

ART. 1.—*Child Mortality in Dublin.*^a By THOMAS WRIGLEY GRIMSHAW, M.A., M.D.; Registrar-General for Ireland; President of the Statistical and Social Inquiry Society of Ireland.

THE high rate of mortality among young children as compared with the general death-rate for the whole population has attracted the attention of all vital statisticians since accurate records of births and deaths have been kept. Especial attention has been frequently called to the high death-rate among young children in Dublin, and to this subject I propose to direct special attention in the present paper. There is a popular idea that the children of the Dublin working classes met with in the slums are a healthy class, and indeed there is some ground for this view, as many active, able-bodied, handsome children—handsome even amidst dirt and rags—are certainly met with in the slums of our city. These fine healthy little creatures are, unfortunately, only the survivors, their less favourably endowed little brothers and sisters have long since passed away, and many even of those able-bodied survivors will, before they grow into adults, in their turn be gradually taken away by disease and death.

In Table I. I have set out a summary of the mortality statistics of young persons in England, Scotland, and Ireland, and in the

^a Read before the Statistical and Social Inquiry Society of Ireland, July 2nd, 1889.

three Dublin Poor-law Unions for ten years, 1877-86, extracted from the returns of the Registrars-General of the latest available dates:—

TABLE I.

DEATHS of Young Persons, and Deaths at all Ages during the Ten Years, 1877-86, in England, Ireland, and Scotland respectively, and in the three Poor-law Unions (Dublin North, Dublin South, and Rathdown), into which the Dublin Registration District extends.

SUBJECT AND LOCALITY		AGES—Years				
		Under One	Total under Five	Five and under Ten	Ten and under Fifteen	All Ages
Number living in Census Year, 1881	England . . .	753,113	3,520,864	3,147,396	2,800,331	25,974,439
	Ireland . . .	104,965	575,983	621,637	616,370	5,174,836
	Scotland . . .	109,663	510,591	450,024	404,991	3,735,573
	Three Dublin Poor-law Unions	9,324	43,269	39,187	37,551	403,158
Average Annual Number of Deaths, Ten Years, 1877-86	England . . .	126,403	205,454	18,242	9,299	521,769
	Ireland . . .	12,125	21,121	3,292	2,291	94,109
	Scotland . . .	14,838	26,269	3,233	1,871	74,550
	Three Dublin Poor-law Unions	1,959	3,511	440	244	11,111
Average Annual Death-rate per 1,000 living at each age	England . . .	167·8	58·4	5·8	3·3	20·1
	Ireland . . .	115·5	36·6	5·3	3·7	18·2
	Scotland . . .	135·3	51·4	7·2	4·6	20·0
	Three Dublin Poor-law Unions	210·1	81·1	11·2	6·5	27·6
Percentage to Total Deaths at all Ages, Average, 1877-86	England . . .	24·2	39·4	3·5	1·8	100·
	Ireland . . .	12·9	22·4	3·5	2·4	100·
	Scotland . . .	19·9	35·2	4·3	2·5	100·
	Three Dublin Poor-law Unions	17·6	31·6	4·0	2·2	100·

A study of this Table shows that in England during the decade 1877-86 the annual average number of deaths was 521,769, or at the rate of 20·1 per 1,000 living; of these, 205,454, or 39·4 per cent., were of children under 5 years of age, being at the rate of 58·4 per 1,000 of those living at that age period, and 126,403 of the total annual average, or 24·2 per cent., were of infants under 1 year of age, being at the rate of 167·8 per 1,000 living at that age, according to the census of 1881.

In Scotland during the same decade the average annual number of deaths at all ages was 74,550, or at the annual rate of 20·0 per 1,000 living. Of these deaths 26,269, or 35·2 per cent., were of children under 5 years of age, or at the rate of 51·4 per 1,000 living at that age period; 14,838, or 19·9 per cent. of the whole, being of children under 1 year of age, or at the rate of 135·3 per 1,000 infants under 1 year, according to the census of 1881.

Turning to Ireland we find that during the same decade the average annual number of deaths at all ages was 94,109, or at the average rate of 18·2 per 1,000 living. Of these, 21,121, or 22·4 per cent., were of children under 5 years of age, or at the rate of 36·6 per 1,000 living at that age period, and 12,125, or 12·9 per cent., of the total annual average, were under 1 year of age, being at the rate of 115·5 per 1,000 living at that age.

