REFERENCE COPY

BUREAU OF THE CENSUS LIBRARY

DEPARTMENT OF THE INTERIOR,
U. S. CENSUS OFFICE.

ROBERT P. PORTER,
Superintendent,
Appointed April 20, 1889; resigned July 31, 1893.

CARROLL D. WRIGHT,
Commissioner of Labor in charge.
Appointed October 5, 1893.

VITAL STATISTICS

OF

NEW YORK CITY AND BROOKLYN

COVERING A PERIOD OF

SIX YEARS ENDING MAY 31, 1890.

BUREAU OF THE CENSUS
LIBRARY

JOHN S. BILLINGS, M. D.,
SURGEON U. S. ARMY, EXPERT SPECIAL AGENT.

WASHINGTON, D. C.:
GOVERNMENT PRINTING OFFICE.
1894.

Bureau of the Census

CONTENTS.

	Page.
LETTER OF TRANSMITTAL OF THE COMMISSIONER OF LABOR IN CHARGE TO THE SECRETARY OF THE INTERIOR	vii
COMPARISON OF THE VITAL STATISTICS OF NEW YORK CITY AND BROOKLYN	1-80
Age	4-13
Race	13-22
Conjugal condition	22-30
Occupations	31, 32
Causes of death	32-37
Consumption	37, 38
Pneumonia	38, 39
Diarrheal diseases	39, 40
Diseases of the nervous system	40, 41
Diphtheria and croup	42
Diseases of the urinary organs	42, 43
Heart disease and dropsy	43, 44
Cancer and tumor	44, 45
Disease of the liver	45, 46
Malarial fever	46, 47
Typhoid fever	47, 48
Childbirth and puerperal diseases	48, 49
Stillbirths	49, 50
Suicides	50
Other accidents and injuries	51-53
Sanitary districts	54-69
Altitude	70-80
VITAL STATISTICS OF NEW YORK CITY	81-164
VITAL STATISTICS OF BROOKLYN	165-228
GENERAL TABLES:	
Population June 1, 1890, by wards and sanitary districts, with distinction of color, nativity, parental nativity, and certain age periods:	
New York	230-233
Brooklyn	238-241
Population June 1, 1890, by wards and sanitary districts, with distinction of birthplaces of mothers and certain age periods:	
New York	234-237
Brooklyn	242-245
Deaths from certain specified causes in each ward and sanitary district during the 6 years ending May 31, 1890:	
New York	246, 247
Brooklyn	248, 249
Average annual death rates due to certain specified causes per 100,000 of mean population in each ward and sanitary district during the 6 years ending May 31, 1890:	
New York	250, 251
Brooklyn	252, 253
Deaths in each ward and sanitary district during the 6 years ending May 31, 1890, at certain ages and from certain causes, with distinction of color, sex, nativity, parental nativity, and birthplaces of mothers:	
New York	254-345
Brooklyn	346-423
Deaths from each specified disease and class of diseases during the 6 years ending May 31, 1890, with distinction of age and sex:	
New York	424-427
Brooklyn	428-431
Deaths among the white population from each specified disease and class of diseases during the 6 years ending May 31, 1890, with distinction of age and sex:	
New York	432-435
Brooklyn	436-439
Deaths among the colored population from each specified disease and class of diseases during the 6 years ending May 31, 1890, with distinction of age and sex:	
New York	440-443
Brooklyn	444-447
Deaths during the 6 years ending May 31, 1890, among the population having mothers born in the United States, from each specified disease and class of diseases, with distinction of age and sex:	
New York	448-451
Brooklyn	452-455

GENERAL TABLES—Continued. Page.

Deaths during the 6 years ending May 31, 1890, among the population having mothers born in Ireland, from each specified disease and class of diseases, with distinction of age and sex:
New York 456–459
Brooklyn 460–463

Deaths during the 6 years ending May 31, 1890, among the population having mothers born in Germany, from each specified disease and class of diseases, with distinction of age and sex:
New York 464–467
Brooklyn 468–471

Deaths during the 6 years ending May 31, 1890, among the population having mothers born in Russia and Poland, from each specified disease and class of diseases, with distinction of age and sex:
New York 472–475
Brooklyn 476–479

Deaths during the 6 years ending May 31, 1890, among the population having mothers born in Italy, from each specified disease and class of diseases, with distinction of age and sex:
New York 480–483
Brooklyn 484–487

Deaths during the 6 years ending May 31, 1890, from each specified disease and class of diseases, with distinction of color and birthplaces of mothers:
New York 488–491
Brooklyn 492–495

Average annual death rates per 100,000 of mean population during the 6 years ending May 31, 1890, for each specified cause and class of causes, with distinction of color and birthplaces of mothers:
New York 496, 497
Brooklyn 498, 499

Average annual death rates per 100,000 of mean population under 15 years of age during the 6 years ending May 31, 1890, for each specified cause and class of causes, with distinction of birthplaces of mothers:
New York 500, 501
Brooklyn 502, 503

Deaths by months during the 6 years ending May 31, 1890, from certain specified diseases and classes of diseases, with distinction of certain groups of ages:
New York 504–507
Brooklyn 508–511

Deaths during the 6 years ending May 31, 1890, from certain causes and classes of causes, by conjugal condition and sex, with distinction of color, nativity, parental nativity, certain ages, and birthplaces of mothers:
New York 512–515
Brooklyn 516–519

Deaths during the 6 years ending May 31, 1890, occurring among males engaged in certain selected occupations and classes of occupations, with distinction of color, nativity, and parental nativity, with specification of certain causes of death:
New York 520–527
Brooklyn 520–527

Deaths during the 6 years ending May 31, 1890, occurring among females engaged in the specified occupations, with distinction of color, nativity, and parental nativity, with specification of certain causes of death:
New York 528, 529
Brooklyn 528, 529

LIST OF ILLUSTRATIONS.

MAPS.

	Page.
CITY OF NEW YORK:	
Relative death rates of the total population in different districts during the 6 years ending June 1, 1890	164
Relative death rates of the total population under 5 years of age in different districts during the 6 years ending June 1, 1890	164
Average annual death rates due to consumption in different districts during the 6 years ending June 1, 1890	164
Average annual death rates due to pneumonia in different districts during the 6 years ending June 1, 1890	164
Average annual death rates due to diarrheal diseases in different districts during the 6 years ending June 1, 1890	164
Average annual death rates due to diphtheria and croup in different districts during the 6 years ending June 1, 1890	164
CITY OF BROOKLYN:	
Relative death rates of the total population in different districts during the 6 years ending June 1, 1890	228
Relative death rates of the total population under 5 years of age in different districts during the 6 years ending June 1, 1890	228
Average annual death rates due to consumption in different districts during the 6 years ending June 1, 1890	228
Average annual death rates due to pneumonia in different districts during the 6 years ending June 1, 1890	228
Average annual death rates due to diarrheal diseases in different districts during the 6 years ending June 1, 1890	228
Average annual death rates due to diphtheria and croup in different districts during the 6 years ending June 1, 1890	228
Outline map of Manhattan Island	Pocket.
Outline map of Brooklyn	Pocket.

DIAGRAMS.

Comparative death rates per 1,000 of population in New York and Brooklyn for the years 1875 to 1890	4
Comparative death rates of children under 1 year of age per 1,000 of population of corresponding age in New York and Brooklyn for the years 1880 to 1890	9
Comparative death rates of children under 5 years of age per 1,000 of population of corresponding ages in New York and Brooklyn for the years 1880 to 1890	10
Average annual death rates per 1,000 of population under 15 years of age in New York and Brooklyn, with distinction of birthplaces of mothers, during the 6 years ending May 31, 1890	16
Average annual death rates per 1,000 of population 15 years of age and over in New York and Brooklyn, with distinction of birthplaces of mothers, during the 6 years ending May 31, 1890	17
Average annual death rates per 10,000 of population, by months, in New York and Brooklyn, for the total population and for children under 5 years of age	26
Proportion of deaths due to diphtheria per 1,000 deaths from all causes, by months, in New York, for 6 years ending May 31, 1890	28
Proportion of deaths due to diphtheria per 1,000 deaths from all causes, by months, in Brooklyn, for 6 years ending May 31, 1890	28
Proportion of deaths due to diarrheal diseases per 1,000 deaths from all causes, by months, in New York, for 6 years ending May 31, 1890	29
Proportion of deaths due to diarrheal diseases per 1,000 deaths from all causes, by months, in Brooklyn, for 6 years ending May 31, 1890	29
Proportion of deaths due to typhoid fever per 1,000 deaths from all causes, by months, in New York, for 6 years ending May 31, 1890	30
Proportion of deaths due to typhoid fever per 1,000 deaths from all causes, by months, in Brooklyn, for 6 years ending May 31, 1890	30
Number and proportion of deaths from different causes in New York during the 6 years ending May 31, 1890	36
Number and proportion of deaths from different causes in Brooklyn during the 6 years ending May 31, 1890	37

LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
CENSUS OFFICE,
WASHINGTON, D. C., March 28, 1894.

SIR:

I have the honor to transmit the following special report upon the Vital Statistics of New York city and Brooklyn, N. Y., by Dr. John S. Billings, United States army, expert special agent of the Census Office. The statistics and illustrations presented have been prepared by Mr. William A. King, chief of the division of vital statistics.

This report presents a number of features which are new in the line of census work, such as the subdivision of the cities into sanitary districts and the analyzation of the effect of immediate surroundings of stated conditions upon the death rates of different races and classes of people. The influence of heredity, as derived from the mother, is also shown.

In addition to the usual returns for the census year ending May 31, 1890, this report covers a further period of 5 years preceding that period, making a complete record for 6 years and adding largely to the value of conclusions which may be based upon the results shown.

As in the preceding report upon the Vital Statistics of Baltimore, Md., and the District of Columbia, the source of information was the registration records of the local boards of health, containing the certificates of death furnished by attending physicians, and is therefore much more accurate as to the number and more reliable as to the data than any report based upon returns of the census enumerators could be.

Very respectfully,

CARROLL D. WRIGHT,
Commissioner of Labor in charge.

The SECRETARY OF THE INTERIOR.

VITAL STATISTICS

OF

NEW YORK CITY AND BROOKLYN.

COVERING A PERIOD OF SIX YEARS ENDING MAY 31, 1890.

BY DR. JOHN S. BILLINGS, U. S. ARMY, EXPERT SPECIAL AGENT.

The following constitutes a special report, with tables and illustrations, relating to the vital statistics of New York city and Brooklyn, New York, for the period of 6 years ending May 31, 1890. The tables and illustrations have been prepared under the direction of Mr. William A. King, chief of the division of vital statistics of the Eleventh Census, who has also prepared the descriptions of the several sanitary districts from data furnished by Mr. D. L. M. Peixotto and others, and to whom I am indebted for much valuable aid in the preparation of this report.

The data used in the computations are the population figures for June 1, 1880, and June 1, 1890, and the number of deaths occurring during either the 6 years, or the year, ending May 31, 1890, the first being referred to as the "6-year period", and the latter as "the census year". The unit of area used in each city is either the ward, or a subdivision of the ward, known as a "sanitary district", the boundaries of these last having been fixed prior to the enumeration, with reference to topographical features and character of habitation and of residents, in accordance with the advice of the local health and police authorities.

As the system of collecting data concerning deaths through inquiries of the regular census enumerators always gives defective or inaccurate results, arrangements were made to secure copies of the physicians' certificates of death filed with the local health officers under a compulsory registration law. This work was done by clerks previously instructed in the Census Office, who noted upon a card the information furnished in each certificate by means of the punch used in connection with the electrical counting system employed.

In most of the certificates the locality in which the death occurred was indicated by the street and house number, and in order to locate these in the proper ward or sanitary district a street schedule, or directory, was first prepared for each city, showing the district to which each numbered house belonged. These schedules were sufficient for the proper location of most of the cases, but in large cities a considerable number of deaths occur in hospitals and other institutions, and to charge a sanitary district containing a hospital with all the deaths occurring in it, might give an excessive death rate to that district, and also too low a mortality for the other districts from which the decedents had been brought to the hospital. To diminish this source of error, the locality from which each person dying in hospitals or other institutions was received was obtained from the institution records as far as possible, and the proper reference then made. In the same way deaths of nonresidents occurring in New York and Brooklyn were eliminated unless the fatal disease or injury had been contracted in the city.

Those cases which it was impossible to assign to any ward or district are designated in some of the tables as "unlocated", and in the small rate tables interspersed through the discussion these have been distributed among the sanitary districts upon the assumption that they belonged to the several districts in the same proportions as did those for whom a location could be assigned.

When the certificates were copied for New York and Brooklyn, similar information was secured for the country immediately around them and embraced in Kings, Queens, Richmond, and Westchester counties in New York, and Hudson and Essex counties and the cities of Paterson and Passaic in New Jersey, covering an area termed the "Metropolitan district". These data have also been compiled, and some of the results are referred to in this report. In transcribing these records, particularly those of the New York counties, many institutions were found reporting deaths of persons residents of New York and Brooklyn. Under the state law these deaths were registered in the office of the state board of health at Albany, and not in the office of the board of health of the city of which the persons were residents, but in this report all such are credited to sanitary districts in the cities if the residence is shown by the institution records, or are placed among the "unlocated" for the particular county if no exact locality was mentioned.

As the deaths reported covered a period of 6 years, the mean population for this period was computed for each city as a whole, and for each ward and sanitary district, to be used as one of the factors in computing death rates.

The process employed was the usual geometrical progression formula, using the figures of 1880 and 1890 to establish the ratio of annual change, all "unknown" items being first eliminated, as far as possible, by proportional distribution.

The census figures for 1880 give the aggregate population of each ward in New York and Brooklyn, but not of the sanitary districts, which are now used for the first time. Under these conditions the ward totals in 1880 and 1890 were used to furnish the ratio of increase (or decrease) in each ward; and the mean population of each district of the ward was found by applying this ratio to the population of the district in 1890.

The distribution, whenever practicable, of all unknown details concerning either population or deaths, such as unknown ages and unknown nativities, in the calculation of rates, should be borne in mind, since for this reason certain details of population and deaths do not precisely agree with other statements in which such distribution has not been made.

The area of New York remained unchanged from 1880 to 1890, but the area of Brooklyn was increased in August, 1886, by the inclusion of the town of New Lots as the twenty-sixth ward of the city. The inclusion of this new area for a portion of the 6 years in Brooklyn would have greatly complicated the computation of the mean population of the city for that period, were it not for the fact that the record of deaths occurring in the town of New Lots prior to August, 1886, was secured from the state board of health at Albany, and these were added to those of Brooklyn, making the return of deaths represent the present area of Brooklyn for the whole 6 years.

Table 1 gives certain data for comparisons between New York and Brooklyn, the figures relating to June 1, 1890.

TABLE 1.

SUBJECTS.	New York.	Brooklyn.
Population June 1, 1890	1,515,301	806,343
Area in acres, total	25,741	18,084
Persons to an acre of total area	58.87	44.59
Dwellings:		
Total number	81,828	82,282
To an acre of total area	3.18	4.55
Persons to each	18.52	9.80
Streets:		
Paved, miles of	358	375
Cleaning, annual cost (10 years)	$1,075,290	$165,165
Street lighting:		
Total number of lamps	26,978	10,890
Gas	25,483	9,381
Electric	1,369	1,509
Vapor	126	.....
Persons to each lamp	56.17	74.04
Waterworks:		
Daily consumption in gallons	112,000,000	50,000,000
To each person	73.91	62.01
Miles of mains	660	416
Number of taps	95,000	65,961
Sewers:		
Total length in miles	464	380
Brick and stone, miles of	341	66
Sewers—Continued.		
Pipe, miles of	123	314
Number of house connections	123,000	83,512
Persons to each mile of	3,265.73	2,121.96
Parks:		
Area of, in acres	5,101	685
Acres of, to 1,000 population	3.37	0.85
Per cent of city area embraced in	19.82	3.79
Cemeteries, intramural:		
Area of, in acres	421	757
Per cent of city area embraced in	1.64	4.47
Interments, average annual (10 years) *a*	1,800	9,283
Saloons:		
Number	7,579	3,659
To each 1,000 persons	5.00	4.54
Police:		
Number of	3,342	1,041
Annual arrests (10 years)	74,594	28,364
Annual station house lodgers (10 years)	138,604	21,569
Fire department:		
Number of employés	1,027	527
Number of fires during past year	2,836	901
Aggregate loss from fires (10 years)	$4,142,777	$2,510,043

a Includes interments in cemeteries within city limits only.

The figures in this table show that New York was the more densely populated of the two cities, having a smaller number of dwellings than, and almost twice as many people to each dwelling as, Brooklyn. The open space in the form of parks was proportionately much greater in New York, and a much larger proportion of the business population lived outside the city limits than was the case in Brooklyn.

The mean population of New York for the 6-year period was 1,394,647, and that of Brooklyn was 721,914.

During the same period the average annual death rate in New York, exclusive of stillbirths, was 27.66 and in Brooklyn 24.17 per 1,000 of population. For the census year alone the death rates per 1,000 of population were: New York, 26.45; Brooklyn, 23.89; Metropolitan district, 24.61.

A comparison of these death rates with those of certain other of the principal registration cities during the census year, both inclusive and exclusive of stillbirths, is shown in Table 2. The population used in computing these rates is that of June 1, 1890, and not the mean population for the census year.

Table 2 shows death rates among the white population of certain cities for the year ending May 31, 1890, including and excluding stillbirths.

TABLE 2.

CITIES.	DEATH RATES PER 1,000 OF WHITE POPULATION.	
	Including stillbirths.	Excluding stillbirths.
Average	22.84	21.21
New York, N. Y.	28.47	26.31
Chicago, Ill.	21.03	19.01
Philadelphia, Pa.	22.28	20.93
Brooklyn, N. Y.	25.41	23.75
St. Louis, Mo.	18.15	16.50
Boston, Mass.	24.62	23.29
Baltimore, Md.	22.61	21.05
San Francisco, Cal.	23.57	22.32
Cincinnati, Ohio	21.93	20.64
Cleveland, Ohio	21.83	20.10
Buffalo, N. Y.	19.83	18.32
New Orleans, La.	25.41	23.57
Pittsburg, Pa.	21.56	19.91
Washington, D. C.	19.79	18.57
Detroit, Mich.	20.36	18.62
Milwaukee, Wis.	19.26	18.76
Newark, N. J.	28.67	27.07
Minneapolis, Minn.	14.76	13.48
Jersey city, N. J.	27.48	25.61
Louisville, Ky.	19.61	18.16
Rochester, N. Y.	17.39	17.36
St. Paul, Minn.	16.74	14.78
Kansas city, Mo.	17.54	15.74
Providence, R. I.	21.97	20.76

The variations in the annual death rates of New York and Brooklyn for the 16 calendar years ending with the year 1890 are shown in the following table. The number of deaths and of stillbirths upon which these rates are based were obtained from the annual reports of the local boards of health. The population for each year was calculated by the geometrical progression formula from the figures of the censuses of 1870, 1880, and 1890.