We thus find that the annual death-rate per 1,000 among infants under 12 months is in England 167·8, in Scotland 135·3, and in Ireland 115·5. For children under 5 years of age the rates are—England 58·4, Scotland 51·4, Ireland 36·6.

We thus arrive at the broad result that the death-rate of infants and young children is much lower in Ireland than it is in England or Scotland.

There can be no doubt that one cause of the lower mortality of children in Ireland than in England and Scotland is owing to the fact that the proportion of the population of the sister countries living in towns far exceeds that of Ireland—and the death-rate of town children far exceeds that of country children. The population of England in 1881 was 25,974,439, of whom 14,626,131, or 56·3 per cent., lived in towns of over 10,000 inhabitants. In Ireland the population at the same period was 5,174,836, of whom 845,839, or 16·3 per cent., lived in towns with a population of over 10,000 inhabitants. No doubt the general death-rate of town populations is greater than that of country populations, but at early ages this excessive death-rate is much accentuated. As already pointed out

the death rate of young children in Ireland is lower than that for England or Scotland.

Besides the figures already referred to in Table I., statistics are given for the three Poor-law unions or Superintendent Registrars' districts, which include, in their area, the city and suburbs of Dublin, and a considerable portion of the surrounding country—in fact, the whole of what may be considered as the Dublin population, in its widest sense, as distinguished from the population of the Dublin registration district. The area included in these unions contained a population of 403,158 in 1881. During the decade of 1877-86 the deaths averaged 11,111 per annum, or at the annual rate of 27·6 per 1,000 living. Of these deaths 3,511, or 31·6 per cent., were of children under five years of age, or at the rate of 81·1 per 1,000 of persons living at that age. Of these an average of 1,959 per annum were infants under one year of age, or at the rate of 210·1 per 1,000 of children living at that age, according to the census of 1881.

We have thus before us the very remarkable facts that Dublin is situated in a country where the death-rate of children is low, as compared with neighbouring countries, yet, when we compare the child mortality of Dublin with other large towns of the United Kingdom, we find that it is comparatively high, not only as compared with English and Scotch towns, but also with the large Irish cities, Belfast and Cork.

In Tables II. and III., are set out for the ten years, 1879-88, the statistics of deaths and rates of mortality from all causes at all ages, in thirteen of the larger towns of the United Kingdom.

These Tables show that the average death-rate of Dublin, for the decade in question, was the highest rate for any of the large towns of the United Kingdom referred to, including eight English, two Scotch, and three Irish, all except Cork having populations of upwards of 200,000.

It might naturally be expected that the towns with the highest general death-rate, would also have the highest child death-rate. This we find to be markedly the case with Dublin.

TABLE II.

DEATHS from all Causes at all Ages in Thirteen Large Towns of the United Kingdom, during the Ten Years 1879-88.

TOWNS	Estimated Population in 1881	TOTAL DEATHS from all Causes										Average Yearly Number, 1879-88
		1879 (53 weeks)	1880	1881	1882	1883	1884 (53 weeks)	1885	1886	1887	1888	
London . . .	3,881,719	85,540	81,128	81,071	82,905	80,578	83,050	80,000	82,276	82,208	78,848	81,760
Liverpool . . .	554,073	14,818	14,811	14,733	14,818	15,074	14,691	13,764	13,919	14,006	12,159	14,279
Birmingham . . .	402,314	8,766	8,172	8,009	8,527	8,824	9,145	8,248	8,628	8,668	7,954	8,494
Manchester . . .	341,173	9,882	9,185	8,664	9,057	9,344	9,071	8,902	9,894	10,786	9,834	9,462
Leeds . . .	310,483	7,150	6,688	6,675	7,321	7,454	8,034	6,621	7,399	7,241	7,209	7,179
Sheffield . . .	285,619	6,422	6,410	5,993	6,281	6,755	6,832	6,305	6,131	6,808	6,586	6,452
Bristol . . .	207,522	4,493	4,276	4,054	4,021	3,795	4,024	4,282	4,253	4,546	3,816	4,156
Bradford . . .	184,035	4,106	4,109	3,612	4,142	3,743	4,286	3,791	4,188	4,460	3,924	4,036
Dublin . . .	347,013	10,885	11,008	9,180	9,461	9,905	9,538	9,734	9,236	10,513	8,661	9,812
Belfast ^a . . .	208,822	—	—	4,911	5,365	5,600	5,073	6,127	5,256	5,807	5,742	5,485 ^a
Cork ^a . . .	80,124	—	—	2,101	1,935	1,993	2,139	2,098	1,769	1,792	1,934	1,970 ^a
Edinburgh . . .	229,219	4,432	4,946	4,613	4,565	4,544	4,865	4,554	4,889	5,097	4,736	4,724
Glasgow . . .	511,914	12,498	13,304	12,916	13,046	14,577	13,942	13,492	13,104	12,128	11,675	13,068

^a Belfast and Cork for eight years only.

TABLE III.

DEATHS (*from all Causes*) per 1,000 of Population in Thirteen Large Towns of the United Kingdom during the Ten Years 1879-88.

TOWNS	Estimated Population in 1888	DEATHS from all Causes per 1,000 of Population										
		1879 (53 weeks)	1880	1881	1882	1883	1884 (53 weeks)	1885	1886	1887	1888	Average Yearly Rate
London . . .	4,282,921	22·7	21·6	21·2	21·4	20·4	20·3	19·8	19·9	19·6	18·5	20·5
Liverpool . . .	599,738	26·9	27·1	26·7	26·5	26·7	25·2	23·8	23·8	23·7	20·3	25·1
Birmingham . . .	447,912	22·1	20·7	20·0	20·9	21·3	21·4	19·3	19·9	19·7	17·8	20·3
Manchester . . .	378,164	28·3	26·9	25·5	26·7	27·6	26·4	26·5	26·3	28·7	26·1	26·9
Leeds . . .	351,210	23·5	22·0	21·6	23·2	23·3	24·2	19·9	21·9	21·1	20·6	22·1
Sheffield . . .	321,711	22·9	22·9	21·1	21·7	22·9	22·4	20·7	19·8	21·6	20·5	21·7
Bristol . . .	226,510	21·9	21·0	19·6	19·2	17·9	18·4	19·7	19·3	20·4	16·9	19·4
Bradford . . .	229,721	22·9	22·9	19·7	21·2	18·3	20·1	17·7	19·2	19·9	17·1	19·9
Dublin . . .	353,082	34·6	35·9	27·0	27·2	28·3	27·2	27·6	26·2	29·8	24·5	28·8
Belfast ^a . . .	227,022	—	—	23·6	25·8	26·2	23·4	27·9	23·7	25·9	25·3	25·2 ^a
Cork ^a . . .	80,124	—	—	26·8	24·7	24·9	26·7	26·2	22·1	22·4	24·1	24·7 ^a
Edinburgh . . .	262,733	19·9	21·9	20·1	19·6	19·2	19·7	18·2	19·2	19·7	18·0	19·6
Glasgow . . .	526,088	24·6	26·1	25·2	25·4	28·2	26·9	25·9	25·1	23·1	22·2	25·3

^a Belfast and Cork for *eight* years only.

TABLE IV.

DEATHS of Infants under One Year old in Thirteen Large Towns of the United Kingdom during the Ten Years, 1879-88.

TOWNS	DEATHS of Infants under One Year old.											Percentage to Total Deaths
	1879 (53 weeks)	1880	1881	1882	1883	1884 (53 weeks)	1885	1886	1887	1888	Average Yearly Number 1879-88	
London . . .	19,810	20,907	19,575	20,122	19,487	21,369	19,594	21,231	21,015	19,196	20,231	24·7
Liverpool . . .	3,458	3,961	3,587	3,641	3,686	3,984	3,391	3,670	3,420	2,981	3,578	25·1
Birmingham . . .	2,396	2,614	2,241	2,481	2,361	2,613	2,265	2,509	2,463	2,110	2,405	28·3
Manchester . . .	2,201	2,293	2,020	2,231	2,146	2,277	2,136	2,501	2,577	2,346	2,273	24·0
Leeds . . .	1,879	1,968	1,900	2,035	1,849	2,125	1,772	2,068	1,973	1,975	1,954	27·2
Sheffield . . .	1,657	1,762	1,682	1,787	1,764	1,936	1,747	1,774	1,839	1,758	1,771	27·4
Bristol . . .	1,109	1,047	891	981	911	987	1,029	1,000	985	815	976	23·5
Bradford . . .	956	1,103	924	1,108	869	1,123	889	1,051	1,107	962	1,009	25·0
Dublin . . .	1,949	2,319	1,602	1,874	1,794	1,827	1,789	1,715	1,965	1,638	1,847	18·8
Belfast ^a . . .	—	—	944	1,031	1,084	913	1,215	989	1,223	1,117	1,065 ^a	19·4
Cork ^a . . .	—	—	271	282	236	253	247	225	252	288	257 ^a	13·0
Edinburgh . . .	881	1,076	940	888	880	1,013	885	1,012	1,038	955	957	20·3
Glasgow . . .	2,504	2,842	2,745	2,959	3,091	3,094	3,100	2,786	2,660	2,517	2,830	21·7