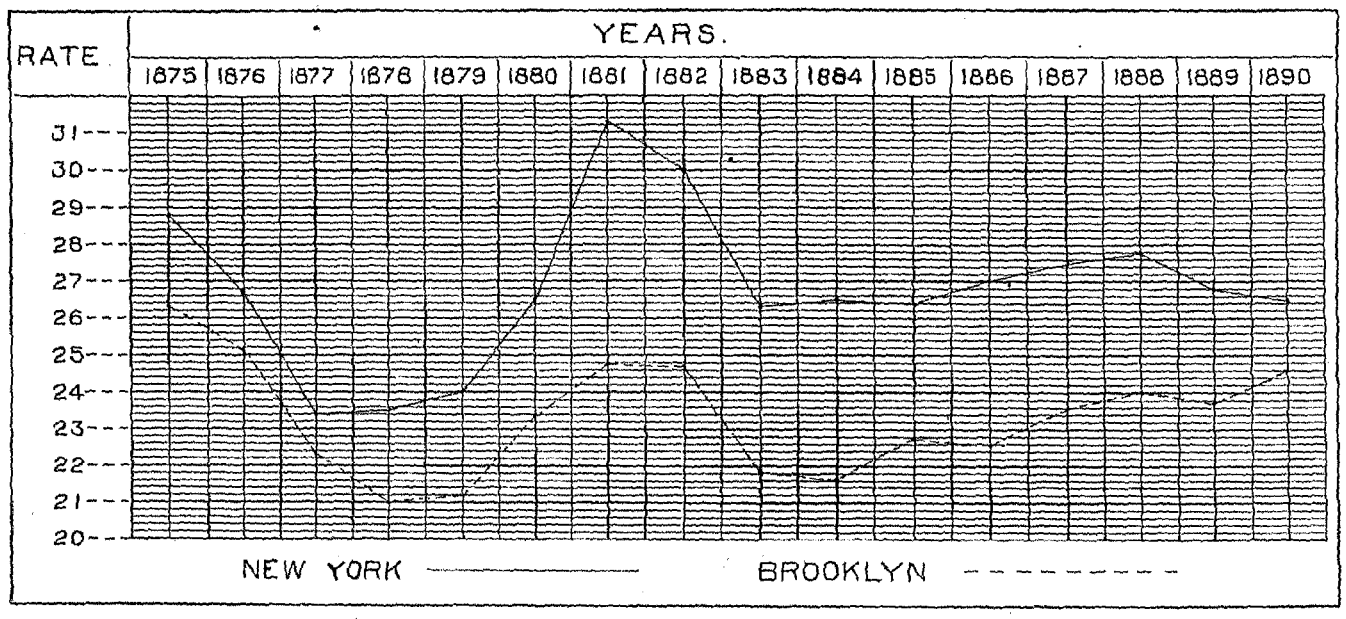
Table 3 shows for New York and Brooklyn the death rates per 1,000 of population for each calendar year from 1875 to 1890, inclusive.

TABLE 3.

YEARS.	NEW YORK.		BROOKLYN.	
	Including stillbirths.	Excluding stillbirths.	Including stillbirths.	Excluding stillbirths.
1875	30.94	28.80	28.18	26.32
1876	28.77	26.68	27.05	25.12
1877	25.32	23.39	23.93	22.32
1878	25.43	23.52	22.60	21.00
1879	25.94	24.08	22.78	21.16
1880	28.43	26.48	24.89	23.33
1881	33.29	31.30	26.46	24.76
1882	32.14	30.04	26.44	24.69
1883	28.42	26.33	23.55	21.84
1884	28.71	26.51	23.42	21.63
1885	28.59	26.39	24.49	22.74
1886	29.21	27.00	24.33	22.55
1887	29.70	27.51	25.34	23.55
1888	29.99	27.75	25.74	24.04
1889	29.05	26.79	25.38	23.74
1890	28.65	26.47	26.21	24.59

The variations in the death rates of the two cities, exclusive of stillbirths, as contained in the preceding table, are shown graphically in the following diagram:

DIAGRAM SHOWING COMPARATIVE DEATH RATES PER 1,000 OF POPULATION IN NEW YORK AND BROOKLYN FOR THE YEARS 1875 TO 1890.



From this table and the diagram it will be seen that the death rate in New York has been uniformly greater than that of Brooklyn, and has varied more widely; that in general the death rates of the two cities have increased and decreased together, but that from 1886 to 1890 there has been a gradual increase in the death rate of Brooklyn, while that of New York has first risen and then fallen to the level of 1885. The higher death rates in 1881 and 1882 were due largely to relatively high death rates among the children, produced by diphtheria, scarlet fever, and diarrheal diseases.

In different parts of New York the death rates vary from over 50 to less than 15, and in Brooklyn from over 40 to less than 12 per 1,000 of population. Before considering these differences in localities it is desirable to discuss briefly the influence of age, sex, race, occupation, and season upon the death rates, and also the relative proportion of deaths due to certain causes in these cities.

AGE.

Of the factors named, age is one of the most important, and in comparing death rates of different localities, or of different races, it must be constantly borne in mind that the death rates of infants and young children and of old persons are much higher than those of persons between 15 and 45 years of age, and a comparatively high death rate in any class of population, or in any particular district, may be due mainly or entirely to the fact that that class or district contained a relatively large proportion of children or of old persons.

The following tables show the proportions of the population by age groups in each class, and the corresponding death rates. In these tables and others where the term "colored" occurs it will be understood to include negroes and persons of mixed blood, Chinese, Japanese, and Indians.

Table 4 shows the population of New York on June 1, 1890, and number in each specified age group per 100,000 of all ages, with distinctions of sex, color, nativity, and parental nativity.

TABLE 4.

SEX, COLOR, NATIVITY, AND PARENTAL NATIVITY.	June 1, 1890.	NUMBER IN EACH AGE GROUP PER 100,000 OF ALL AGES.							
		Under 15 years.	15 to 20 years.	20 to 25 years.	25 to 35 years.	35 to 45 years.	45 to 55 years.	55 to 65 years.	65 years and over.
Aggregate	1,515,301	28,782	9,843	11,709	20,367	13,371	8,804	4,505	2,559
Males	747,579	29,145	9,208	10,666	20,988	14,070	9,150	4,445	2,328
Females	767,722	28,429	10,461	12,725	19,764	12,690	8,466	4,682	2,783
White	1,480,627	28,948	9,881	11,686	20,247	13,278	8,891	4,590	2,569
Males	734,930	29,315	9,250	10,631	20,866	13,968	9,147	4,478	2,345
Females	754,697	28,591	10,495	12,713	19,645	12,605	8,463	4,701	2,787
Native	852,641	44,818	12,419	11,452	16,482	8,007	3,963	1,700	1,150
Males	420,449	45,364	11,983	10,869	16,554	8,305	4,177	1,728	1,020
Females	432,192	44,286	12,844	12,019	16,413	7,717	3,755	1,690	1,276
Both parents native	270,487	37,463	8,556	9,391	16,987	12,136	8,198	4,290	3,069
Males	134,457	37,639	8,084	8,714	17,196	12,638	8,802	4,270	2,747
Females	136,030	37,289	9,022	10,060	16,870	11,639	7,601	4,131	3,388
One or both parents foreign	582,154	48,235	14,215	12,410	16,248	6,088	1,995	551	258
Males	285,992	48,996	13,817	11,881	16,294	6,267	2,003	534	208
Females	296,162	47,500	14,599	12,920	16,203	5,915	1,988	568	307
Foreign	636,986	7,707	6,483	11,999	25,287	20,333	15,275	8,448	4,468
Males	314,481	7,859	5,597	10,313	26,030	21,540	15,791	8,153	4,117
Females	322,505	7,558	7,348	13,643	23,977	19,155	14,773	8,735	4,811
Colored	25,674	19,160	7,615	13,048	27,331	18,780	8,982	3,104	1,971
Males	12,649	19,282	6,720	12,697	28,073	19,970	9,329	2,577	1,352
Females	13,025	19,040	8,484	13,390	26,610	17,643	8,645	3,616	2,572

Table 5 shows the population of Brooklyn on June 1, 1890, and number in each specified age group per 100,000 of all ages, with distinctions of sex, color, nativity, and parental nativity.

TABLE 5.

SEX, COLOR, NATIVITY, AND PARENTAL NATIVITY.	June 1, 1890.	NUMBER IN EACH AGE GROUP PER 100,000 OF ALL AGES.							
		Under 15 years.	15 to 20 years.	20 to 25 years.	25 to 35 years.	35 to 45 years.	45 to 55 years.	55 to 65 years.	65 years and over.
Aggregate	806,343	30,736	9,752	10,889	18,941	12,743	8,972	4,941	3,026
Males	394,123	31,420	9,515	10,150	19,130	13,134	9,145	4,784	2,713
Females	412,220	30,074	9,979	11,595	18,760	12,370	8,807	5,091	3,324
White	795,397	30,822	9,766	10,865	18,896	12,694	8,974	4,951	3,032
Males	388,964	31,508	9,538	10,125	19,074	13,083	9,148	4,800	2,724
Females	406,433	30,167	9,984	11,574	18,726	12,321	8,807	5,098	3,327
Native	534,672	42,084	11,995	11,696	16,407	8,771	4,933	2,387	1,727
Males	260,292	43,818	11,910	10,592	16,127	8,776	4,946	2,341	1,490
Females	274,380	41,608	12,075	11,573	16,672	8,768	4,921	2,431	1,952
Both parents native	222,573	38,796	8,951	9,195	15,196	11,299	8,325	4,648	3,590
Males	108,101	39,989	8,895	8,708	14,991	11,307	8,412	4,586	3,112
Females	114,472	37,668	9,004	9,655	15,389	11,292	8,242	4,708	4,042
One or both parents foreign	312,099	45,457	14,165	12,451	17,270	6,969	2,515	774	399
Males	152,191	46,538	14,052	11,930	16,934	6,977	2,484	747	338
Females	159,908	44,428	14,274	12,947	17,591	6,960	2,543	800	457
Foreign	260,725	6,498	5,196	10,393	24,000	20,737	17,260	10,210	5,706
Males	128,672	6,604	4,740	9,180	25,034	21,798	17,649	9,774	5,221
Females	132,053	6,395	5,640	11,574	22,993	19,704	16,880	10,635	6,179
Colored	10,946	24,466	8,743	12,598	22,191	16,353	8,862	4,193	2,594
Males	5,159	25,528	7,753	12,037	23,338	16,961	8,897	3,625	1,861
Females	5,787	23,518	9,625	13,099	21,168	15,811	8,830	4,700	3,249

The aggregate white population of New York under 15 years of age on June 1, 1890, was 430,463, and of these 381,514, or about 89 per cent, were native, while but 48,949, or about 11 per cent, were foreign. The corresponding figures for Brooklyn are: aggregate white, 244,941—native, 228,046; foreign, 16,895; about 93 per cent being native and about 7 per cent foreign. In New York 44.74 per cent of the native white population was under 15 years of age, against 19.09 for the colored and only 7.68 per cent for the foreign. In Brooklyn the proportion of those under 15 years of age was smaller among the whites and larger among the colored, being 42.65 per cent of the native whites, 6.48 per cent of the foreign whites, and 24.32 per cent of the colored.

The following tables show the death rates of the different age groups, with distinctions of sex, color, nativity, and nativity of parents.

Table 6 shows the death rates in New York during the census year, stillbirths included, with distinctions of certain age groups, and of sex, color, nativity, and parental nativity.

TABLE 6.

SEX, COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 1,000 OF POPULATION.								
	All ages.	Under 15 years.	15 to 20 years.	20 to 25 years.	25 to 35 years.	35 to 45 years.	45 to 55 years.	55 to 65 years.	65 years and over.
Aggregate	28.63	47.51	5.76	9.96	14.26	21.01	29.41	48.80	105.03
Males	31.33	51.66	6.41	11.66	15.07	23.45	32.02	54.31	107.79
Females	25.99	43.37	5.20	8.57	12.81	18.37	26.66	43.71	102.78
White	28.47	47.06	5.65	9.84	14.15	20.91	29.30	48.45	105.16
Males	31.15	51.15	6.25	11.47	15.54	23.30	31.86	53.88	107.99
Females	25.87	42.97	5.13	8.52	12.71	18.32	26.60	43.41	102.84
Native	32.34	51.67	5.65	10.95	16.71	20.11	25.51	41.18	99.65
Males	35.82	56.37	6.25	12.52	18.76	23.23	29.40	48.44	101.24
Females	28.95	46.98	5.10	9.57	14.69	16.85	21.20	33.96	98.42
Both parents native	30.35	52.72	5.14	7.05	9.49	13.50	21.78	37.23	94.56
Males	33.24	57.89	5.98	8.36	10.30	14.65	24.76	43.72	95.32
Females	27.49	47.65	4.40	5.92	8.67	12.25	18.38	30.61	93.95
One or both parents foreign	33.26	51.29	5.79	12.32	20.21	26.24	32.62	55.16	127.83
Males	37.03	55.86	6.33	13.95	22.94	31.35	39.27	66.19	138.05
Females	29.62	46.74	5.30	10.87	17.57	21.01	26.15	45.16	121.15
Foreign	23.31	11.16	5.64	8.43	11.91	21.33	30.62	50.42	107.06
Males	24.00	10.84	6.25	9.09	12.86	23.34	32.70	55.42	110.23
Females	21.75	11.49	5.19	7.27	10.89	19.12	28.44	45.86	104.42
Colored	37.47	87.42	14.32	16.12	19.24	25.29	35.56	79.05	94.86
Males	42.06	96.76	18.82	21.17	21.40	29.69	40.68	98.16	87.72
Females	33.01	78.23	10.86	11.47	17.02	20.45	30.20	65.82	98.51

Table 7 shows the death rates in Brooklyn during the census year, stillbirths included, with distinctions of certain age groups, and of sex, color, nativity, and parental nativity.

TABLE 7.

SEX, COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 1,000 OF POPULATION.								
	All ages.	Under 15 years.	15 to 20 years.	20 to 25 years.	25 to 35 years.	35 to 45 years.	45 to 55 years.	55 to 65 years.	65 years and over.
Aggregate	25.54	41.00	5.51	8.71	12.64	16.03	23.18	40.69	96.65
Males	27.75	44.50	6.00	10.37	13.73	17.87	25.55	46.35	96.32
Females	23.42	37.51	5.06	7.32	11.57	14.16	20.82	35.60	96.91
White	25.41	40.69	5.42	8.60	12.65	15.93	23.03	40.60	96.09
Males	27.62	44.14	5.90	10.28	13.74	17.76	25.49	46.23	96.06
Females	23.29	37.24	4.98	7.19	11.60	14.06	20.59	35.53	96.11
Native	26.53	42.97	5.57	9.09	13.44	13.35	16.61	29.07	93.87
Males	29.08	46.74	5.97	10.48	14.94	14.71	18.64	32.82	93.32
Females	24.11	39.21	5.10	7.87	12.07	12.06	14.66	25.64	94.27
Both parents native	26.90	44.53	4.67	6.60	9.17	11.33	15.76	27.74	92.73
Males	29.34	49.16	4.47	7.44	9.44	12.52	17.93	30.46	93.34
Females	24.60	39.89	4.85	5.88	8.91	10.21	13.67	25.24	92.28
One or both parents foreign	26.26	42.02	5.97	10.40	16.12	15.68	18.60	34.77	101.29
Males	28.90	45.27	6.64	12.06	18.39	17.23	20.36	43.13	93.20
Females	23.75	38.79	5.35	8.94	14.04	14.20	16.97	27.34	106.85
Foreign	23.11	9.98	4.72	7.53	11.55	18.16	26.80	46.13	97.47
Males	24.68	9.30	5.57	9.82	12.17	20.25	29.37	52.72	97.65
Females	21.59	10.66	4.03	5.76	10.90	15.91	24.18	40.23	97.32
Colored	34.99	69.45	12.54	15.95	11.53	21.70	34.02	47.93	144.37
Males	37.22	77.45	15.60	16.10	13.29	24.00	30.50	58.82	125.00
Females	33.01	61.72	10.77	15.83	9.80	19.67	37.18	46.44	154.26

Some comments on these tables will be given hereafter in speaking of the influence of race. At present it is only desired to call attention to the fact that the proportion of population in the different age groups has a decided influence upon the gross death rates of the classes specified. For example, the death rate of the native whites in New York was 32.34, while it was only 23.31 for the foreign whites. But 44.74 per cent of the whole native white population was under 15 years of age, while but 7.68 per cent of the whole foreign white population was under that age. Moreover, 87.74 per cent of the foreign whites who were under 15 years of age were also over 5 years of age, or in the age group 5 to 15 years, and had therefore passed the ages in which the heaviest death rates occur, while only 58.85 per cent of the native whites were found in the age group 5 to 15 years.

There are also differences in the death rates of the two cities which do not depend upon the different proportions of population in the age group, since the proportion of the population of Brooklyn under 15 years of age is greater than in New York, while the death rate is 6.51 per 1,000 of population less than in New York, and the proportion of population in the age group 15 to 45 is less in Brooklyn than in New York, the death rate of that age group being also less.

During the 6-year period the average annual death rate per 1,000 of children under 5 years of age, excluding stillbirths, was, in New York, for the native whites, 110.37; for the colored, 153.90, and in Brooklyn, for the native whites, 93.78; for the colored, 147.59. In New York this rate varied for the native whites in different districts from under 55 to over 170, and in Brooklyn, from under 55 to over 130 per 1,000 of population. These rates are higher than those of Washington and Baltimore for the same periods for the whites, which were, Washington, 61.94; Baltimore, 73.94, but for the colored they are lower in Brooklyn, while in New York they are higher than in Washington and lower than in Baltimore during the same period, these rates being, Washington, 150.53; Baltimore, 163.41.

The death rate of the foreign white children under 5 years of age during the 6-year period was, in New York, 74.28, and in Brooklyn, 54.96, per 1,000 of corresponding population, being decidedly lower than the rates for the native born, but the differences in the different localities were much greater, ranging from under 35 to over 250 in New York, and from under 25 to over 135 in Brooklyn, and these differences, as we shall see, probably depend to a considerable extent on race distribution of the population.

The following table shows the variations of the death rates of the infants under 1 year, and of the children under 5 years of age in New York and Brooklyn during the 11 years 1880 to 1890, inclusive, the number of deaths being taken from the board of health reports.

Table 8 shows the death rates per 1,000 of population in New York and Brooklyn, by years, from 1880 to 1890, excluding stillbirths.

TABLE 8.

YEARS.	DEATH RATES PER 1,000 OF POPULATION, STILLBIRTHS EXCLUDED.			
	New York.		Brooklyn.	
	Under 1 year.	Under 5 years.	Under 1 year.	Under 5 years.
1880	279.80	104.35	225.66	88.52
1881	305.45	124.34	239.01	95.29
1882	305.66	120.88	245.88	96.55
1883	263.91	94.08	218.71	76.97
1884	288.34	102.06	238.96	80.58
1885	273.60	100.41	248.98	84.61
1886	284.14	104.34	237.04	85.44
1887	286.45	106.80	257.79	90.13
1888	290.70	108.82	271.63	92.97
1889	288.89	105.83	268.47	93.38
1890	277.48	99.01	276.52	93.18

The variations in the death rates of the two cities, exclusive of stillbirths, among children under 1 and under 5 years of age, as contained in the preceding table, are shown graphically in the following diagrams:

DIAGRAM SHOWING COMPARATIVE DEATH RATES OF CHILDREN UNDER 1 YEAR OF AGE PER 1,000 OF POPULATION OF CORRESPONDING AGE IN NEW YORK AND BROOKLYN FOR THE YEARS 1880 TO 1890.