^a Belfast and Cork for eight years only.

TABLE V.
DEATHS under One Year per 1,000 of Registered Births in Thirteen Large Towns of the United Kingdom
during the Ten Years, 1879-88.

Child Mortality in Dublin.

TOWNS	NO. OF DEATHS, UNDER ONE YEAR PER 1,000 OF REGISTERED BIRTHS:										
	1879 (53 weeks)	1880	1881	1882	1883	1884 (53 weeks)	1885	1886	1887	1888	Average Annual Rate
London	148	158	148	151	146	155	148	159	158	146	152
Liverpool	163	191	173	178	185	194	174	188	186	168	180
Birmingham	151	172	150	167	160	174	157	175	176	154	164
Manchester	165	179	161	179	177	183	175	183	191	176	177
Leeds	161	173	167	179	166	184	155	181	172	173	171
Sheffield	153	164	155	165	163	172	164	168	177	178	166
Bristol	145	146	125	142	133	143	152	149	149	123	141
Bradford	150	174	153	178	146	181	148	167	178	153	162
Dublin	195	231	158	186	180	178	176	168	200	166	184
Belfast*	—	—	136	151	162	126	170	135	163	145	149*
Cork*	—	—	125	127	109	115	120	110	123	140	121*
Edinburgh	119	143	128	122	129	136	120	136	137	127	130
Glasgow	127	150	144	150	155	151	156	140	138	130	144

* Belfast and Cork for eight years only.

In Table IV. are set out the deaths of children under one year of age in thirteen towns for the ten years, 1879-88, and in Table V. we have the number of deaths of children under one year of age compared with the number of births registered during the same decade. This will be found to be a more exact method of measuring infant mortality than a comparison with the number of children living, or estimated to be living, at the age under one year.

It has been generally found that where there is an excessive birth-rate there is an excessive death-rate, the rate being raised by the deaths among children, and thus the cause of the high death-rate, both general and infantile, has been explained for the population of manufacturing towns. Married women working in mills being unable to nurse their own children, are more liable to frequent pregnancies, and their children, being artificially fed and not having the proper amount of maternal care, are more liable to disease and death than the children of country mothers.

Dublin, however, is not a manufacturing town in the sense which necessitates the large employment of women, married and unmarried, in mills and factories; the birth-rate of Dublin is not high. Therefore this class of causes of high death-rate among children does not exist to any appreciable extent in Dublin.

Tables VI. and VII. have been prepared with the view of testing and illustrating this point. In Table VI. the birth-rates of the thirteen selected towns are set out for the decade 1879-88, from which it will be seen that the lowest rate—26·56—is to be found in Cork, and the highest—37·00—in Glasgow. Dublin occupies a place next to Cork, being the lowest but one, and having a birth-rate of only 29·31 per 1,000 of the population.

In Table VII. the thirteen towns are arranged in scales according to the position occupied by them under the various heads we have been considering. From this Table it appears that Dublin occupies the worst position both as regards total deaths and infantile deaths, and is the lowest but one (Cork) in its birth-rate, although in the ratio of infantile death-rate to total death-rate it only stands at 18·8 per cent. (Table IV.), and in this respect also is the lowest except Cork.

TABLE VI.
 BIRTHS IN THIRTEEN LARGE TOWNS OF THE UNITED KINGDOM—EIGHT ENGLISH, THREE IRISH, AND TWO SCOTCH.
Table of Birth-rates for Ten Years 1879-88.