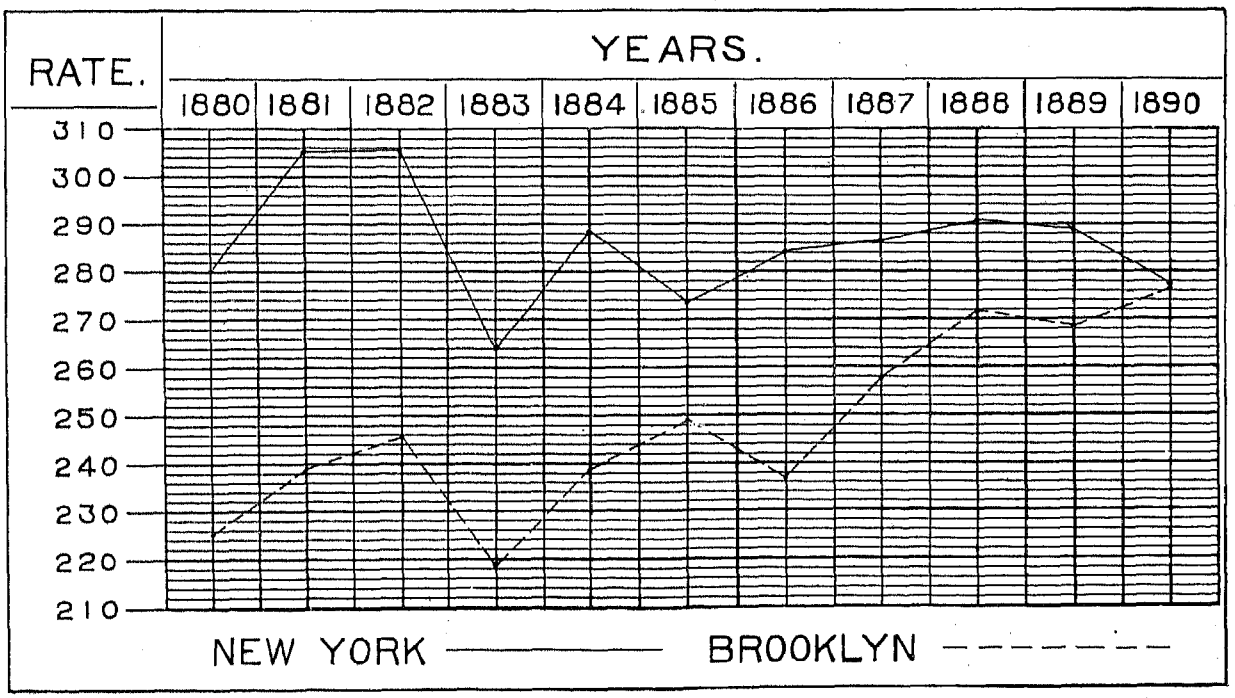
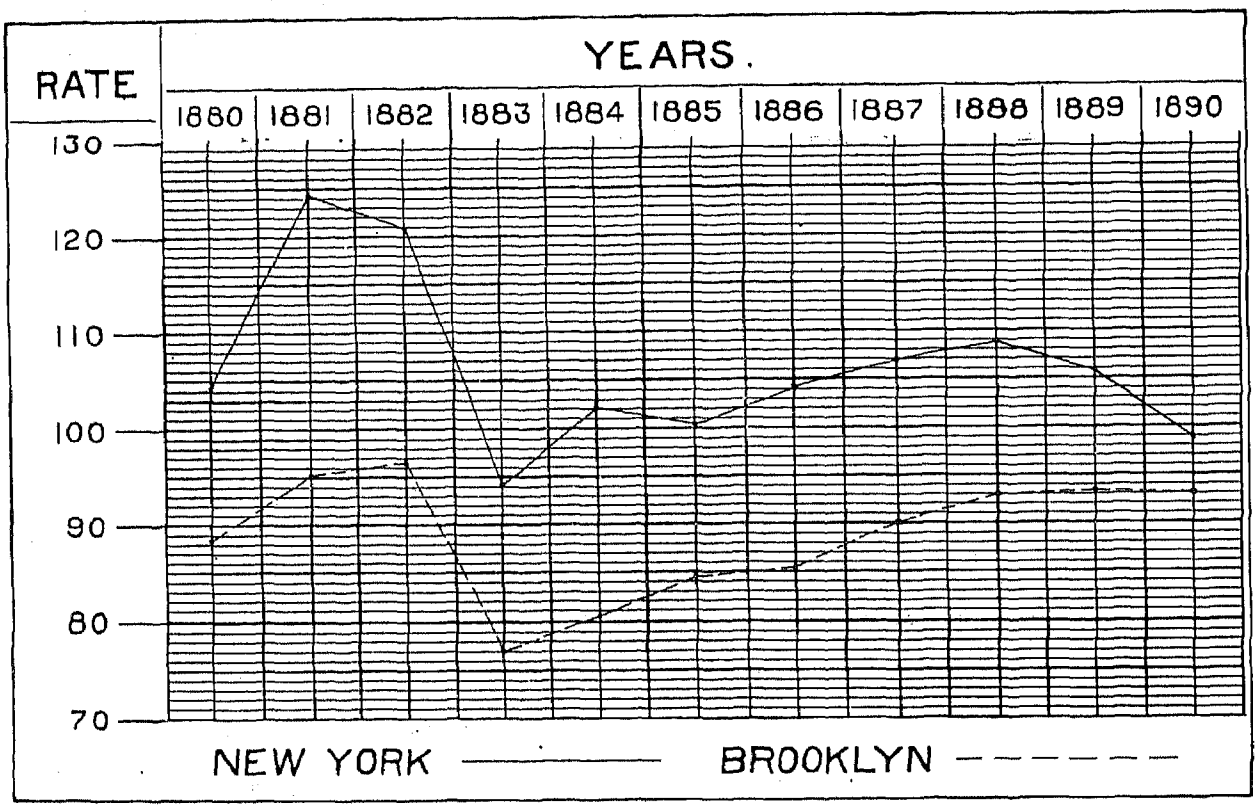


DIAGRAM SHOWING COMPARATIVE DEATH RATES OF CHILDREN UNDER 5 YEARS OF AGE PER 1,000 OF POPULATION OF CORRESPONDING AGES IN NEW YORK AND BROOKLYN FOR THE YEARS 1880 TO 1890.



It will be seen from these diagrams and from the table that the death rate of infants and of children under 5 years of age was lower in New York in 1890 than it had been for several years, while in Brooklyn these rates had been rising irregularly since 1883.

The shaded maps, which show the relative mortality among the children under 5 years of age in New York and Brooklyn, merit careful examination, and should be compared with the transparent maps, which show the location of ancient streams and marshes. It will be seen that the death rate of those under 5 years of age is as a rule greatest in the low lying parts and where there is filled ground, but to this there are numerous exceptions. The influence of race appears in the comparatively light shades representing the mortality of Russian and Polish Jews in the seventh, tenth, and thirteenth wards, inhabited largely by this class.

The death rates of the infants under 1 year of age require special consideration.

Table 9 shows for the years ending May 31, 1880 and 1890 the death rates of children under 1 year of age, exclusive of stillbirths, the number of deaths during each census year per 1,000 children born during the year, and the death rate under 1 year of age per 1,000 deaths of all ages in New York and Brooklyn.

TABLE 9.

CHARACTER OF RATES.	Sex.	NEW YORK.		BROOKLYN.	
		1890	*1880*	*1890*	*1880*
Number of deaths of children under 1 year of age per 1,000 of population of corresponding ages.	Total	279.35	245.33	254.87	196.50
	Male	299.57	263.20	277.03	214.74
	Female	258.43	226.97	232.44	177.79
Number of deaths during the census year per 1,000 children born within the year.	Total	240.84	211.12	223.77	177.11
	Male	255.16	223.36	239.29	190.70
	Female	225.67	198.18	207.54	162.74
Number of deaths under 1 year of age per 1,000 deaths of all ages	Total	258.43	270.02	253.58	248.29
	Male	262.71	280.33	263.16	271.12
	Female	253.48	258.69	242.92	224.84

From this table it appears that the mortality of infants was greater in New York than it was in Brooklyn in 1890, and that in both cities it was higher in 1890 than it was in 1880. The number of deaths under 1 year of age per 1,000 deaths of all ages was less in New York in 1890 than in 1880, and was but little higher in Brooklyn.

The increase in the death rate of children under 1 year of age shown in this table corresponds with that observed in Washington and Baltimore for those years, and it may be due, either to an actually greater infantile mortality in 1890 than in 1880, or to a more defective enumeration of children under 1 year of age in the last census in these cities, or to a combination of these two causes.

The increase per 1,000 in the death rate of infants in 1890 over that of 1880, is: for New York, 34.02; for Brooklyn, 58.37; for Baltimore (white), 49.74, (colored) 102.44; and for the District of Columbia (white), 13.08, (colored) 84.60.

The number of deaths of children under 1 year of age per 1,000 children born during the year, was, in 1880, for New York, 211.12; for Brooklyn, 177.11; increasing in 1890 to 240.84 for New York, and 223.77 for Brooklyn.

The infantile death rate of the colored was much greater than that of the whites. During the census year the number of deaths per 1,000 births was in New York, for the whites, 238.62; for the colored, 416.36. In Brooklyn, for the whites, 221.87; for the colored, 367.13.

The following are the corresponding rates for some large English cities for the average of 10 years from 1877 to 1886: London, 152; Birmingham, 164; Liverpool, 183; Manchester, 174; and Leicester, 201. (*a*)

For some countries taken as a whole the corresponding figures are: France, 1875–1882, 166.2; Netherlands, 1878–1881, 193.2; Italy, 1872–1883, 209.7; Switzerland, 1869–1880, 195.2; Prussia, 1874–1882, 207.8; England and Wales, 1866–1882, 149.2. (*b*)

The increase in the number of deaths per 1,000 of the births in 1890 as compared with 1880 is for New York, 29.72; Brooklyn, 46.66; Baltimore (white), 48.16, (colored), 95.17, and for the District of Columbia (white), 13.14, (colored), 55.47.

Let us now compare the proportion of children in the population of these cities in 1880 and 1890.

Table 10 shows the number of children under 1 and under 5 years of age in New York and Brooklyn June 1, 1890, and June 1, 1880, and also the number of population of these ages per 100,000 of the total population, with distinction of sex.

TABLE 10.

Color and sex.	Years.	Population at each age.				Proportion at each age per 100,000 of all ages.			
		New York.		Brooklyn.		New York.		Brooklyn.	
		Under 1 year.	Under 5 years.	Under 1 year.	Under 5 years.	Under 1 year.	Under 5 years.	Under 1 year.	Under 5 years.
Aggregate	1890	37,076	164,080	19,163	90,811	2,447	10,838	2,377	11,262
	1880	31,183	140,387	14,814	70,212	2,585	11,638	2,614	12,390
White males	1890	18,634	81,904	9,522	44,868	2,535	11,144	2,448	11,535
	1880	15,519	69,718	7,397	35,153	2,671	12,000	2,752	13,080
White females	1890	18,028	81,090	9,413	45,001	2,380	10,745	2,316	11,072
	1880	15,182	68,904	7,208	34,185	2,510	11,392	2,488	11,802

It will be seen from this table that the number of children under 1 year of age was 1.38 less per 1,000 in New York and 2.37 per 1,000 less in Brooklyn in 1890 than it was in 1880.

In every census there are errors in the count of children under 1 year of age, owing partly to omissions due to forgetfulness or concealment on the part of those furnishing the information and in part to the fact that children 10 or 11 months old are often reported as 1 year old, just as children 4 years and 10 or 11 months old are reported as 5 years old, the tendency being to give such figures in round numbers; but these errors should not affect the comparison of the proportion of infants present in these two different censuses of large populations, as the two censuses were taken in substantially the same manner.

a Newsholme, "Elements of Vital Statistics", London, 1889, page 104.
b Rochard, "Encyclopédie d' hygiène", Paris, 1890, volume I, page 254.

Table 11 shows for New York and Brooklyn the number of deaths occurring in each year from 1875 to 1890, inclusive, of persons under 1 year and under 5 years of age per 1,000 deaths of all ages, both inclusive and exclusive of stillbirths.

TABLE 11.

YEARS.	NEW YORK.				BROOKLYN.			
	Including stillbirths.		Excluding stillbirths.		Including stillbirths.		Excluding stillbirths.	
	Under 1 year.	Under 5 years.	Under 1 year.	Under 5 years.	Under 1 year.	Under 5 years.	Under 1 year.	Under 5 years.
1875	327.87	519.12	278.09	483.51	320.83	544.45	272.73	512.19
1876	332.68	524.78	280.26	487.45	310.77	541.37	257.74	506.08
1877	337.82	510.14	283.14	469.68	302.85	499.06	252.60	462.95
1878	318.22	500.07	262.89	459.49	317.73	514.98	265.73	478.01
1879	319.69	490.22	267.09	450.82	302.39	488.68	249.03	449.56
1880	323.25	495.99	273.19	458.72	299.46	503.12	252.84	470.05
1881	295.79	491.63	250.91	459.22	298.31	506.37	249.98	472.37
1882	308.63	497.22	260.18	461.98	304.62	510.01	255.43	475.36
1883	309.66	450.94	254.86	407.40	308.62	466.20	254.40	424.33
1884	330.61	479.15	275.05	435.92	333.20	486.75	277.98	444.25
1885	317.49	471.80	260.72	427.86	324.96	479.67	272.95	439.58
1886	318.80	474.52	263.18	431.61	313.69	484.03	259.53	443.32
1887	313.63	472.63	258.98	430.64	319.51	482.97	267.76	443.64
1888	314.41	474.43	259.14	432.06	321.70	480.71	273.74	444.00
1889	322.49	476.46	265.30	432.27	318.49	483.02	271.32	447.24
1890	313.30	451.80	256.54	406.58	312.51	462.19	267.26	426.79

The figures on which these rates are based were obtained from the annual reports of the boards of health.

Table 12 shows for each 1,000 deaths from all causes occurring within the census year in 1890 and 1880 in New York and Brooklyn the number of deaths due to the most important infantile diseases.

TABLE 12.

CAUSES.	NEW YORK.		BROOKLYN.	
	1890	1880	1890	1880
Total infantile diseases	226.15	213.26	224.51	219.21
Measles	3.17	2.12	0.83	3.07
Diarrheal diseases	40.31	33.96	30.32	22.94
Cholera infantum	32.81	35.83	37.54	45.04
Inanition	5.46	6.32	7.32	0.72
Whooping cough	6.34	4.17	4.05	7.76
Premature birth	20.91	23.75	12.10	17.66
Malformation	1.90	0.67	3.12	2.47
Debility and atrophy	26.10	18.46	41.23	26.36
Anæmia	0.25	1.20	0.21	.....
Hydrocephalus	6.86	7.66	4.10	8.02
Scrofula and tabes	1.10	1.91	0.67	3.50
Meningitis and diseases of the brain	10.21	8.97	20.46	14.16
Trismus nascentium	1.12	0.35	1.56	.....
Convulsions	10.43	23.01	18.38	15.95
Croup and angina	1.92	4.80	1.61	2.05
Bronchitis	22.31	14.86	20.51	18.42
Pneumonia	24.50	19.27	13.81	14.07
Dentition	1.22	4.20	4.05	6.23
Others of class, digestive	1.82	1.13	1.71	1.28
Exposure and neglect	0.02	.....	.....	.....
Suffocation	1.37	0.64	0.93	0.51

It will be seen from this table that the proportion of deaths due to these infantile diseases was greater in both New York and Brooklyn in 1890 than it was in 1880, the difference being most marked in New York. Taking the figures of Tables 9, 10, 11, and 12 and comparing them with the corresponding figures given in the report of this office upon the "Vital Statistics of the District of Columbia and Baltimore", and taking into consideration the fact that the censuses of 1880 and 1890 were taken in the same manner, and by substantially the same class of persons as enumerators, it seems probable that the number of children under 1 and under 5 years of age was less in proportion to the total population on June 1, 1890, than it was on June 1, 1880, in both New York and Brooklyn.

A part of this diminution was probably due to a diminished birth rate during the years 1889 and 1890, and a part to a somewhat greater mortality from infantile diseases during the census year.

Birth rates are calculated from census data by adding to the number of children under 1 year of age, reported as living on the date of the census, the number of children reported as born and died within the census year, and comparing the number of births thus obtained with the total population, or with the number of women of child bearing ages. Calculated in this way the birth rate per 1,000 of population in New York city was 30.04 in 1880 and 28.38 in 1890, and in Brooklyn it was 29.00 in 1880 and 27.07 in 1890.

The diminution in the birth rate which these figures indicate for these two cities is also found in other large cities, and in the whole country, the birth rate of which in 1880 was 30.95 and in 1890, 26.68 per 1,000 of population.

These rates are too low by about 30 per cent for each census, but they are comparable with each other if the ratio of deficiency was about the same in 1890 that it was in 1880.

The corresponding figures for birth rates in some of the other large cities are as follows: Philadelphia, 1880, 26.20; 1890, 25.12. Boston, 1880, 25.01; 1890, 22.67. Chicago, 1880, 32.40; 1890, 31.02. Baltimore, whites, 1880, 28.38; 1890, 25.58. Cincinnati, 1880, 29.85; 1890, 25.58. District of Columbia, whites, 1880, 26.85; 1890, 20.98.

In fact, the only exceptions thus far noted among the large cities to this rule of diminution in birth rates are in St. Louis and Detroit, in which the birth rate was higher in 1890 than it was in 1880 according to the census reports.

RACE.

The mean colored population of New York for the 6-year period was 24,003, of whom 1,553, or 64.70 per 1,000, were under 5 years of age, and in Brooklyn it was 10,100, of whom 865, or 85.64 per 1,000, were under 5 years of age. At the same time the proportion of the children under 5 years of age to the native white population having both parents native was 155.90 per 1,000, and for the foreign white 9.46 per 1,000 in New York, and in Brooklyn the corresponding proportions were 155.08 and 8.31 per 1,000.

The annual death rate of the colored in New York during the 6-year period, excluding stillbirths, was 30.27, and in Brooklyn 29.79 per 1,000 of population, and the death rate of the colored children under 5 years of age was, in New York, 153.90, and in Brooklyn, 147.59. These rates are higher than those of the whites, but the excess is not so great as it was in Baltimore and Washington during the same period, the corresponding rates for the colored in those cities being, for Baltimore, 32.60, and for the District of Columbia, 33.25. For the colored children under 5 years of age, in Baltimore the rate was 163.41, and in the District of Columbia 150.53. During the census year the death rates per 1,000 of the children under 1 year of age, excluding stillbirths, were: for New York, whites 276.39, colored 541.06; for Brooklyn, whites 252.39, colored 460.35, and for the Metropolitan district, whites 261.79, colored 445.08.

From Tables 6 and 7, given above, it will be seen that during the census year the death rate of the foreign born whites was less than that of the native born whites in both New York and Brooklyn, and especially so for those under 15 years of age. In New York the death rate of the native born of native born parents, or "Americans", as they may be called, was less than that of the native born having one or both parents foreign born, but in Brooklyn the rate was slightly greater for the same class, the difference being too small to be of any importance.

For the age group 35 to 45 years in New York the death rates were: for the colored, 25.29; for the foreign whites, 21.33; for the native whites having one or both parents foreign, 26.24; and for the native white of native parents, 13.50, and in general it will be seen that for ages over 35 the death rate of this class was less than that of the other whites taken as a body, although this is not true for certain districts.

Table 13 shows for New York city for each of certain specified causes the average annual death rate per 100,000 of mean population during the 6 years ending May 31, 1890, with distinction of color, nativity, and parental nativity.

TABLE 13.

CAUSES.	Aggregate.	WHITE.					Colored.
		Total.	Native.			Foreign.	
			Total.	Both parents native.	One or both parents foreign.		
All causes	2,991.90	2,986.03	3,495.68	3,350.89	3,561.69	2,314.77	3,327.36
Scarlet fever	52.19	52.91	85.57	79.58	88.30	9.89	11.11
Typhoid fever	24.27	24.38	19.51	18.51	19.96	30.80	18.05
Malarial fever	24.62	24.60	26.98	30.67	25.29	21.47	25.69
Diphtheria	121.11	122.67	202.45	179.46	212.94	17.58	31.94
Croup	60.53	61.36	101.42	78.76	111.75	8.59	13.19
Diarrheal diseases	316.85	318.14	491.16	383.24	540.36	90.25	243.72
Consumption	391.75	385.05	310.05	238.48	342.69	483.83	774.21
Pneumonia	287.89	287.25	303.94	280.15	314.78	265.27	324.27
Measles	45.67	46.21	76.31	58.34	84.50	6.56	15.28
Whooping cough	33.70	33.60	57.82	54.24	59.46	1.69	30.58
Cancer and tumor	60.55	60.82	29.69	54.92	17.32	102.61	45.13
Heart disease and dropsy	138.24	137.37	93.65	130.00	77.08	194.95	188.17
Childbirth and puerperal diseases	26.72	26.78	18.25	16.87	18.87	38.01	23.61
Diseases of the liver	33.03	33.39	17.91	24.05	15.11	53.79	12.56
Diseases of the nervous system	241.96	241.99	276.11	308.64	261.27	197.06	240.25
Diseases of the urinary organs	173.72	172.52	110.77	147.76	93.90	253.86	242.33
Old age	21.38	21.16	8.09	21.11	2.15	38.37	34.02
Stillbirths	.....	.....	394.23	326.81	424.97	.....	300.66
All other causes	711.32	710.80	871.27	918.06	849.94	499.44	740.88
Unknown	0.99	0.96	1.11	1.23	1.06	0.76	2.78

Table 14 shows the average annual death rates during the 6 years ending May 31, 1890, in Brooklyn, due to certain specified causes, per 100,000 of mean population, with distinction of color, nativity, and parental nativity.

TABLE 14.