CITIES AND TOWNS	BIRTHS per 1,000 of the Population										
	1879 (53 weeks)	1880	1881	1882	1883	1884 (53 weeks)	1885	1886	1887	1888	Average, 1879-88
London	36.5	36.2	34.7	34.3	33.9	33.7	32.6	32.3	31.7	30.7	33.66
Liverpool	38.9	38.3	37.6	36.7	35.2	35.2	33.7	33.5	31.2	29.7	35.00
Birmingham	40.1	38.6	37.2	36.6	35.6	35.2	33.8	33.0	31.8	30.8	35.27
Manchester	36.3	35.3	36.9	36.7	36.0	36.2	36.4	36.3	35.9	35.3	36.13
Leeds	36.9	35.7	36.8	36.1	34.7	34.8	34.4	33.9	33.3	32.6	34.92
Sheffield	35.9	35.3	38.0	37.4	36.7	36.9	35.0	34.1	32.9	30.8	35.30
Bristol	35.8	33.8	34.5	33.1	32.3	31.5	31.2	30.5	29.7	29.3	32.17
Bradford	32.9	32.3	33.0	31.8	29.2	29.2	29.1	28.8	27.7	27.4	30.14
Dublin	31.8	32.0	29.1	28.9	28.5	29.3	28.7	28.9	27.9	28.0	29.31
Belfast ^a	—	—	33.4	32.8	31.3	33.4	32.7	33.1	33.5	34.0	33.03 ^a
Cork ^a	—	—	27.7	28.2	27.0	27.4	25.6	25.4	25.5	25.7	26.56 ^a
Edinburgh	32.8	32.8	32.0	31.4	29.0	30.3	29.4	29.2	29.2	28.5	30.46
Glasgow	34.1	32.0	37.3	38.4	38.6	39.7	38.2	38.1	36.9	36.7	37.00

^a Eight years.

TABLE VII.

INFANT MORTALITY, &c., in *Thirteen Large Towns of the United Kingdom.*
Average of Ten Years, 1879-88.

TOWNS Arranged according to Infant Mortality in proportion to Births— lowest to highest	Position in Scale of 1 to 13, the <i>Lowest</i> Rate in each case being represented by 1			
	Deaths under 1 year to 1,000 Births	Births per 1,000 of Population	Total Deaths per 1,000 of Population	Percentage of Deaths of Infants under 1 year old to Total Deaths
Cork ^a . . .	1	1	8	1
Edinburgh . . .	2	4	2	4
Bristol . . .	3	5	1	6
Glasgow . . .	4	13	11	5
Belfast ^a . . .	5	6	10	3
London . . .	6	7	5	8
Bradford . . .	7	3	3	9
Birmingham . . .	8	10	4	13
Sheffield . . .	9	11	6	12
Leeds . . .	10	8	7	11
Manchester . . .	11	12	12	7
Liverpool . . .	12	9	9	10
Dublin . . .	13	2	13	

Thus the population of Dublin is an exception to the rule that a high death-rate and a high birth-rate generally—though by no means so generally as some think—are coincident. We thus see that it is not the employment of our female population in factory work, to which excessive child mortality has been largely attributed in England, which leads to the excessive death-rate among Dublin children. What, then, are the causes? The four following have been assigned as the main causes, and let us now examine them:—

1st. The large proportion of very poor in Dublin.

2nd. The inferior house accommodation of the artisan and labouring classes.

3rd. The habits of the people.

^a Eight Years 1881-88.

4th. Carelessness with regard to children in general, and of sick children in particular.

Firstly, the supposed large proportion of very poor people in Dublin. I advisedly use the word "supposed," as there are no statistical or other facts which prove that there is a greater want of the necessities of life in Dublin than elsewhere. The different methods of administering poor relief in the different divisions of the United Kingdom preclude the possibility of making comparisons between English, Scotch, and Irish towns. Even in Ireland itself, from various reasons, the methods of granting indoor and outdoor relief vary so much in different districts that statistical comparisons would be misleading. While I believe that there is in Dublin an undue proportion of very poor—just as in the east end of London—as compared with the well-to-do, I have no proof to offer in support of my opinion. Assuming, however, that this opinion is correct, there can be no doubt it would account for much of the high death-rate among children. It is now a well-ascertained fact that the death-rates at all ages among the lower social strata of society are greater than among the upper strata, and this is still more remarkable in the case of children. Although in the case of poverty we have no standard for comparing Dublin with other places, on the other hand, the "Social Condition" Table for Dublin in the census of 1881, and the weekly death-rate Tables, we have the means of comparing each class of the Dublin population with the others. Table VIII. supplies this information for the population at all ages for five years, 1884–88, and Table IX. supplies it for children under five years of age for the same period.