CAUSES.	Aggregate.	WHITE.					Colored.
		Total.	Native.			Foreign.	
			Total.	Both parents native.	One or both parents foreign.		
All causes	2,596.50	2,590.00	2,769.15	2,839.88	2,719.13	2,226.02	3,054.46
Scarlet fever	42.48	42.85	60.37	60.22	60.48	7.24	16.50
Typhoid fever	23.13	23.30	20.65	23.36	18.73	28.68	11.55
Malarial fever	32.62	32.48	30.08	30.87	29.53	37.34	42.90
Diphtheria	115.85	116.58	166.06	159.92	170.41	16.04	64.36
Croup	48.57	49.03	70.65	59.46	78.56	5.11	16.50
Diarrheal diseases	282.58	282.10	375.49	325.32	410.97	92.35	316.83
Consumption	303.24	300.01	246.63	203.69	277.00	408.45	531.35
Pneumonia	230.06	229.27	216.24	216.09	216.34	255.76	285.48
Measles	17.71	17.75	25.16	22.10	27.32	2.70	14.85
Whooping cough	26.18	25.85	37.87	40.23	36.21	1.42	49.50
Cancer and tumor	48.27	48.19	26.06	44.28	13.18	93.13	54.46
Heart disease and dropsy	131.16	130.51	85.84	114.29	65.73	221.26	176.57
Childbirth and puerperal diseases	20.62	19.95	14.64	13.50	15.45	30.74	24.75
Diseases of the liver	35.95	35.85	20.44	24.46	17.59	67.15	42.90
Diseases of the nervous system	270.67	269.76	293.35	332.82	265.43	221.83	334.98
Diseases of the urinary organs	112.87	112.74	74.73	91.77	62.69	189.96	122.11
Old age	31.37	31.38	17.50	36.86	3.82	59.56	31.35
Stillbirths	.....	.....	269.31	290.74	254.16	.....	75.91
All other causes	641.90	639.12	715.72	747.29	693.40	483.48	838.28
Unknown	2.84	2.83	2.34	2.61	2.15	3.83	3.30

No comparison can properly be made of the death rates shown in these tables for the foreign and the colored as due to scarlet fever, diphtheria, measles, and other diseases which affect children chiefly, owing to the relatively small proportion of children among these classes of population. Consumption and pneumonia are more fatal among the colored than among the whites in both cities, and among the foreign than among the native in Brooklyn.

The best means at our command for classifying the whites according to race is to divide them according to the birthplaces of mothers, and the death rates of different classes thus formed are shown in the following tables.

Table 15 shows for New York and Brooklyn for the 6-year period the death rates per 1,000 of certain races as indicated by color or by birthplaces of mothers, with distinction of under 15 years and 15 years of age and upward, including stillbirths.

TABLE 15.

COLOR AND BIRTHPLACES OF MOTHERS.	NEW YORK.			BROOKLYN.		
	All ages.	Under 15 years.	15 years and over.	All ages.	Under 15 years.	15 years and over.
White	29.86	53.28	20.36	25.90	44.71	17.63
Colored	33.27	75.71	23.57	30.54	63.75	20.00
White mothers born in—						
United States	32.43	54.01	15.91	27.49	45.76	13.89
England and Wales	27.67	50.53	20.78	20.51	32.42	16.05
Ireland	32.51	50.87	28.01	27.14	43.84	22.08
Scotland	26.60	43.71	21.91	19.62	29.86	16.41
France	23.28	47.01	17.86	17.22	27.81	14.43
Germany	24.27	46.97	17.04	23.18	44.31	15.46
Russia and Poland	14.85	28.07	6.21	13.93	27.03	5.85
Canada	26.57	52.06	16.71	20.04	33.44	14.33
Scandinavia	23.47	57.33	13.43	19.46	45.50	9.13
Hungary	22.43	47.21	8.45	11.27	21.16	5.20
Bohemia	43.57	82.57	20.31	52.08	90.91	31.75
Italy	35.29	76.41	12.27	24.11	53.62	7.89
Other foreign countries	24.24	40.68	13.00	27.58	56.11	18.96

The variations in the death rates of the two cities among those under 15 years and those 15 years of age and upward, with distinction of birthplaces of mothers, as contained in the preceding table, are shown graphically in the diagrams following.

DIAGRAM SHOWING AVERAGE ANNUAL DEATH RATES PER 1,000 OF POPULATION UNDER 15 YEARS OF AGE IN NEW YORK AND BROOKLYN, WITH DISTINCTION OF BIRTHPLACES OF MOTHERS, DURING THE 6 YEARS ENDING MAY 31, 1890.

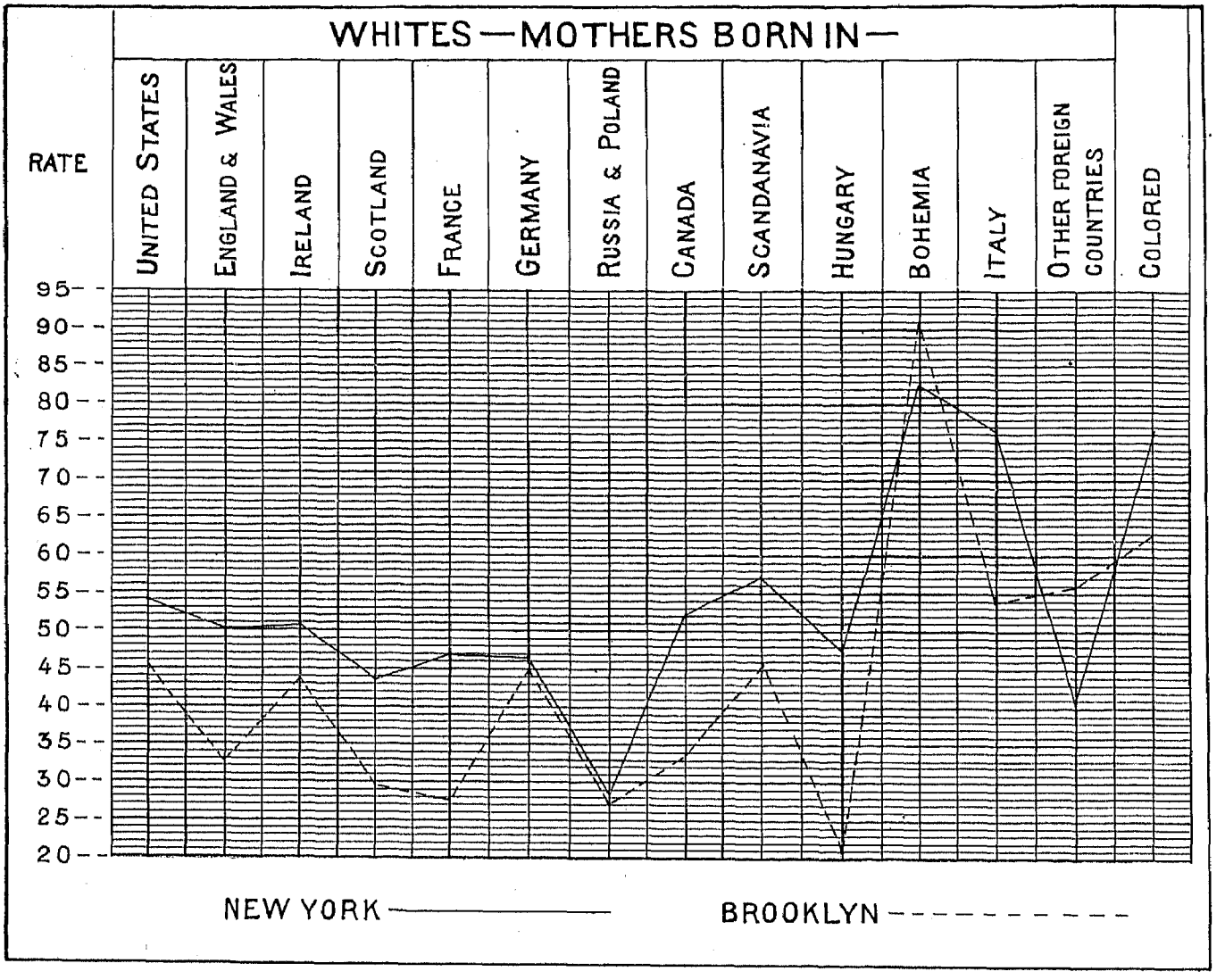


DIAGRAM SHOWING AVERAGE ANNUAL DEATH RATES PER 1,000 OF POPULATION, 15 YEARS OF AGE AND OVER, IN NEW YORK AND BROOKLYN, WITH DISTINCTION OF BIRTHPLACES OF MOTHERS, DURING THE 6 YEARS ENDING MAY 31, 1890.

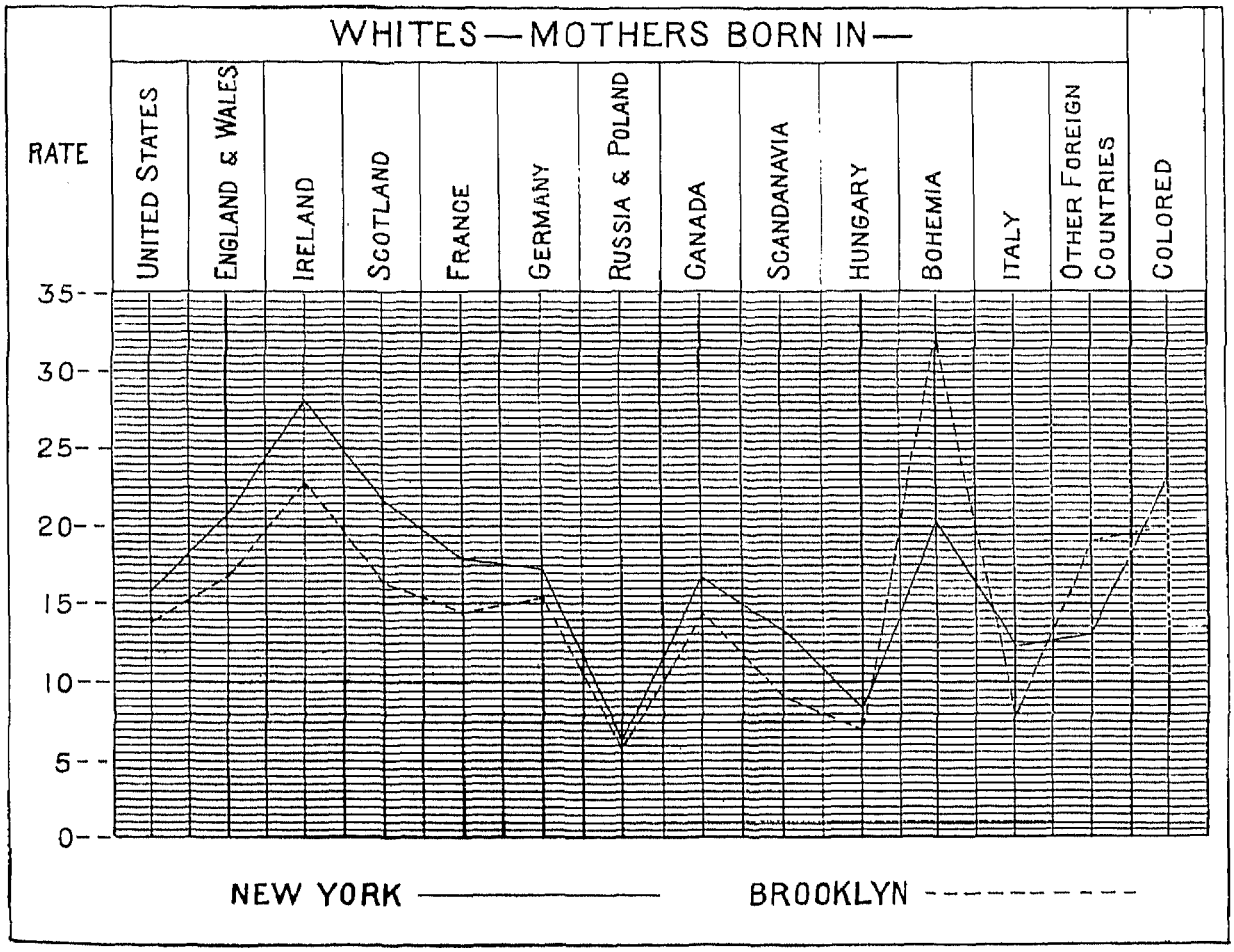


Table 15 shows that during the 6-year period the average annual death rate in New York was greatest among those whose mothers were born in Bohemia and least among those whose mothers were born in Russsia and Poland. In Brooklyn it was also greatest among those whose mothers were born in Bohemia, but least among those whose mothers were born in Hungary. *The real significance in the difference in the race mortality*, however, appears in the columns showing the death rates by age groups.

For those 15 years of age and upward the death rate in New York city was higher among the colored than among the whites, and among the latter was highest among those whose mothers were born in Ireland, and lowest among those whose mothers were born in Russia and Poland and Hungary. For all others, except the colored and the Irish, Scotch, and English and Welsh, the death rate in this age group was below the average.

In Brooklyn, the highest death rate of those 15 years of age and upward occurred among those whose mothers were born in Bohemia, and next to this among those whose mothers were born in Ireland. The lowest, as in New York, was among those whose mothers were born in Russsia and Poland and Hungary.

For the children under 15 years of age the heaviest death rate in New York was among those whose mothers were born in Bohemia (82.57), in Italy (76.41), and the colored (75.71). The lowest was among those whose mothers were born in Russia and Poland (28.67).

In Brooklyn the death rate of this age group was highest among those whose mothers were born in Bohemia (90.91), and the colored (63.75). The lowest was among those whose mothers were born in Hungary (21.16), Russia and Poland (27.03), and France (27.81).

The two following tables show the death rates of different races, with finer distinction of ages, stillbirths being included. These rates are for the census year, which will account for the difference in the rates at all ages and under 15 years of age, as stated in the table showing rates for the 6 years.

Table 16 shows for New York the death rates per 1,000 of white population during the census year, with distinction of birthplaces of mothers and of eight groups of ages.

TABLE 16.

BIRTHPLACES OF MOTHERS.	AGES.								
	All ages.	Under 15 years.	15 to 20 years.	20 to 25 years.	25 to 35 years.	35 to 45 years.	45 to 55 years.	55 to 65 years.	65 years and over.
United States (white)	29.16	46.92	4.92	7.00	9.67	12.55	20.66	34.41	93.35
England and Wales	27.59	43.28	5.63	10.04	12.96	19.28	29.78	42.70	127.82
Ireland	32.20	43.26	7.75	13.81	20.72	30.76	40.91	63.32	133.11
Scotland	26.55	35.32	4.98	10.77	14.34	20.70	36.21	41.84	108.75
France	24.08	42.46	6.06	5.27	10.22	15.26	28.05	44.31	111.52
Germany	22.08	36.90	4.30	7.73	11.05	16.94	22.65	43.27	84.52
Russia and Poland	21.18	40.25	3.27	4.07	7.01	9.93	20.63	31.25	102.80
Canada	26.85	39.53	5.68	13.24	15.89	28.95	18.25	70.55	95.24
Scandinavia	28.32	62.56	7.72	11.87	14.44	19.21	28.30	49.42	85.23
Hungary	29.25	58.73	7.01	5.49	8.14	11.99	30.84	40.23	102.19
Bohemia	36.22	62.19	5.69	13.11	18.45	20.30	23.54	58.38	89.74
Italy	39.96	84.18	7.94	13.50	11.03	15.36	19.90	38.34	88.40
Other foreign countries	18.06	32.11	4.14	6.39	7.47	13.20	18.96	36.48	66.73

Table 17 shows for Brooklyn the death rates per 1,000 of white population during the census year, with distinction of birthplaces of mothers and of eight groups of ages.

TABLE 17.

BIRTHPLACES OF MOTHERS.	AGES.								
	All ages.	Under 15 years.	15 to 20 years.	20 to 25 years.	25 to 35 years.	35 to 45 years.	45 to 55 years.	55 to 65 years.	65 years and over.
United States (white)	26.13	41.56	4.47	7.13	8.81	10.04	14.84	26.87	89.27
England and Wales	20.21	28.59	3.08	6.27	8.42	10.89	20.77	39.50	90.99
Ireland	27.83	38.69	7.03	11.05	18.28	23.56	32.17	56.08	117.23
Scotland	20.92	33.27	4.26	8.99	8.73	10.94	19.21	35.41	69.57
France	14.86	19.63	.....	8.87	6.26	5.81	15.65	31.14	79.30
Germany	21.58	36.47	5.04	7.11	10.32	13.75	20.66	37.81	84.98
Russia and Poland	37.57	76.29	10.50	6.30	11.39	18.22	33.98	44.78	32.26
Canada	21.53	36.47	2.61	11.89	11.15	16.80	17.16	33.90	74.07
Scandinavia	24.88	55.33	4.87	7.98	10.75	12.53	19.54	29.85	91.30
Hungary	7.81	11.63	20.41	.....	.....	.....	.....	66.67	.....
Bohemia	24.39	28.99	.....	.....	54.05	.....	.....	.....	111.11
Italy	30.83	65.42	3.41	7.34	6.92	12.74	20.27	46.51	129.41
Other foreign countries	18.41	27.90	33.47	4.94	9.05	12.61	23.60	48.66	83.33

From these tables it will be seen that in New York the death rates of those whose mothers were born in Russia and Poland were very low between the ages 15 and 45, and that, at the other groups of ages, it was also lower than that of almost every other race. These people were nearly all of the Jewish race, and numbered 80,235 in New York. This has a very important bearing upon the mortality of tenement house population in certain districts of the city, especially in wards 7, 10, and 13, and it shows that poverty does not necessarily produce a high death rate.

In Brooklyn the death rate of this class appears to be much higher; highest of all in fact, but in the population count of this city the Polish population was not counted with the Russian but with "all other foreigners", which is probably the chief cause of the discrepancy.

The heavy death rate both in New York city and in Brooklyn was largely due to the excessive death rate among the children of Irish mothers, because of the large number of this class of the population, it being 399,348 in New York and 196,372 in Brooklyn on June 1, 1890. It was greater for those of Italian mothers than for those of Irish mothers in New York, but the Italian population on June 1, 1890, was only 54,334, of whom 19,485 were under 15 years of age, and it was among these children that the excessive mortality occurred.

In addition to those living at the date of the census and those dying during the 6-year period, for whom the birthplace of the mother was reported, there were a certain number in each class with regard to whom this information was not obtained, the proportion being greater among the decedents than it was among the living, it being impossible to obtain this information in many cases for those found dead or in a dying condition. It is impossible to properly distribute those with unknown birthplaces of mothers among the several races, either for the living or for the dead, and hence the rates given in the above table are probably somewhat below the truth for

the foreign and for the native born of foreign parents. Of those whose mothers were born in the United States, 334,725 in number in New York and 268,097 in Brooklyn, there are two quite distinct classes, the prosperous and failures. The prosperous are very prosperous; they live in the best part of the city and have very low death rates, as will be seen by examining the figures for those districts, while the failures are apt to be terrible failures, and, when found in the tenement house districts, to furnish very heavy death rates.

The excessive death rate among the adults having Irish mothers as compared with the average death rate of the total whites during the 6-year period was mainly due to consumption, alcoholism and its consequences, and pneumonia.

The average annual death rates per 100,000 of mean population were: in New York, total whites, 2,986.03, those having Irish mothers, 3,250.64; in Brooklyn, total whites, 2,590.00, those having Irish mothers, 2,714.36; consumption, New York, total whites, 385.05, those having Irish mothers, 645.73; Brooklyn, total whites, 300.01, those having Irish mothers, 452.79; apoplexy and paralysis, New York, total whites, 76.21, those having Irish mothers, 100.74; Brooklyn, total whites, 79.44, those having Irish mothers, 99.52; diseases of the heart, New York, total whites, 136.81, those having Irish mothers, 179.21; Brooklyn, total whites, 127.56, those having Irish mothers, 167.41; pneumonia, New York, total whites, 287.25, those having Irish mothers, 343.99; Brooklyn, total whites, 229.27, those having Irish mothers, 281.97; and Bright's disease, New York, total whites, 82.64, those having Irish mothers, 141.75; Brooklyn, total whites, 57.55, those having Irish mothers, 92.79.

The excessive death rate among those having Italian mothers during the 6-year period was mainly due to measles (New York, total whites, 46.21, those having Italian mothers, 198.75; Brooklyn, total whites, 17.75, those having Italian mothers, 91.54), diarrheal diseases (New York, total whites, 318.14, those having Italian mothers, 425.58), stillbirths (New York, total whites, 224.09, those having Italian mothers, 383.15; Brooklyn, total whites, 180.48, those having Italian mothers, 273.18), pneumonia (New York, total whites, 287.25, those having Italian mothers, 455.89; Brooklyn, total whites, 229.27, those having Italian mothers, 280.33), and homicides (New York, total whites, 3.75, those having Italian mothers, 9.89; Brooklyn, total whites, 1.12, those having Italian mothers, 11.44).

On June 1, 1890, New York city contained 403,784 persons whose mothers were born in Germany, and 399,348 persons whose mothers were born in Ireland; and Brooklyn contained 195,663 persons whose mothers were born in Germany, and 196,372 persons whose mothers were born in Ireland.

These figures are large enough to make comparisons of the death rates from different diseases in these two classes of some value, and such comparisons are given in the following tables.

Table 18 shows for the children of Irish and of German mothers in New York during the year ending May 31, 1890, the number of deaths per 100,000 of population, with distinction of certain causes of death and of certain age groups.

TABLE 18.

CAUSES.	DEATH RATES PER 100,000 OF POPULATION OF CORRESPONDING AGES.							
	Children of Irish mothers.				Children of German mothers.			
	All ages.	Under 15 years.	15 to 45 years.	45 years and over.	All ages.	Under 15 years.	15 to 45 years.	45 years and over.
All causes	3,219.75	4,326.32	1,955.02	6,107.54	2,207.86	3,689.25	1,055.50	3,917.[illegible]
Males	1,600.86	2,323.44	1,031.88	2,666.89	1,273.95	2,022.35	629.96	2,355.[illegible]
Females	1,618.89	2,002.88	923.15	3,440.65	933.92	1,666.90	425.54	1,580.[illegible]
Measles	9.01	45.43	.....	.....	12.14	49.03	0.43	.....
Scarlet fever	21.03	99.70	2.05	.....	15.60	61.28	1.29	.....
Diphtheria and croup	81.88	397.55	3.60	3.93	92.62	367.70	4.29	[illegible]
Whooping cough	20.03	99.70	0.41	.....	16.35	67.41	.....	.....
Cerebro-spinal fever	7.26	29.03	2.46	.....	6.19	20.43	2.14	.....
Typhoid fever	20.04	7.57	33.23	22.26	25.01	12.26	31.28	[illegible]
Diarrheal diseases and cholera infantum	237.89	788.78	38.98	301.12	238.49	869.20	14.57	[illegible]
Malarial fever	22.54	18.93	18.46	39.28	10.40	11.24	7.71	[illegible]
Erysipelas and septicæmia	10.27	18.93	3.28	23.57	11.14	17.36	5.14	[illegible]
Venereal diseases	8.01	8.83	8.21	6.55	6.44	17.36	1.71	[illegible]
Alcoholism	46.08	3.79	53.34	66.77	11.39	.....	12.86	[illegible]
Premature birth	42.32	213.29	.....	.....	20.06	82.73	.....	.....
Stillbirths	119.44	602.00	.....	.....	154.29	636.32	.....	.....
Inanition, debility, and atrophy	63.60	234.74	1.64	83.79	50.03	174.66	0.43	[illegible]
Old age	45.57	.....	.....	238.28	20.06	.....	.....	[illegible]
Rheumatism	14.52	5.05	9.03	41.90	7.68	3.06	4.71	[illegible]
Tubercular diseases	745.97	426.57	778.73	972.76	391.55	288.03	391.26	[illegible]
Consumption	648.56	82.03	749.60	913.84	317.50	45.96	377.12	[illegible]
Scrofula and tabes	5.51	22.72	0.82	2.62	3.71	13.28	0.86	.....
Hydrocephalus	28.05	123.68	4.92	2.62	26.25	100.10	1.71	[illegible]
Inflammation of the brain	54.50	183.00	16.00	44.51	40.62	121.55	10.71	[illegible]
Diseases of the bones and joints	9.27	15.14	7.39	9.16	3.47	7.15	0.86	[illegible]
Cancer and tumor	71.87	.....	30.36	278.87	75.78	4.60	33.00	[illegible]
Diabetes	5.51	.....	2.87	19.64	10.90	.....	2.57	[illegible]
Diseases of the nervous system	242.40	355.90	82.88	633.67	189.46	269.65	57.85	[illegible]
Apoplexy	84.89	3.79	26.67	354.80	65.13	2.04	19.71	[illegible]
Tetanus	1.25	1.26	1.23	1.31	0.74	.....	0.43	[illegible]
Trismus nascentium and convulsions	25.04	124.94	.....	1.31	27.24	111.33	.....	[illegible]
Diseases of the circulatory system	182.05	79.67	107.09	536.78	143.64	46.98	77.14	[illegible]
Aneurism	6.51	.....	6.15	14.40	3.71	.....	4.71	[illegible]
Heart disease and dropsy	167.02	44.17	99.70	509.29	130.76	32.68	72.00	[illegible]
Diseases of the respiratory system	677.35	875.86	373.36	1,441.46	387.58	676.16	156.42	[illegible]
Bronchitis	184.30	283.96	58.26	483.10	85.94	177.72	11.14	[illegible]
Pneumonia	428.20	434.15	295.00	847.07	244.44	338.08	134.99	[illegible]
Diseases of the digestive system	128.21	95.92	73.85	335.16	91.39	93.97	47.14	[illegible]
Diseases of the liver	48.33	3.79	27.90	159.73	32.20	9.19	17.14	[illegible]
Diseases of the urinary system	261.43	29.03	171.91	788.15	142.16	36.77	79.28	[illegible]
Bright's disease	142.73	7.57	93.55	439.90	71.82	2.04	37.71	[illegible]
Diseases of the female organs of generation	a14.73	.....	b14.18	c30.13	a10.53	.....	b12.99	[illegible]
Affections connected with pregnancy	b85.80	.....	b84.30	.....	b96.10	.....	b96.10	.....
Abortion	b11.19	.....	b11.19	.....	b12.12	.....	b12.12	.....
Childbirth and puerperal septicæmia	b57.45	.....	b56.70	.....	b19.91	.....	b19.91	.....
Accidents and injuries	138.73	117.37	114.47	238.28	90.64	73.54	75.42	[illegible]
Drowned	19.53	18.93	18.05	24.88	9.91	10.21	6.86	[illegible]
Burns and scalds	5.01	7.57	3.69	6.55	4.95	13.28	2.14	[illegible]
Gunshot wounds and homicides	4.26	2.52	5.74	1.31	2.97	1.02	4.29	[illegible]
Infanticide	.....	.....	.....	.....	.....	.....	.....	.....
Railroad accidents	8.01	3.79	7.80	13.69	2.23	1.02	2.57	[illegible]
Suicides	8.01	.....	7.39	18.33	21.55	.....	21.00	[illegible]

a Per 100,000 total females. b Per 100,000 females 15 to 45 years of age. c Per 100,000 females 45 years of age and over.

Table 19 shows for the children of Irish and of German mothers in Brooklyn during the year ending May 31, 1890, the number of deaths per 100,000 of population, with distinction of certain causes of death and of certain age groups.

TABLE 19.

CAUSES.	DEATH RATES PER 100,000 OF POPULATION OF CORRESPONDING AGES.							
	Children of Irish mothers.				Children of German mothers.			
	All ages.	Under 15 years.	15 to 45 years.	45 years and over.	All ages.	Under 15 years.	15 to 45 years.	45 years and over.
All causes	2,782.98	3,868.89	1,597.70	5,227.09	2,157.79	3,644.90	954.24	3,670.07
Males	1,371.38	2,032.97	829.70	2,307.69	1,222.51	2,041.97	545.81	2,098.43
Females	1,411.61	1,835.92	767.99	2,919.40	935.28	1,602.92	408.43	1,571.64
Measles	3.06	14.42	.....	.....	3.58	13.25	.....	.....
Scarlet fever	10.18	45.06	0.86	.....	15.84	58.07	.....	.....
Diphtheria and croup	134.95	629.60	2.57	.....	134.41	482.58	6.45	2.91
Whooping cough	13.75	64.88	.....	.....	17.89	64.34	0.92	.....
Cerebro-spinal fever	0.51	2.40	.....	.....	1.53	5.68	.....	.....
Typhoid fever	27.50	19.22	38.57	2.63	18.40	5.68	26.74	11.64
Diarrheal diseases and cholera infantum	178.74	574.33	30.00	202.15	208.52	680.97	14.75	84.40
Malarial fever	36.16	40.85	24.00	68.26	18.40	11.35	16.60	34.93
Erysipelas and septicæmia	12.73	9.61	11.14	21.00	18.91	11.35	17.52	34.93
Venereal diseases	0.51	2.40	.....	.....	2.04	5.68	0.92	.....
Alcoholism	10.09	.....	9.43	26.25	4.09	.....	4.61	8.73
Premature birth	14.26	67.29	.....	.....	12.27	45.42	.....	.....
Stillbirths	93.70	442.16	.....	.....	150.77	558.28	.....	.....
Inanition, debility, and atrophy	94.21	341.23	7.71	89.26	117.04	301.46	4.61	96.04
Old age	52.96	.....	.....	273.04	30.15	.....	.....	171.72
Rheumatism	16.80	4.81	9.43	52.51	5.62	3.78	5.53	8.73
Tubercular diseases	519.93	353.25	573.42	538.20	381.78	338.75	386.31	433.66
Consumption	432.85	52.87	546.85	498.82	286.72	39.74	370.63	401.64
Scrofula and tabes	1.02	2.40	0.86	.....	2.04	7.57	.....	.....
Hydrocephalus	16.69	48.06	0.86	.....	14.82	49.20	1.84	2.91
Inflammation of the brain	72.31	242.71	23.14	36.76	75.64	232.77	13.83	29.10
Diseases of the bones and joints	3.06	7.21	1.71	2.63	2.56	9.46	.....	.....
Cancer and tumor	51.43	2.40	22.29	194.28	55.20	1.89	13.83	267.76
Diabetes	2.55	.....	.....	13.13	3.07	.....	0.92	14.55
Diseases of the nervous system	286.19	511.85	87.43	648.47	234.08	475.01	44.25	402.76
Apoplexy	86.57	4.81	21.43	375.43	52.13	3.78	11.06	256.12
Tetanus	0.51	2.40	.....	.....	1.02	1.89	0.92	.....
Trismus nascentium and convulsions	27.50	127.36	0.86	.....	40.00	170.32	.....	.....
Diseases of the circulatory system	208.79	144.18	115.71	564.45	139.53	58.07	64.54	500.60
Aneurism	1.53	.....	1.71	2.63	2.50	.....	0.92	11.64
Heart disease and dropsy	191.47	72.09	114.00	559.20	128.28	28.39	64.54	483.13
Diseases of the respiratory system	625.85	711.36	346.28	1,388.82	419.09	671.83	167.80	823.66
Bronchitis	166.52	276.35	36.00	446.31	99.15	177.89	13.83	247.39
Pneumonia	375.82	249.92	274.28	824.36	233.56	261.16	139.22	488.95
Diseases of the digestive system	155.32	139.38	86.57	383.30	103.24	113.55	50.71	253.21
Diseases of the liver	57.54	12.02	26.57	202.15	38.84	9.46	20.28	142.61
Diseases of the urinary system	204.71	31.24	138.00	598.58	93.02	28.39	51.63	323.06
Bright's disease	112.03	4.81	71.14	354.42	42.93	1.89	27.66	154.25
Diseases of the female organs of generation	*a*13.17	.....	*b*10.95	*c*32.53	*a*8.25	.....	*b*7.45	*c*23.85
Affections connected with pregnancy	*b*73.54	.....	*b*71.98	.....	*b*67.04	.....	*b*67.04	.....
Abortion	.....	.....	.....	.....	*b*1.86	.....	*b*1.86	.....
Childbirth and puerperal septicæmia	*b*56.33	.....	*b*56.33	.....	*b*54.00	.....	*b*54.00	.....
Accidents and injuries	70.78	40.85	61.71	131.27	55.20	34.06	42.41	128.06
Drowned	9.17	4.81	8.57	15.75	5.62	5.68	5.53	5.82
Burns and scalds	5.09	9.61	0.86	13.13	5.62	13.25	2.77	2.91
Gunshot wounds and homicides	3.06	.....	4.29	2.63	3.58	.....	4.61	5.82
Infanticide	0.51	2.40	.....	.....	.....	.....	.....	.....
Railroad accidents	3.06	.....	3.43	5.25	1.53	.....	0.92	5.82
Suicides	5.09	.....	1.71	21.00	16.87	.....	12.91	55.30

a Per 100,000 total females. *b* Per 100,000 females 15 to 45 years of age. *c* Per 100,000 females 45 years of age and over.

These tables present many interesting points relating to the death rates of the two groups. It should be remembered, however, that the children of Irish mothers form a much more homogeneous group than do the children of German mothers, since the latter include a considerable number of the Jewish race, whose death rate is very low, and if it were possible to separate these the difference between the Irish and the German death rates would not be so great.

A large part of the excessive death rate among children of Irish mothers is due to tubercular diseases, and to the effects of alcohol, which last include a considerable part of the diseases of the nervous system, of the circulatory system, of the digestive, and of the urinary organs among the adults. The greater prevalence of malarial diseases among those of Irish mothers is due to the fact that a greater proportion of them live in the water side and filled districts. The death rate of the women with Irish mothers, from childbirth and its consequences, is very high, but the number of abortions and stillbirths among them is below the average. Cancer and tumor and suicides are more frequent among those having German mothers.

On June 1, 1890, there were 1,970 Chinese living in the city of New York, and the number of deaths which occurred among this class during the census year was 57, giving a death rate of 28.93, which is a very high one when it is remembered that they were nearly all adults, and that the average death rate of persons 15 years of age and upward was for the whites 20.36. Of these 57 deaths, 46 occurred in sanitary district C, of ward 6, and out of 245 deaths which occurred in the city during the 6-year period 158 occurred in this district.

This would give an enormous mortality for this locality if all the decedents had been residents of the district, but I am informed by Dr. John T. Nagle, the registrar of the health department, that this large number of deaths among the Chinese is due to the fact that in this district are some houses used for hospitals to which Chinese are brought from all parts of the city, and perhaps from some of the adjacent cities. Nearly all the deaths of Chinese are due to consumption.

CONJUGAL CONDITION.

Of the male population over 15 years of age in each city over one-half are married, the proportion being 512.28 per 1,000 in New York, and 551.21 in Brooklyn. The proportion of the widowed was 37.86 in New York, and 37.86 in Brooklyn.

Of the females 15 years of age and upward 490.84 per 1,000 in New York and 514.40 in Brooklyn were married. The proportion of married was decidedly greater among the white than among the colored in both cities, and the same is the case for the widowers in New York; the proportion of widowers in Brooklyn and of widows in both cities being greater among the colored. The proportion of married is much greater among the foreign than among the native for the males and somewhat greater among the females.

Out of each 1,000 males 45 years of age and upward in New York 767.01 are married; of the native white males 719.07 are married, and of the foreign white males 784.58 are married. Of each 1,000 females 45 years of age and upward there are married of the total 505.31, of the native 492.81, and of the foreign 513.52. These proportions are somewhat greater in Brooklyn.

It will be seen that the difference between the native and the foreign in the proportion of the married becomes less at the higher groups of ages, which is in part due to the fact that the average age of marriage is less among the foreign than it is among the native. These and other ratios are shown in the following table.

Table 20 shows for certain age groups the number of single, married, and widowed in New York and Brooklyn in each 1,000 of population on June 1, 1890, with distinction of sex, color, nativity, and parental nativity.

TABLE 20.

SEX, COLOR, NATIVITY, AND PARENTAL NATIVITY.	Conjugal condition.	OVER 15 YEARS.		15 TO 45 YEARS.		45 YEARS AND OVER.	
		New York.	Brooklyn.	New York.	Brooklyn.	New York.	Brooklyn.
Total males	Single	447.21	408.85	540.73	519.89	103.86	62.40
	Married	512.28	551.21	438.44	465.68	767.01	818.09
	Widowed	37.86	37.86	12.34	12.46	125.88	117.10
Total females	Single	382.18	359.15	463.93	449.70	96.68	82.65
	Married	490.84	514.40	486.70	508.03	505.31	533.90
	Widowed	124.63	124.96	47.16	40.96	395.19	382.02
Native white, males	Single	608.73	528.32	675.06	611.71	151.73	77.96
	Married	362.57	443.93	310.83	375.43	719.07	813.93
	Widowed	25.24	25.75	11.19	11.11	122.02	104.83
Native white, females	Single	506.89	451.67	558.37	517.03	131.64	103.65
	Married	414.41	461.15	400.24	447.14	492.81	535.02
	Widowed	78.89	85.61	38.98	33.83	360.77	358.78
Both parents native, males	Single	473.82	411.13	584.82	536.26	147.21	70.12
	Married	476.37	547.77	394.04	448.42	718.60	818.54
	Widowed	42.09	38.37	13.81	12.94	125.30	107.67
Both parents native, females	Single	384.50	357.07	465.55	454.39	129.42	100.71
	Married	477.41	509.98	474.92	502.61	485.24	529.64
	Widowed	132.89	129.60	54.82	40.77	378.58	366.61
Foreign white, males	Single	316.82	261.69	417.70	374.06	86.44	52.57
	Married	633.25	683.65	580.98	609.32	784.58	821.99
	Widowed	47.95	52.55	13.33	14.38	127.01	123.58
Foreign white, females	Single	282.25	230.52	369.37	335.16	84.98	69.47
	Married	557.17	586.20	576.45	613.92	513.52	536.90
	Widowed	158.58	172.98	52.14	49.78	360.50	392.65

Table 21 shows the death rates in New York and Brooklyn during the census year ending May 31, 1890, per 1,000 of total population 15 years of age and upward, with distinction of nativity, parental nativity, and conjugal condition.

TABLE 21.

CONJUGAL CONDITION.	Aggregate.	WHITE.		
		Native.		Foreign.
		Total.	Both parents native.	
New York:				
Single	14.10	12.21	11.42	16.57
Married	20.20	18.27	15.52	21.09
Widowed	57.98	48.04	40.58	62.50
Brooklyn:				
Single	11.32	10.37	9.27	13.54
Married	18.26	14.70	15.16	21.28
Widowed	54.10	43.19	47.12	61.13

This table shows that the death rate was less among the single than among the married, and was greatest of all among the widowed; that it was least among the native whites of native parents and greatest among the foreign, and that it was less in all the groups in Brooklyn than it was in New York, with the exception of the married among the foreign, for whom it was 21.28 per 1,000 in Brooklyn and 21.09 in New York.

Table 22 shows the death rates in New York and Brooklyn during the census year ending May 31, 1890, per 1,000 of population of two groups of ages, with distinction of sex, nativity, parental nativity, and conjugal condition.

TABLE 22.

LOCALITY, SEX, AND CONJUGAL CONDITION.	15 TO 45 YEARS.				45 YEARS AND OVER.			
	Aggregate.	White.			Aggregate.	White.		
		Native.		Foreign.		Native.		Foreign.
		Total.	Both parents native.			Total.	Both parents native.	
Males:								
New York—								
Single	14.68	13.91	10.68	15.49	67.86	53.64	44.08	76.43
Married	14.57	15.44	8.92	13.83	37.95	34.63	33.63	38.74
Widowed	56.03	52.12	38.19	58.06	97.70	85.56	79.17	101.98
Brooklyn—								
Single	12.16	11.70	8.21	13.37	52.04	46.04	44.23	58.42
Married	12.20	10.53	8.55	13.56	35.13	28.99	30.66	38.20
Widowed	43.92	35.01	30.94	53.38	91.13	71.40	70.40	100.37
Females:								
New York—								
Single	7.79	7.73	6.34	7.67	52.77	42.63	40.57	57.08
Married	14.23	15.12	9.11	13.50	30.48	25.29	23.85	32.63
Widowed	22.34	20.60	14.09	23.65	60.72	55.86	56.89	62.34
Brooklyn—								
Single	6.88	7.09	6.19	5.96	41.72	34.77	38.28	48.20
Married	12.33	11.79	9.20	12.95	26.91	22.26	22.42	29.13
Widowed	15.39	13.17	8.51	18.28	57.26	51.97	53.85	59.62

For males between the ages 15 and 45 years the death rate was slightly greater among the single than among the married in New York, while the reverse was the case in Brooklyn, but the difference is so small as to be unimportant in the aggregate. The death rate is least among the native whites of native parents in New York and greatest among the foreign, with the exception of the married.