Taking the average of the five years under consideration, we find (Table VIII.) that the death-rate at all ages varied from 13·8 per 1,000 in the "Professional and Independent Class" to 34·8, or about $2\frac{1}{2}$ times as much, in the "General Service and Inmates of Workhouses Class." When we come to children under five years of age, as shown in Table IX., the difference is still more remarkable, the rate being 18·2 per 1,000 living at this age period for the "Professional and Independent Class," and 116·9 per 1,000, or over six times as much, in the "General Service and Inmates of Workhouses Class." This latter figure is really something startling in a civilised community.

Secondly, the inferior house accommodation of the artisan and labouring classes.

TABLE VIII.

DEATHS IN DUBLIN REGISTRATION DISTRICT, FIVE YEARS, 1884-8.

DEATH-RATE *per 1,000* (of Population in 1881) for each Class of "Occupation" or "Social Position"—all Ages.

Classes of "Occupation" or "Social Position"	Population in 1881	DEATH RATE—Year						
		1884 (53 weeks)	1885	1886	1887	1888	Total, 5 years	Average, 5 years, 1884-8
Deaths in Families of the—								
1. Professional and Independent Class	30,129	14·4	14·0	13·4	14·5	12·9	69·2	13·8
2. Middle Class	56,761	27·2	27·6	27·3	29·5	24·4	186·0	27·2
3. Artisan Class and Petty Shopkeepers	106,142	22·7	24·5	22·3	26·3	21·5	117·3	23·5
4. General Service Class	147,625	35·2	35·4	33·7	38·2	31·5	174·0	34·8
5. Inmates of Workhouses	6,036							
Total,	346,693	28·3	28·9	27·4	31·1	25·7	141·4	28·3

TABLE IX.

DEATHS of Children under Five Years of Age in each Class of "Occupation" or "Social Position."

Classes	No. of Children under 5 years of age by Census of 1881	DEATHS UNDER 5 YEARS OF AGE						
		Number in each year						Average of 5 years
		1884 (53 weeks)	1885	1886	1887	1888	Total, 5 years	Rate per 1,000 Children under 5 years
Deaths in Families of the—								
1. Professional and Independent Classes	2,247	52	49	37	44	24	206	41
2. Middle Class	6,188	405	368	349	422	304	1,848	370
3. Artisan Class and Petty Shopkeepers	12,895	880	993	833	1,108	833	4,647	929
4. General Service Class	16,111	1,790	1,884	1,707	2,349	1,682	9,412	1,883
5. Inmates of Workhouses								
All Classes	37,441	3,127	3,294	2,926	3,923	2,843	16,113	3,223

I have dealt with this subject in another place,^a in which I have shown that the concentration of families in single houses is very great. Much improvement has taken place in this respect during the past 10 or 15 years, and is still in active progress, but still proportionally not sufficiently to show in the death-rate of children.

Thirdly, the habits of the people are of such a nature as to lead to negligence.

There can be little doubt that the extremely intemperate habits of the lower classes of the people of Dublin have much to do with the high death-rate among children. The children of drunken parents are not born healthy, and when born are neglected in every conceivable way and are exposed to dangers from reckless negligence, which are almost inconceivable among civilised people.

A comparison between the rates of mortality and the rates of drunkenness, as measured by the criminal statistics of large towns, shows that there is a close relationship between the two.

^a "The House Accommodation of the Artisan and Labouring Classes in Ireland, with Special Reference to Dublin and other Large Towns." *Dublin Journal of Medical Science*, July, 1885. From this paper the following figures are extracted :—

TABLE showing, for the City of Dublin, the Number of Families occupying Fourth-class Accommodation, and residing in Houses of the First and Second Class, at each Census period from 1841 to 1881, inclusive.