Among the females 15 to 45 years of age the death rate of the married is nearly double that of the single in both New York and Brooklyn, which is largely due to the perils of childbirth. For those 45 years of age and upward the death rate is decidedly less among the married than among the single in each city, while the death rate of the widowed is greatest of all.

Table 23 shows the death rates per 1,000 of white children of American, Irish, and German mothers in New York, Brooklyn, and the District of Columbia for the year ending May 31, 1890, with distinction of sex and conjugal condition, and the corresponding rates for Prussia, Belgium, and Bavaria.

TABLE 23.

LOCALITY AND BIRTHPLACE.	15 TO 45 YEARS.				45 YEARS AND OVER.			
	Males.		Females.		Males.		Females.	
	Single.	Married.	Single.	Married.	Single.	Married.	Single.	Married.
New York:								
Children of American mothers (white)	9.42	8.70	6.01	9.71	39.37	31.20	40.36	24.26
Children of Irish mothers	20.86	23.65	10.06	23.93	82.82	43.97	57.23	44.19
Children of German mothers	10.09	13.13	4.98	10.80	65.59	36.87	46.83	24.99
Brooklyn:								
Children of American mothers (white)	7.74	8.27	6.09	9.38	38.92	28.97	36.75	22.11
Children of Irish mothers	17.31	18.75	8.13	19.83	58.59	42.10	46.32	37.51
Children of German mothers	10.42	10.44	5.61	9.51	60.51	33.51	81.25	23.24
District of Columbia:								
Children of American mothers (white)	7.77	6.75	4.94	7.53	22.86	22.06	15.74	14.83
Children of Irish mothers	19.45	13.61	9.02	19.81	78.84	42.06	33.00	23.32
Children of German mothers	7.09	12.63	6.64	6.50	78.77	33.48	105.26	19.61
Prussia, 1885	8.11	10.13	5.87	9.62	50.21	32.83	38.82	23.94
Belgium, 1880	8.43	8.62	6.84	9.14	41.29	31.72	35.60	22.39
Bavaria, 1878	8.14	8.58	5.93	10.28	55.04	33.46	45.34	26.75

It will be seen from this table that as a rule the death rates of the children of American mothers were the smallest, those of Irish mothers the largest, and those of German mothers intermediate between the two, but that in Brooklyn in the age group 45 years and upward the death rate of single Germans, both male and female, exceeds that of the Irish.

MONTHS OR SEASONS.

Some data for estimating the influence of month or season upon the death rates due to certain causes in New York and Brooklyn are given in the following tables and diagram.

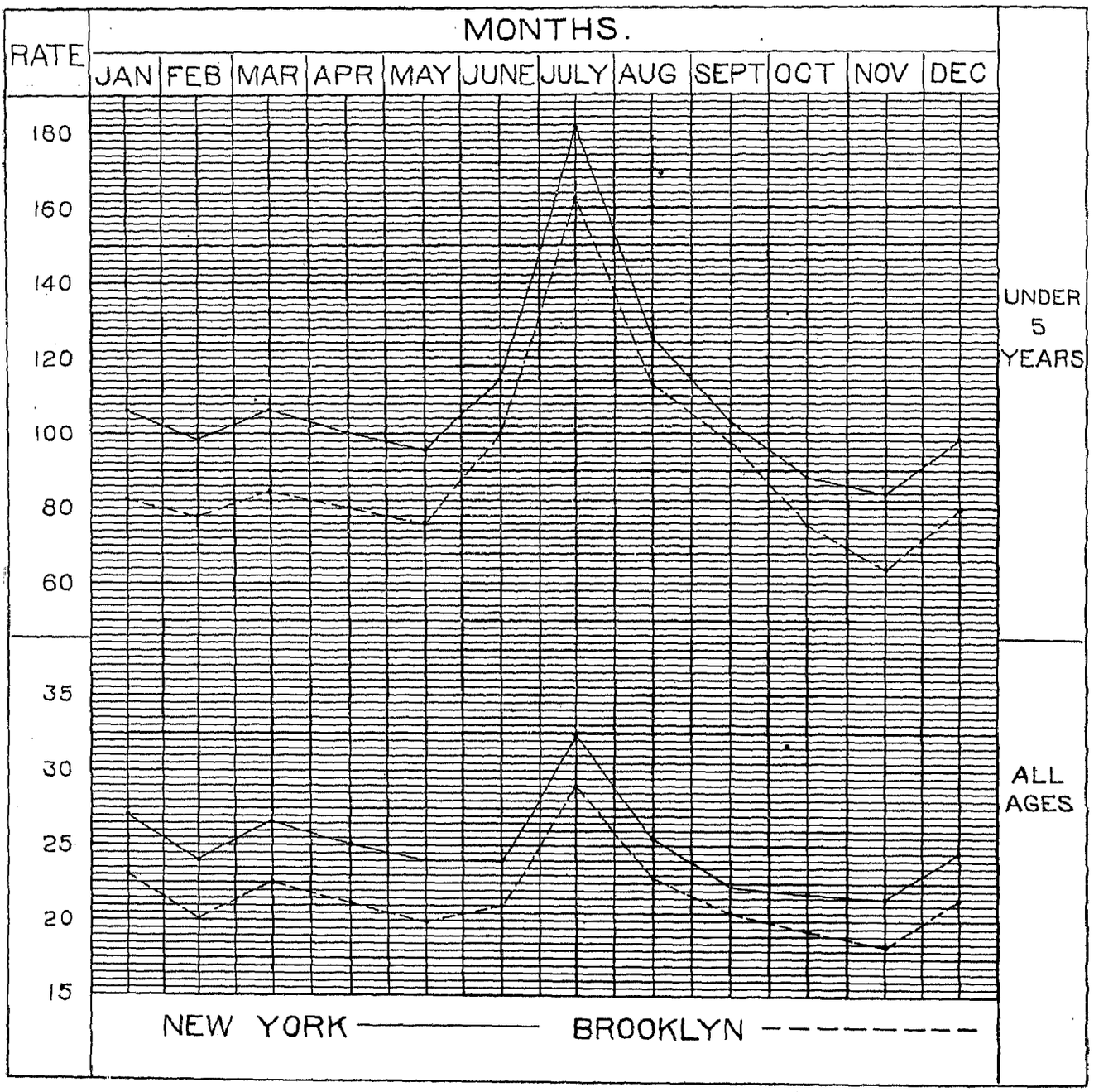
Table 24 shows for New York and Brooklyn for the 6-year period the average death rates per 10,000 of population for each month for the total population and for the children under 5 years of age.

TABLE 24.

MONTHS.	NEW YORK (AGGREGATE).		BROOKLYN (AGGREGATE).	
	All ages.	Under 5 years.	All ages.	Under 5 years.
January	27.11	106.21	23.11	82.78
February	24.00	98.60	20.12	77.00
March	26.65	106.33	22.50	84.72
April	25.13	100.26	21.18	80.01
May	24.00	95.86	19.00	76.16
June	23.97	114.51	21.06	99.95
July	32.40	181.65	29.05	102.85
August	25.52	125.34	22.84	113.23
September	22.32	103.34	20.64	97.72
October	21.00	88.38	19.41	75.70
November	21.40	83.98	18.38	63.87
December	24.57	98.51	21.40	70.65

The following diagram shows for New York and Brooklyn for the 6-year period the average death rates per 10,000 of population for each month for the total population and for the children under 5 years of age:

DIAGRAM SHOWING AVERAGE ANNUAL DEATH RATES PER 10,000 OF POPULATION, BY MONTHS, IN NEW YORK AND BROOKLYN FOR THE TOTAL POPULATION AND FOR CHILDREN UNDER 5 YEARS OF AGE.



It will be seen from this table and diagram that the heavy death rate of the children under 5 years of age occurs in July, for which month it is more than double the rates for October and November. In Washington the heaviest death rate at this age occurs in June, and in Baltimore in July.

Table 25 shows for New York, by months, the number of deaths due to certain specified causes per 1,000 deaths from all causes during the 6 years ending May 31, 1890.

TABLE 25.

CAUSES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Measles	2.27	1.68	1.33	1.23	1.27	1.33	1.39	0.68	0.40	0.48	1.22	1.99	.....
Scarlet fever	1.97	2.00	2.20	2.15	1.87	1.55	1.01	0.65	0.58	0.71	1.03	1.71	.....
Diphtheria	4.04	3.67	3.02	3.09	4.02	3.62	2.88	2.19	1.96	2.87	3.36	4.25	0.01
Whooping cough	0.91	0.84	0.97	0.96	0.74	0.73	1.25	1.31	1.20	0.85	0.64	0.87	.....
Cerebro-spinal fever	0.36	0.35	0.45	0.46	0.46	0.44	0.36	0.28	0.31	0.30	0.36	0.34	.....
Typhoid fever	0.46	0.36	0.38	0.32	0.29	0.32	0.67	1.10	1.37	1.25	0.93	0.67	.....
Diarrheal diseases	2.23	1.99	2.15	2.36	2.52	12.18	38.21	20.61	12.60	6.08	2.46	2.06	0.01
Malarial fever	0.56	0.60	0.60	0.62	0.67	0.63	0.67	0.86	0.84	0.90	0.68	0.60	.....
Inanition, debility and atrophy, and old age	3.58	3.02	3.86	3.41	3.34	3.57	5.63	4.67	4.66	3.81	3.02	2.98	.....
Consumption	12.90	11.13	12.25	11.84	11.14	9.60	10.08	10.30	9.56	10.70	10.26	11.16	0.01
Diseases of the nervous system	7.05	7.13	7.71	7.55	6.96	6.82	7.54	6.38	5.63	5.68	5.70	6.70	0.02
Diseases of the respiratory system	23.53	18.52	21.13	18.47	15.21	9.74	7.84	7.57	8.47	11.78	14.39	18.86	.....
Affections connected with pregnancy	0.86	0.85	1.05	0.93	0.83	0.71	0.70	0.64	0.57	0.53	0.58	0.67	.....
Accidents and injuries	2.71	2.44	2.73	3.00	3.60	3.65	4.54	3.69	3.01	2.98	2.82	2.78	0.08
Suicides	0.43	0.36	0.44	0.54	0.50	0.47	0.49	0.36	0.40	0.38	0.43	0.44	.....
Sunstroke	.....	.....	.....	.....	.....	0.35	1.23	0.52	0.30	.....	.....	.....	.....

Table 26 shows for Brooklyn, by months, the number of deaths due to certain specified causes per 1,000 deaths from all causes during the 6 years ending May 31, 1890.

TABLE 26.

CAUSES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Measles	0.76	0.73	0.93	1.03	0.98	0.53	0.42	0.24	0.09	0.07	0.22	0.81	.....
Scarlet fever	1.69	2.00	1.81	1.99	1.75	1.56	0.87	0.78	0.57	0.84	1.00	1.49	.....
Diphtheria	5.04	3.89	4.06	3.62	3.71	3.05	2.65	2.41	2.70	3.87	4.62	4.91	.....
Whooping cough	0.69	0.84	1.03	0.77	0.63	0.68	1.06	1.33	1.11	0.69	0.61	0.61	.....
Cerebro-spinal fever	0.22	0.20	0.18	0.29	0.26	0.20	0.29	0.24	0.23	0.17	0.12	0.20	.....
Typhoid fever	0.64	0.20	0.36	0.37	0.23	0.23	0.56	0.94	1.28	1.49	1.54	1.03	.....
Diarrheal diseases	1.37	1.17	1.63	1.64	2.31	14.67	41.68	21.57	13.87	5.33	1.86	1.73	.....
Malarial fever	0.81	0.71	0.73	0.81	0.70	0.84	0.92	1.40	1.46	1.56	1.47	1.16	.....
Inanition, debility and atrophy, and old age	4.10	3.55	3.89	4.28	3.73	4.77	7.57	7.50	7.34	5.76	4.00	4.03	.....
Consumption	11.43	9.60	10.32	10.68	10.27	8.74	9.07	9.07	9.01	9.32	9.25	10.02	0.02
Diseases of the nervous system	9.22	8.56	10.18	9.34	8.91	8.55	10.12	8.28	7.58	7.76	7.10	8.61	0.04
Diseases of the respiratory system	24.13	18.84	20.73	17.62	14.04	9.01	6.85	7.07	7.98	11.59	14.11	19.64	.....
Affections connected with pregnancy	0.60	0.77	0.82	0.68	0.67	0.69	0.64	0.48	0.46	0.52	0.57	0.69	0.02
Accidents and injuries	1.73	1.64	2.02	1.95	2.16	2.70	3.55	2.63	2.45	1.90	1.84	2.13	0.05
Suicides	0.23	0.19	0.26	0.32	0.32	0.34	0.26	0.25	0.31	0.25	0.23	0.29	.....
Sunstroke	.....	.....	.....	.....	0.03	0.24	0.92	0.36	0.17	.....	.....	.....	.....

DIAGRAM SHOWING PROPORTION OF DEATHS DUE TO DIPHTHERIA PER 1,000 DEATHS FROM ALL CAUSES, BY MONTHS, IN NEW YORK FOR 6 YEARS ENDING MAY 31, 1890.

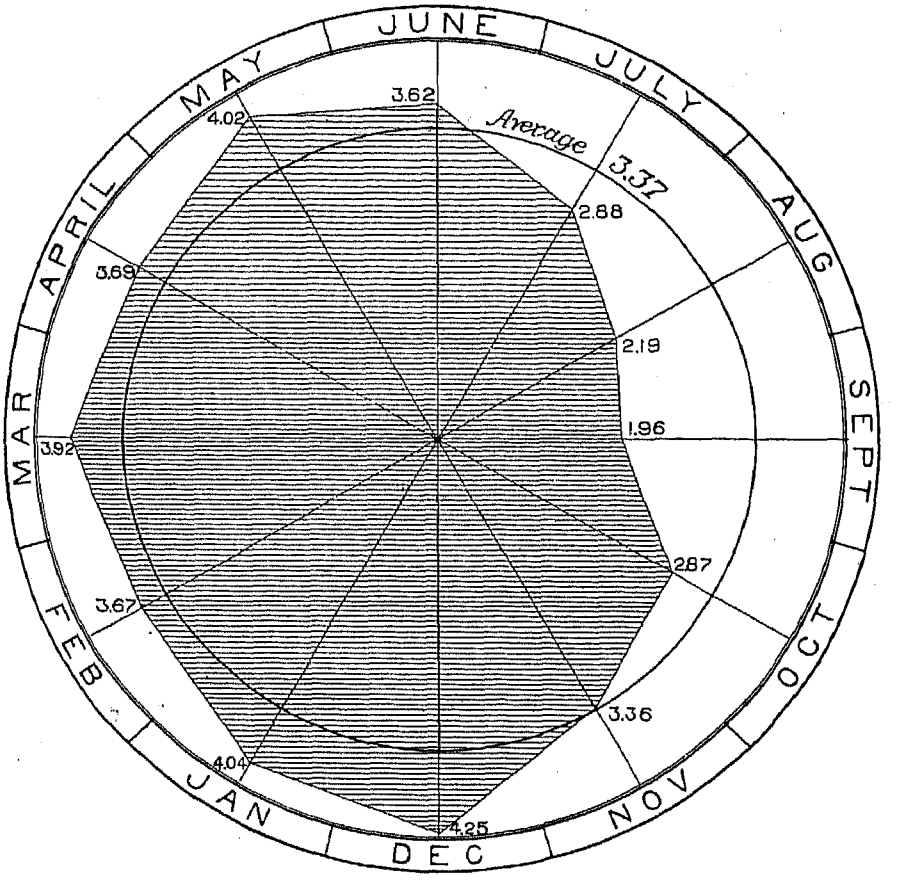


DIAGRAM SHOWING PROPORTION OF DEATHS DUE TO DIPHTHERIA PER 1,000 DEATHS FROM ALL CAUSES, BY MONTHS, IN BROOKLYN FOR 6 YEARS ENDING MAY 31, 1890.

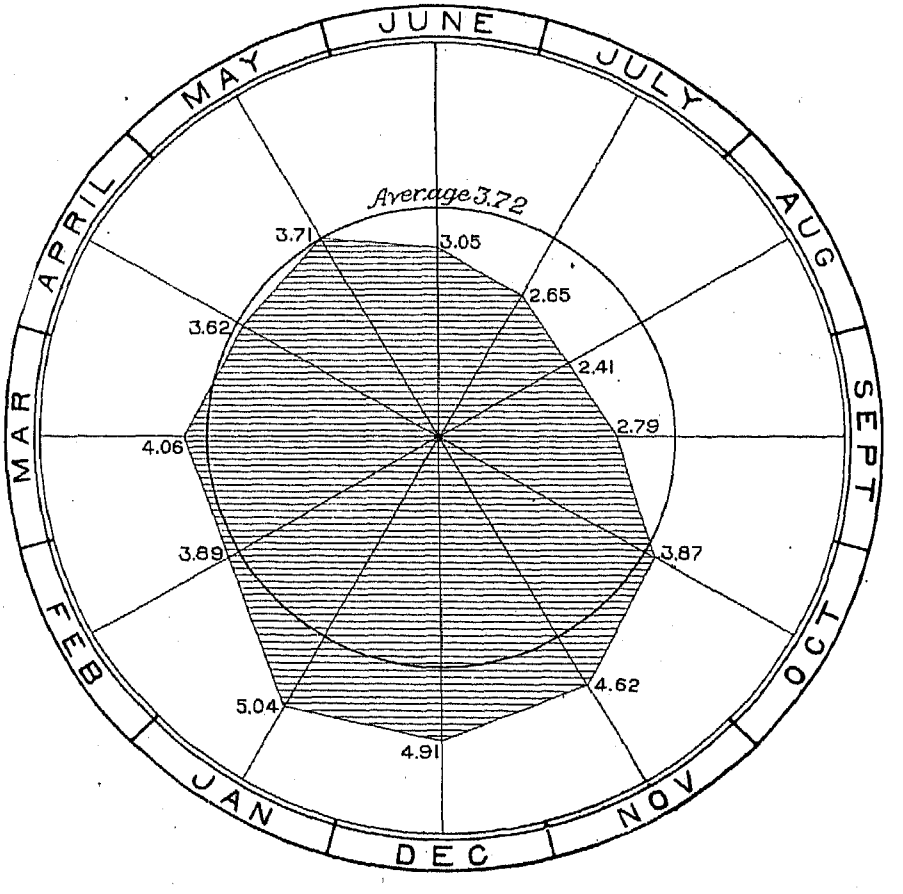


DIAGRAM SHOWING PROPORTION OF DEATHS DUE TO DIARRHEAL DISEASES PER 1,000 DEATHS FROM ALL CAUSES, BY MONTHS, IN NEW YORK FOR 6 YEARS ENDING MAY 31, 1890.

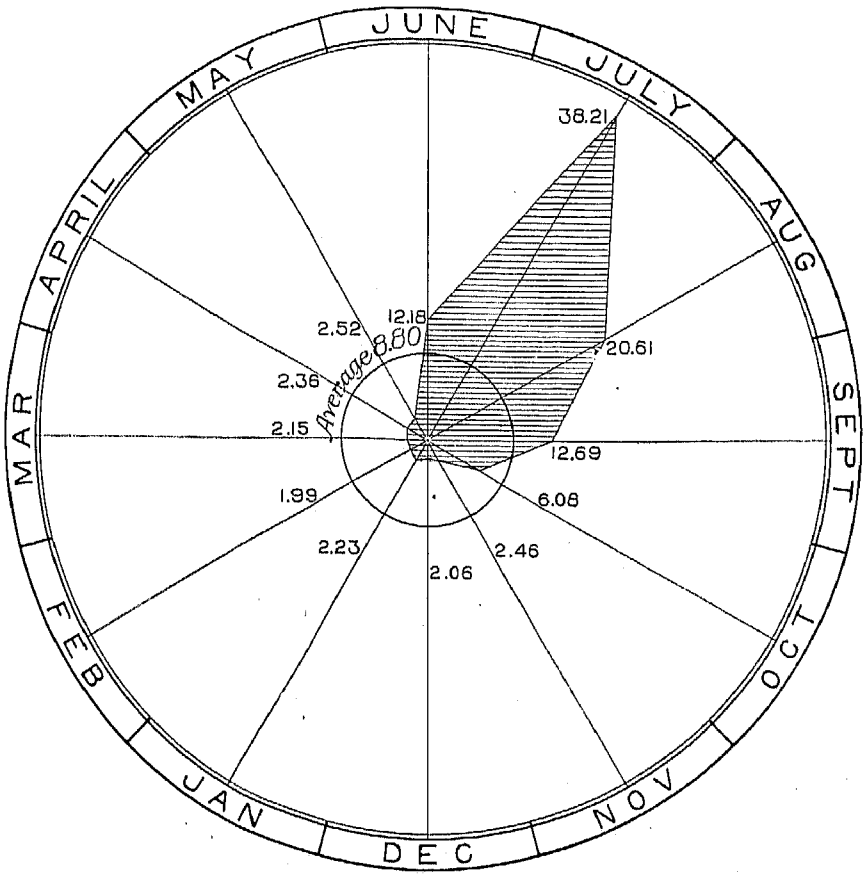


DIAGRAM SHOWING PROPORTION OF DEATHS DUE TO DIARRHEAL DISEASES PER 1,000 DEATHS FROM ALL CAUSES, BY MONTHS, IN BROOKLYN FOR 6 YEARS ENDING MAY 31, 1890.