	Percent of Families in 4th Class Accommodation	Fourth Class Accommodation in First Class Houses			Fourth Class Accommodation in Second Class Houses		
		Houses	Families	Families per House	Houses	Families	Families per House
1841	46·9	1,503	11,864	7·9	1,903	10,151	5·3
1851	48·9	1,921	15,768	8·2	2,122	11,341	5·3
1861	46·7	2,070	15,964	7·7	2,071	10,371	5·0
1871	44·5	1,999	15,056	7·5	2,040	9,893	4·8
1881	42·7	1,744	13,009	7·5	1,983	9,575	4·8

This statement shows that there were, in 1881, 1,744 first-class and 1,983 second-class houses let in tenements, making in all 3,727 houses of this kind. The larger tenement houses were occupied by 13,009 families, or at the rate of 7·5 families per house, and the smaller houses by 9,575 families, or at the rate of 4·8 families per house. In all there were at the time of the Census 22,584 families, or over 100,000 persons living in these old, degenerated, and dilapidated houses.

The concentration of families in single houses is in many cases very great. Thus, there were in Dublin, in 1881, 102 houses of the first class, containing 1,020 families. There were many more houses containing larger numbers of families, the details of which will be found in Table VIII. A. of the Dublin Census Book.

In an address delivered at the Dublin Sanitary Association, in the year 1888, I compared, for the year 1886, Dublin with thirteen other towns of the United Kingdom having populations of over 200,000, with the results shown in the following Table (Table X.) extracted from the report of the Dublin Sanitary Association for the year 1887.

TABLE X.

TABLE showing for each Town in the United Kingdom with over 200,000 Inhabitants the Rates per 1,000 of the Population represented by the Deaths Registered during the Year 1886, and by the Number of Cases of "Drunkenness" and "Drunkenness and Disorderly Conduct" at Police Courts in the same Year.

Towns arranged according to Death-rates from lowest to highest.	Estimated population	Deaths		Cases of Drunkenness		Position as regards Drink-rate, lowest to highest
		Number	Rate per 1,000 of population	Number	Rate per 1,000 of population	
1. Bradford .	219,411	4,188	19·2	320	1·5	1
2. Edinburgh .	254,591	4,882	19·2	2,340	9·2	9
3. Bristol .	220,915	4,253	19·3	957	4·3	4
4. Sheffield .	310,957	6,131	19·8	801	2·6	2
5. London .	4,149,533	82,276	19·9	25,856 ^a	5·4	5
6. Birmingham .	434,381	8,628	19·9	2,871	6·6	6
7. Nottingham .	217,733	4,419	20·4	1,829	8·4	8
8. Leeds .	339,057	7,399	21·9	1,468	4·3	3
9. Salford .	211,241	4,643	22·1	1,722	8·2	7
10. Belfast .	221,822	5,256	23·7	5,752	25·9	13
11. Liverpool .	586,320	13,919	23·8	12,568	21·4	12
12. Glasgow .	521,999	13,099	25·1	11,002	21·1	11
13. Dublin .	353,082	9,236	26·2	12,699	35·7	14
14. Manchester .	376,895	9,894	26·3	7,288	19·3	10
Total of 14 Towns,	8,417,937	178,223	21·2	87,473	10·4	—

^a Metropolitan Police District, Dockyards Police, and City of London—Population taken as 4,766,661.

From this it appears that, in 1886, Dublin was distinguished by having the highest drink-rate with all but the highest death-rate (being within 0·1 per 1,000 as high as Manchester), and, as I have already shown, having a specially high rate of child mortality as given in Table V. The towns quoted in the two Tables are not exactly the same. Table X. includes Nottingham and Salford, which are not in Table V., while Table V. includes Cork and omits the two former towns. The result, however, is that we find the high drink-rate of Dublin corresponding with a high infant mortality, which I need scarcely say is exactly what might be expected.

Fourthly, negligence with regard to the care of young children in general, and of sick children in particular.

The carelessness with respect to child life in Dublin is shown by the large proportion of children who die without being medically attended during their last illness.

TABLE XI.

DUBLIN.

TABLE showing by Ages the Number and Proportion of Certified and Uncertified Deaths during the First Quarter of the Year 1889.

Ages.	Total Deaths	Uncertified	Proportion Per cent. Uncertified
All ages	2,521	311	12·3
Under one month	149	80	53·7
One month, and under one year	269	73	27·1
Total under one year	418	153	36·6
One year, and under five years	271	44	16·2
Total under five years	689	197	28·6
Five years, and under twenty	200	7	3·5
Twenty " " forty	410	16	3·9
Forty " " sixty	544	28	5·1
Sixty " " eighty	563	40	7·1
Eighty and upwards	115	23	20·0

In Table XI. are shown for the first quarter of the present year, the number of "uncertified deaths" in the Dublin registration district, and their relation to the total number of deaths.