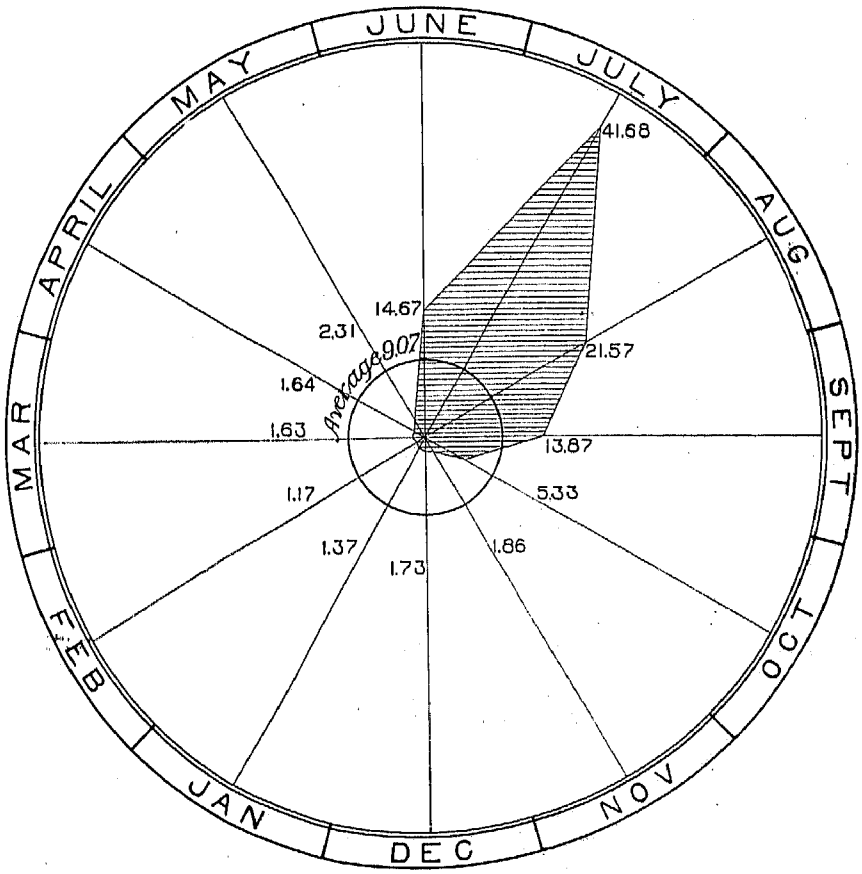


DIAGRAM SHOWING PROPORTION OF DEATHS DUE TO TYPHOID FEVER PER 1,000 DEATHS FROM ALL CAUSES, BY MONTHS, IN NEW YORK FOR 6 YEARS ENDING MAY 31, 1890.

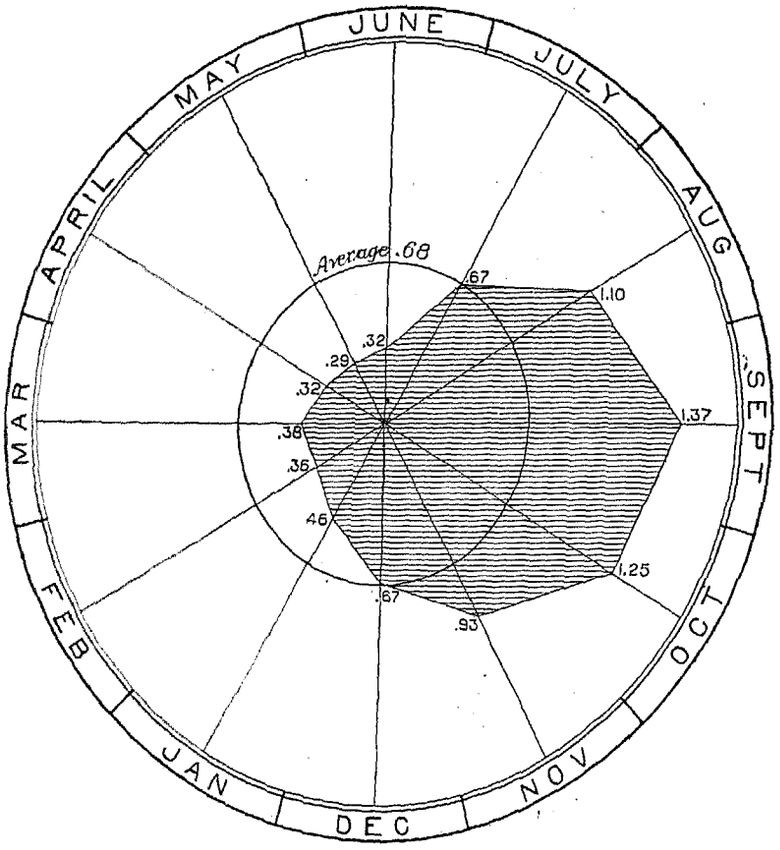
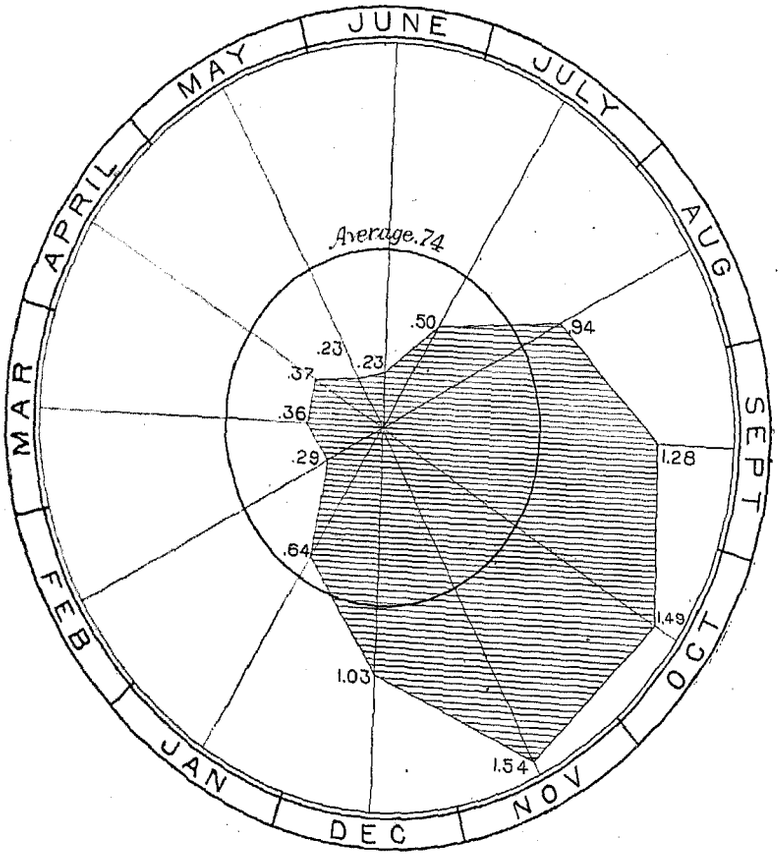


DIAGRAM SHOWING PROPORTION OF DEATHS DUE TO TYPHOID FEVER PER 1,000 DEATHS FROM ALL CAUSES, BY MONTHS, IN BROOKLYN FOR 6 YEARS ENDING MAY 31, 1890.



OCCUPATIONS.

The influence of occupation may become a special predisposing cause of sickness and death, which should be taken into account, when it is possible to do so, in comparing the death rates in different localities. It is not at this time possible to give death rates for the several occupations, owing to want of the necessary population data, but something can be learned by comparing the proportion of deaths due to certain causes occurring among persons of different occupations.

Table 27 shows for the males 15 years of age and upward engaged in certain occupations in New York and Brooklyn during the 6 years ending May 31, 1890, the number dying and the number of deaths from certain causes per 1,000 deaths from all causes for each specified occupation.

TABLE 27.

Occupations.	Localities.	Total number of deaths.	Number of deaths per 1,000 deaths from all causes.								
			Typhoid fever.	Consumption.	Cancer.	Heart disease.	Diseases of the nervous system.	Diseases of the respiratory system.	Bright's disease.	Suicide.	Accidents and injuries (except burns).
All occupations	New York	49,343	16.40	276.84	23.67	82.48	82.18	156.23	53.93	16.35	71.78
	Brooklyn	18,450	20.33	257.99	22.38	86.23	95.18	175.66	45.91	10.73	51.17
Clergymen	New York	156	6.41	153.85	44.87	166.67	153.85	179.49	38.46	.....	25.64
	Brooklyn	87	11.49	91.95	11.49	114.94	91.95	183.91	22.99	.....	11.49
Lawyers	New York	361	27.70	102.49	24.93	127.42	141.27	168.98	77.56	11.08	36.01
	Brooklyn	144	27.78	236.11	13.89	131.94	145.83	145.83	34.72	6.94	34.72
Physicians and surgeons	New York	331	15.11	120.85	27.19	108.76	163.14	132.93	48.34	15.11	24.17
	Brooklyn	141	35.46	113.48	14.18	163.12	148.94	156.03	92.20	.....	21.28
Accountants, bookkeepers, clerks, etc	New York	3,597	22.52	352.52	18.35	87.02	68.67	144.56	46.15	21.13	44.48
	Brooklyn	1,433	37.68	371.25	13.96	69.78	85.83	147.94	36.29	9.77	20.94
Dealers, retail	New York	3,101	19.99	184.46	36.76	116.09	118.67	148.66	56.76	16.77	39.34
	Brooklyn	1,342	19.37	159.46	26.08	108.79	137.85	174.37	48.44	16.39	26.83
Saloonkeepers, bartenders, etc	New York	1,306	10.72	296.32	21.44	67.38	71.21	160.80	57.43	19.91	56.66
	Brooklyn	345	14.49	295.65	26.09	63.77	69.87	185.51	57.97	20.29	40.58
Barbers and hairdressers	New York	417	11.99	338.13	21.58	163.12	83.93	127.10	57.55	35.97	23.98
	Brooklyn	145	41.38	358.62	6.90	68.97	62.07	117.24	41.38	48.28	41.38
Policemen, watchmen, and detectives	New York	739	16.24	190.80	18.94	109.61	74.42	156.97	64.95	17.59	94.72
	Brooklyn	260	7.69	169.23	34.62	115.38	96.15	203.85	57.69	15.38	69.23
Soldiers, sailors, and marines (United States)	New York	81	37.04	111.11	49.38	172.84	135.80	74.07	111.11	12.35	74.07
	Brooklyn	28	.....	250.00	35.71	71.43	214.29	71.43	71.43	.....	35.71
Laborers	New York	9,978	16.44	263.98	16.24	63.24	68.65	192.82	52.11	7.92	102.22
	Brooklyn	3,638	18.97	245.46	19.24	67.34	78.61	215.23	42.33	5.22	83.56
Servants	New York	2,067	19.35	332.37	15.48	74.50	82.24	146.59	47.41	17.42	53.22
	Brooklyn	304	32.89	292.76	42.76	111.84	55.92	131.58	59.21	.....	42.76
Bakers and confectioners	New York	779	38.51	267.01	28.24	94.99	69.32	129.65	56.48	19.26	51.35
	Brooklyn	272	14.71	250.00	33.09	80.88	106.62	158.09	44.12	29.41	55.15
Blacksmiths	New York	635	9.45	285.04	26.77	61.42	69.29	168.50	72.44	6.30	77.17
	Brooklyn	265	7.55	237.74	18.87	101.89	116.98	177.36	45.28	7.55	60.38
Boot and shoe makers	New York	1,160	7.76	256.90	34.48	85.34	100.86	164.66	68.97	18.10	32.76
	Brooklyn	447	15.66	239.37	15.66	105.15	100.67	194.63	49.22	11.19	20.13
Carpenters and joiners	New York	2,016	19.35	262.40	29.76	85.81	85.81	146.33	48.12	17.36	90.28
	Brooklyn	908	13.22	209.25	30.84	87.00	128.85	163.00	47.36	11.01	67.18
Compositors, printers, and pressmen	New York	772	18.13	437.82	14.25	66.06	56.99	129.53	50.52	11.66	53.11
	Brooklyn	348	20.11	370.69	5.75	86.21	86.21	158.05	45.98	8.62	28.74
Marble and stone cutters	New York	537	5.59	398.51	18.62	61.45	63.31	178.77	50.28	9.31	52.14
	Brooklyn	170	.....	423.53	23.53	70.59	64.71	152.94	47.06	.....	52.94
Masons, brick and stone	New York	738	12.20	250.68	29.81	52.85	66.40	185.64	51.49	18.97	126.02
	Brooklyn	348	17.24	181.03	11.49	89.08	114.94	212.64	51.72	8.62	89.46
Painters, glaziers, and varnishers	New York	1,325	11.32	310.19	16.60	74.72	81.51	124.53	69.43	16.60	92.83
	Brooklyn	500	12.00	302.00	16.00	120.00	98.00	152.00	36.00	10.00	52.00
Plumbers, gas and steam fitters	New York	509	13.75	328.09	17.68	55.01	68.76	161.10	53.05	5.89	94.30
	Brooklyn	175	28.57	314.29	.....	57.14	85.71	194.29	45.71	11.43	40.00
Tailors	New York	1,794	10.59	239.13	37.90	93.65	115.94	149.94	55.18	15.61	36.23
	Brooklyn	782	7.67	263.43	30.69	94.63	90.79	179.03	39.64	14.07	16.62
Draymen, hackmen, teamsters, etc	New York	2,421	14.87	292.03	13.63	77.24	66.91	156.55	45.02	7.85	121.44
	Brooklyn	687	24.75	263.46	14.56	81.51	78.60	196.51	30.57	5.82	84.43
Farmers, planters, and overseers	New York	275	14.55	207.27	43.64	54.55	94.55	178.18	36.36	14.55	87.27
	Brooklyn	179	16.76	128.49	27.93	134.08	72.63	189.94	33.52	11.17	67.04
Sailors, fishermen, and oystermen	New York	647	23.18	207.11	17.00	89.64	77.28	128.28	49.46	9.27	134.47
	Brooklyn	404	42.08	175.74	22.28	86.63	99.01	160.89	42.08	.....	111.39

It will be seen from this table that consumption caused more than one-fourth of all the deaths among the males having specified occupations, and that the proportion of deaths from this cause was greater among compositors, printers, and pressmen, marble and stone cutters, accountants, clerks, etc., barbers and hairdressers, painters and glaziers, and plumbers and gas fitters than among those engaged in other occupations, while it was less among clergymen and physicians. Heart disease caused the greatest proportion of deaths among clergymen, lawyers, and physicians. Suicide was most frequent among the barbers and hairdressers, and the bakers, probably because a greater proportion of these were of the German race.

Table 28 shows for the females 15 years of age and upward engaged in certain occupations in New York and Brooklyn during the 6 years ending May 31, 1890, the number dying and the number of deaths from certain causes per 1,000 deaths from all causes for each specified occupation.

TABLE 28.

OCCUPATIONS.	Localities.	Total number of deaths.	NUMBER OF DEATHS PER 1,000 DEATHS FROM ALL CAUSES.								
			Typhoid fever.	Consumption.	Cancer.	Heart disease.	Diseases of the nervous system.	Diseases of the respiratory system.	Bright's disease.	Suicide.	Accidents and injuries (except burns).
All occupations	New York	15,164	16.95	275.72	52.95	90.48	75.38	131.43	50.[illegible]	[illegible]	25.67
	Brooklyn	5,003	18.99	249.65	49.77	81.95	84.55	113.31	48.17	[illegible]	8.79
Teachers in schools	New York	136	14.71	272.06	95.59	66.18	73.53	147.06	36.76	14.71	36.76
	Brooklyn	92	76.09	336.96	65.22	54.35	54.35	130.43	21.74		10.87
Accountants, bookkeepers, clerks, etc	New York	105	85.71	304.76	38.10	114.29	38.10	76.19	85.71		38.10
	Brooklyn	30	.....	333.33	66.67	100.00	200.00	133.33	.....		.....
Laundresses	New York	573	3.49	291.45	62.83	125.65	90.75	164.71	41.88	1.75	27.92
	Brooklyn	86	.....	267.44	69.77	104.65	127.91	116.28	23.26	.....	.....
Nurses and midwives	New York	230	26.09	165.22	91.30	100.00	86.96	126.09	47.83	4.35	17.39
	Brooklyn	67	74.63	194.03	74.63	44.78	104.48	164.18	44.78	.....	14.93
Servants	New York	11,512	15.38	260.16	51.34	89.99	76.44	135.42	53.60	6.25	24.94
	Brooklyn	4,161	15.62	234.56	50.05	83.87	87.00	144.92	52.15	2.16	8.41
Dressmakers and seamstresses	New York	1,141	13.15	385.63	51.71	99.04	63.98	103.42	35.06	3.51	27.17
	Brooklyn	268	44.78	350.75	33.58	78.36	29.85	119.40	29.85	3.73	14.93

Among the females having specified occupations consumption caused about the same proportion of deaths as among the males, being most fatal among the accountants and clerks and dressmakers and seamstresses. Suicide was most frequent among the school teachers in New York.

The proportion of deaths from typhoid fever was high among the school-teachers and nurses in Brooklyn and among the accountants and clerks in New York, while it was very low among the laundresses in both New York and Brooklyn.

CAUSES OF DEATHS.

The relative influence of different causes of deaths in the production of differences in death rates is an important matter for consideration in connection with the mortality of different districts.

Tables 80 and 81 show for New York and Brooklyn the number of deaths which occurred from certain specified causes during the 6 years ending May 31, 1890, in each sanitary district, and Tables 82 and 83 show the corresponding average annual death rate per 100,000 of population in each district. The relation of certain causes to the death rates in the sanitary districts will be given in greater detail in the matter descriptive of the characteristics of the several districts.

Table 29 shows the average annual death rates due to certain causes in New York and Brooklyn during the 6 years ending May 31, 1890.

TABLE 29.

CAUSES.	AVERAGE ANNUAL DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
All causes	2,991.90	2,596.50
Scarlet fever	52.19	42.48
Typhoid fever	24.27	23.13
Malarial fever	24.62	32.62
Diphtheria and croup	181.63	164.42
Diarrheal diseases	316.85	282.58
Consumption	391.75	363.24
Pneumonia	287.89	230.06
Measles	45.67	17.71
Whooping cough	33.70	26.18
Cancer and tumor	60.55	48.27
Heart disease and dropsy	138.24	131.16
Childbirth and puerperal diseases	26.72	20.02
Other diseases of the respiratory system	176.68	168.49
Diseases of the digestive system	96.62	122.20
Diseases of the nervous system	241.96	270.67
Diseases of the urinary system	173.72	112.87
Stillbirths	225.41	179.01
Suicides	15.67	8.43
Other accidents and injuries	98.14	61.04
All other causes	379.62	351.91

It will be seen from this table that the death rates from scarlet fever, typhoid fever, diphtheria and croup, measles, whooping cough, cancer and tumor, heart disease and dropsy, childbirth, diseases of the urinary organs, and suicide were greater in New York than in Brooklyn, while the death rates from malarial fever, diseases of the digestive system, and diseases of the nervous system were greater in Brooklyn than in New York. The proportion of stillbirths was greater in New York than in Brooklyn.