From this Table it appears that of 2,521 deaths in the Dublin Registration District, 311, or 12·3 per cent., have not had their causes certified, the deceased persons not having had any medical attendant during the last illness. Of these 311 there were 197, or about two-thirds, in children under 5 years of age. Of deaths in children under one month 53·7 per cent., or more than one half, were uncertified; of those under one year 36·6 per cent., or more than one-third, were uncertified.

In Table XII. similar statistics are given for London, which show the remarkable fact that, during the period under review, there were fewer uncertified deaths in the great London district than in the Dublin district.

TABLE XII.

LONDON.

Table showing by Ages the Number and Proportion of Certified and Uncertified Deaths during the First Quarter of 1889.

AGES	Total Deaths	Uncertified	Proportion per cent.
All Ages	21,138	263	1·2
Under one month	1,296	78	6·0
One month, and under one year	3,177	50	1·6
Total under one year	4,473	128	2·9
One year, and under five years	3,573	39	1·1
Total under five years	8,046	167	2·1
Five years, and under twenty	1,202	5	0·4
Twenty " " forty	2,385	8	0·3
Forty " " sixty	3,738	28	0·7
Sixty " " eighty	4,719	43	0·9
Eighty, and upwards	1,048	12	1·1

It is remarkable, however, that the relative proportions of uncertified deaths of young children to the total uncertified are nearly the same in both districts. Thus of the 311 uncertified deaths in Dublin district, 197, or 63·3 per cent., were in children under 5 years of age; while in London, of the 263 uncertified deaths, 167, or 63·5 per cent., were in children under 5 years—thus showing that as regards children the relative negligence is the same, while the total negligence is much greater in Dublin than in London.

In Table XIII. are given the number and proportion of deaths from certain non-infectious forms of disease, which are the main causes of death among young children.

TABLE XIII.

DUBLIN REGISTRATION DISTRICT.

DEATHS from *Tubercular Meningitis, Mesenteric Disease, and Convulsions, and Deaths of Children under Five Years of Age from Diarrhoea during the Five Years, 1884–88.*

YEARS, &c.		DEATHS FROM			
		Tubercular Meningitis	Mesenteric Disease	Convulsions	Diarrhoea— Children under 5 years of age
1884 ^a	.	232	255	761	247
1885	.	258	220	792	105
1886	.	176	249	763	190
1887	.	159	212	893	293
1888	.	140	186	671	140
Total, 5 years, 1884–8		965	1,122	3,880	975
Yearly average, 5 years, 1884–8	Number	193	224	776	195
	Rate per 1,000 chil- dren under 5	5·1	5·9	20·4	5·1
	Percentage to total deaths under 5 years of age	6·0	7·0	24·1	6·1

It will be observed that 24·1 per cent., or about one-fourth of all the deaths among children under five years of age, are ascribed to convulsions. Many of these may be cases of bad food, gross

^a Fifty-three weeks.

negligence, or injury, concerning which no particulars could be ascertained, there being in many instances no medical attendant at all, and in others only a medical attendant called in at the last to see the little one pass away in convulsions, but without having had the opportunity of ascertaining the previous nature of the illness.

Many of the cases of meningitis appear to originate in knocks on the head, either by accident or design, through carelessness, or cruelty. Many cases of diarrhoea originate in bad, or badly prepared, food; and this cause also operates actively in promoting mesenteric disease. The frequency with which young children are shut up alone, leads to many accidents—among others to accidents by fire, often of a terrible character.

Most of the members of the Statistical Society are aware that recently a movement has been started in Dublin for the Prevention of Cruelty to Children, and one of the objects I have in view in bringing this matter prominently before this Society is that the information contained in the paper may serve as an indication of the necessity there is for taking measures to improve the conditions of child-life in Dublin. It is necessary not merely to save the lives of little children, but to secure that those who do survive the dangers of infancy and early childhood may have a fair chance of growing up into healthy men and women, sound in body, mind, and soul, both good and useful, and capable of fulfilling the duties for which Providence intended them.