Table 30 shows for the white population of New York the number of deaths during the census year per 100,000 of population, with distinction of certain causes of deaths and of certain groups of ages.

TABLE 30.

CAUSES.	DEATH RATES PER 100,000 OF POPULATION OF CORRESPONDING AGES.					
	All ages.	Under 1 year.	Under 5 years.	5 to 15 years.	15 to 45 years.	45 years and over.
All causes	2,847.42	36,380.96	11,546.28	536.69	1,334.04	4,701.33
Males	1,536.76	20,183.51	6,283.00	284.02	742.94	2,429.11
Females	1,310.66	16,197.45	5,263.29	252.67	591.11	2,272.22
Measles	27.73	345.79	241.91	5.23	0.49	.....
Scarlet fever	24.44	73.51	161.07	31.72	1.95	.....
Diphtheria and croup	124.53	530.93	911.92	119.80	4.14	4.63
Whooping cough	29.67	686.13	261.51	4.48	0.24	0.42
Cerebro-spinal fever	7.18	65.35	44.71	6.34	2.97	.....
Typhoid fever	22.89	2.72	6.74	11.57	30.59	20.19
Diarrheal diseases and cholera infantum	301.62	8,470.38	2,338.90	22.02	24.25	174.98
Malarial fever	15.64	35.40	30.62	8.21	11.09	29.44
Erysipelas and septicæmia	12.15	234.15	56.96	1.87	4.39	19.77
Venereal diseases	9.33	198.76	48.38	.....	5.21	7.15
Alcoholism	22.15	.....	.....	1.49	27.17	43.32
Premature birth	54.85	2,224.46	500.36	.....	.....	.....
Stillbirths	216.77	8,791.66	.....	.....	.....	.....
Inanition, debility, and atrophy	98.55	3,376.17	869.63	2.61	1.46	53.84
Old age	27.26	.....	.....	.....	.....	170.77
Rheumatism	9.60	8.17	4.90	4.48	5.97	31.13
Tubercular diseases	492.67	2,099.22	918.66	94.05	493.38	646.92
Consumption	379.56	370.29	158.01	34.34	471.81	662.34
Scrofula and tabes	5.64	119.80	41.03	1.12	1.46	0.84
Hydrocephalus	39.54	724.24	311.12	16.79	3.41	3.37
Inflammation of the brain	61.16	876.72	401.76	28.74	12.43	31.07
Diseases of the bones and joints	0.78	8.17	6.74	13.06	4.26	8.41
Cancer and tumor	63.24	10.89	7.35	1.49	29.49	287.71
Diabetes	7.65	.....	.....	1.12	2.80	37.02
Diseases of the nervous system	228.92	2,428.66	857.41	40.68	66.29	570.79
Apoplexy	63.77	35.40	9.80	1.12	20.35	521.36
Tetanus	0.87	.....	0.61	0.75	0.73	1.68
Trismus nascentium and convulsions	38.60	1,236.11	346.64	1.12	0.24	1.68
Diseases of the circulatory system	144.13	364.84	98.60	38.81	83.35	503.91
Aneurism	3.63	.....	.....	.....	3.66	40.40
Heart disease and dropsy	128.09	70.79	29.46	38.44	78.47	468.16
Diseases of the respiratory system	562.96	5,815.73	2,372.58	95.92	227.99	1,092.77
Bronchitis	147.42	2,341.54	771.06	12.32	25.83	291.06
Pneumonia	336.46	2,627.42	1,137.30	54.49	186.43	622.11
Diseases of the digestive system	100.96	765.08	228.44	22.02	54.22	263.73
Diseases of the liver	31.75	76.24	18.09	1.12	19.59	117.35
Diseases of the urinary system	165.95	152.47	74.10	17.01	107.60	567.29
Bright's disease	83.78	.....	.....	5.07	55.81	325.56
Diseases of the female organs of generation	a15.77	.....	.....	.....	b19.35	c31.57
Affections connected with pregnancy	b83.62	.....	.....	.....	b83.15	.....
Abortion	b9.56	.....	.....	.....	b9.56	.....
Childbirth and puerperal septicæmia	b56.15	.....	.....	.....	b55.91	.....
Accidents and injuries	113.38	329.45	153.11	50.38	102.23	195.59
Drowned	14.43	5.45	5.51	10.82	15.48	21.03
Burns and scalds	5.84	19.06	28.17	2.61	2.44	5.89
Gunshot wounds and homicides	4.03	2.72	1.84	1.87	5.48	2.94
Infanticide	0.27	10.89	2.45	.....	.....	.....
Railroad accidents	4.43	.....	1.22	2.99	5.12	5.89
Suicides	15.10	.....	.....	.....	16.82	36.59

a Per 100,000 total females. b Per 100,000 females 15 to 45 years of age. c Per 100,000 females 45 years of age and over.

Table 31 shows for the white population of Brooklyn the number of deaths during the census year per 100,000 of population, with distinction of certain causes of deaths and of certain groups of ages.

TABLE 31.

CAUSES.	DEATH RATES PER 100,000 OF POPULATION OF CORRESPONDING AGES.					
	All ages.	Under 1 year.	Under 5 years.	5 to 15 years.	15 to 45 years.	45 years and over.
All causes	2,540.87	32,197.13	9,938.85	666.19	1,125.52	4,123.17
Males	1,350.90	17,934.78	5,427.46	339.54	613.44	2,067.15
Females	1,189.97	14,262.35	4,511.40	326.65	512.08	2,056.02
Measles	7.54	84.42	58.92	3.87	0.24	.....
Scarlet fever	19.36	36.94	114.51	28.99	1.44	.....
Diphtheria and croup	171.11	295.48	1,067.26	240.96	5.30	3.71
Whooping cough	20.24	395.74	175.65	0.64	0.24	0.74
Cerebro-spinal fever	2.26	21.11	15.56	1.29	0.48	.....
Typhoid fever	24.39	.....	4.45	14.82	35.87	13.35
Diarrheal diseases and cholera infantum	233.59	6,764.46	1,756.53	12.89	19.26	131.98
Malarial fever	25.77	42.21	38.91	14.17	20.95	45.23
Erysipelas and septicæmia	14.71	131.91	32.24	3.22	11.32	26.69
Venereal diseases	2.89	94.98	20.01	.....	0.96	0.74
Alcoholism	5.41	.....	.....	.....	5.78	14.09
Premature birth	28.41	1,192.49	251.25	.....	.....	.....
Stillbirths	166.33	6,980.79	.....	.....	.....	.....
Inanition, debility, and atrophy	147.85	4,838.54	1,148.42	3.22	7.70	78.59
Old age	42.12	.....	.....	.....	.....	248.38
Rheumatism	10.81	10.55	6.67	5.80	6.50	32.62
Tubercular diseases	397.41	2,068.38	838.24	93.42	409.76	415.21
Consumption	284.89	195.23	88.94	23.84	393.15	382.58
Scrofula and tabes	2.39	63.32	17.79	.....	0.24	1.48
Hydrocephalus	16.72	411.57	133.41	4.51	1.20	0.74
Inflammation of the brain	90.14	1,382.44	592.55	56.70	13.96	28.17
Diseases of the bones and joints	3.27	15.83	5.56	8.38	1.20	2.22
Cancer and tumor	47.77	5.28	2.22	1.29	19.02	220.21
Diabetes	3.14	5.28	2.22	0.64	1.20	12.60
Diseases of the nervous system	294.19	4,157.87	1,342.97	76.67	60.43	564.98
Apoplexy	60.22	15.83	6.67	1.29	14.20	305.47
Tetanus	1.01	.....	1.11	2.58	0.72	.....
Trismus nascentium and convulsions	57.20	1,983.96	500.28	2.58	0.24	.....
Diseases of the circulatory system	156.15	897.00	199.00	44.46	75.60	504.18
Aneurism	1.26	.....	.....	.....	0.72	5.19
Heart disease and dropsy	134.90	137.19	38.91	44.46	74.63	488.61
Diseases of the respiratory system	502.39	4,057.62	1,765.43	135.30	212.34	975.74
Bronchitis	132.51	2,026.17	635.91	14.17	20.46	278.04
Pneumonia	277.47	1,350.78	647.03	70.23	169.25	602.79
Diseases of the digestive system	117.17	933.94	297.94	29.64	59.71	274.33
Diseases of the liver	35.45	100.25	24.46	1.29	18.30	134.94
Diseases of the urinary system	120.69	89.70	48.92	21.91	82.10	401.12
Bright's disease	60.22	.....	.....	5.80	40.45	223.92
Diseases of the female organs of generation	*a*8.86	.....	.....	.....	*b*7.95	*c*25.71
Affections connected with pregnancy	*b*65.95	.....	.....	.....	*b*65.01	.....
Abortion	*b*0.47	.....	.....	.....	*b*0.47	.....
Childbirth and puerperal septicæmia	*b*51.92	.....	.....	.....	*b*51.45	.....
Accidents and injuries	64.62	163.57	74.49	24.48	55.85	131.24
Drowned	12.45	21.11	7.78	7.73	13.48	17.79
Burns and scalds	5.03	5.28	18.90	3.22	2.17	6.67
Gunshot wounds and homicides	2.14	.....	.....	.....	2.65	4.45
Infanticide	0.13	5.28	1.11	.....	.....	.....
Railroad accidents	2.26	.....	.....	0.64	1.69	7.41
Suicides	9.81	.....	.....	.....	7.94	33.36

a Per 100,000 total females. *b* Per 100,000 females 15 to 45 years of age. *c* Per 100,000 females 45 years of age and over.

Some of the differences between the two cities indicated by these tables are very striking. Alcoholism gives a death rate in New York four times as great as in Brooklyn, and convulsions in infants caused a much heavier mortality in Brooklyn than in New York, although the general infantile mortality was lowest in Brooklyn.

VITAL STATISTICS.

The comparative number and proportion of deaths from certain causes and classes of causes in the two cities during the 6-year period are graphically represented in the following diagrams:

DIAGRAM SHOWING NUMBER AND PROPORTION OF DEATHS FROM DIFFERENT CAUSES IN NEW YORK DURING THE 6 YEARS ENDING MAY 31, 1890.

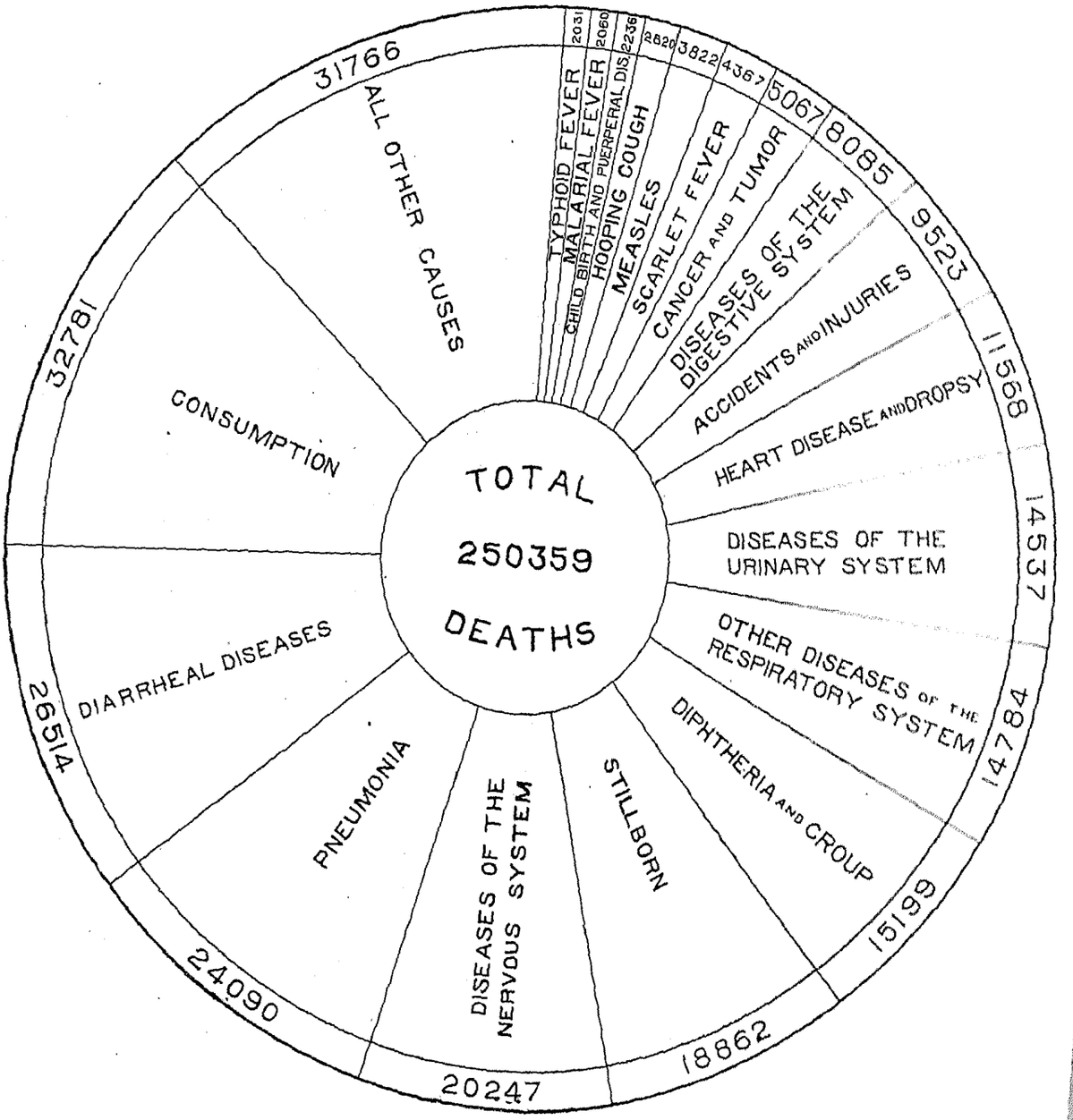
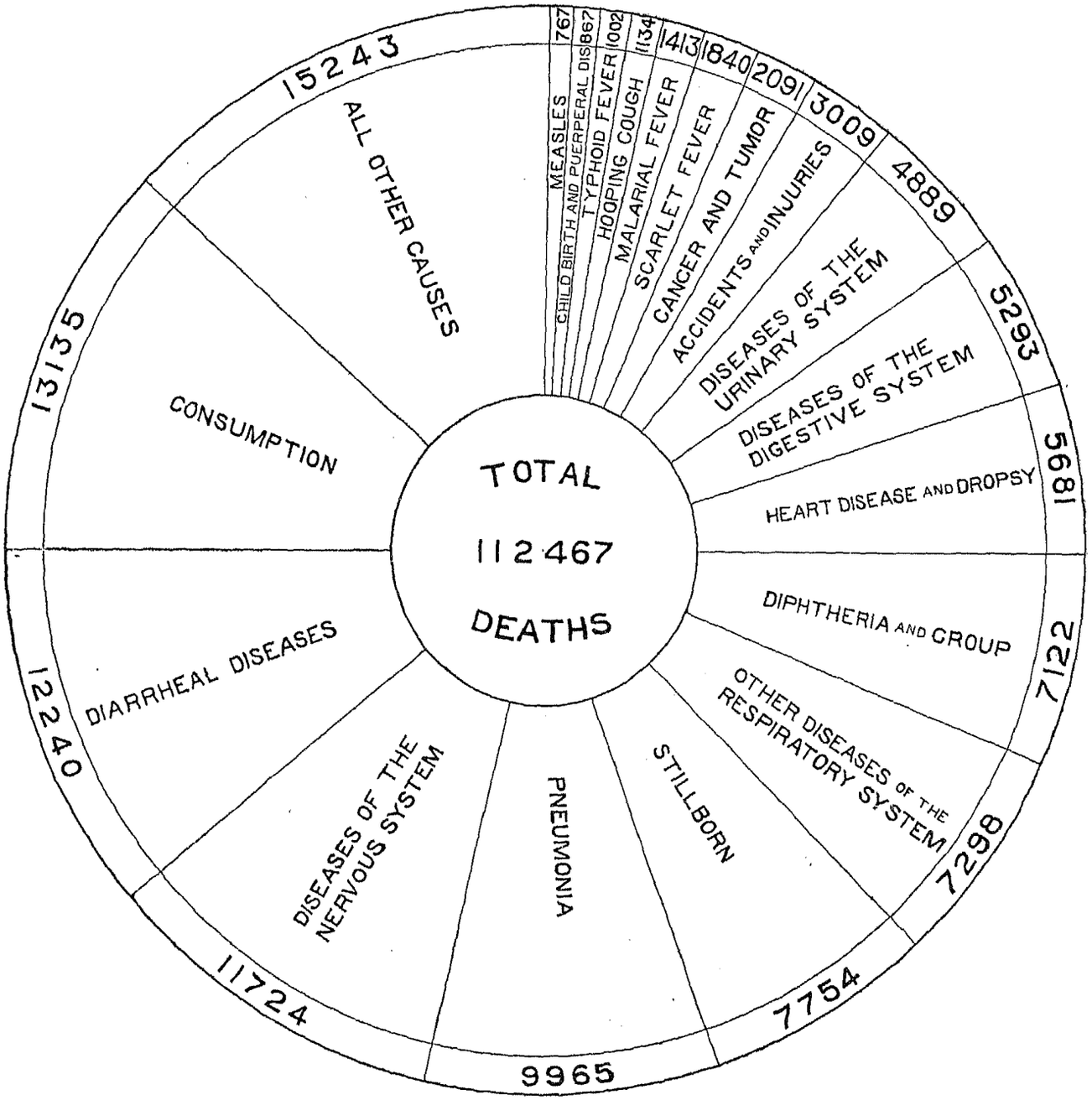


DIAGRAM SHOWING NUMBER AND PROPORTION OF DEATHS FROM DIFFERENT CAUSES IN BROOKLYN DURING THE 6 YEARS ENDING MAY 31, 1890.



CONSUMPTION.

In New York consumption caused 32,781 deaths during the 6-year period, or 391.75 deaths annually per 100,000 of mean population. For the census year the number of deaths was 5,871, the rate being 387.45 per 100,000 of population, or slightly below the average rate for the 6 years.

In Brooklyn the death rates were much less, the average rate for the 6 years being 303.24, and the rate for the census year 288.34. The number of deaths was 13,135 for the whole 6 years, and 2,325 for the census year.

Race distinctions have a very definite relation to death rates from consumption. These death rates, during the 6-year period, were, for each 100,000 of population of each class in New York: mothers born in Ireland, 645.73; Bohemia, 499.13; Scotland, 384.12; Scandinavia, 357.00; Canada, 352.32; Germany, 328.80; France, 324.98; England and Wales, 322.50; Italy, 233.85; United States (white), 205.14; Hungary, 155.05; Russia and Poland, 98.21; other foreign mothers, 286.26; colored, 774.21. Brooklyn: mothers born in Ireland, 452.79;

Bohemia, 347.22; Germany, 295.61; Scotland, 269.24; Canada, 266.27; France, 252.82; England and Wales, 233.78; Scandinavia, 218.92; United States (white), 180.79; Italy, 123.00; Hungary, 120.77; Russia and Poland, 76.72; other foreign mothers, 375.15; colored, 531.35.

From these figures it appears that consumption was most fatal among the colored, the Irish, and the Bohemians, and least fatal among the Hungarians and Russians, that is to say, among the Jews.

Table 32 shows the death rates due to consumption during the census year in each city per 100,000 of population, with distinction of color, nativity, parental nativity, and certain birthplaces of mothers.

TABLE 32.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
White	379.50	284.89
Native	314.70	235.28
Both parents native	217.70	186.46
One or both parents foreign	359.87	270.14
Foreign	466.26	386.61
Colored	845.21	539.01
Birthplaces of mothers:		
United States (white)	192.10	170.09
Ireland	648.56	432.85
Germany	317.50	286.72

The highest average annual death rate due to consumption during the 6 years in New York was 776.26 per 100,000 of population in ward 2, while the lowest was 49.16 in sanitary district K of ward 22.

For the same period the highest average annual rate in Brooklyn was 1,045.75 per 100,000 of population in sanitary district F of ward 17, and the lowest was 96.21 in district I of ward 18.

The shaded maps, which show the relative prevalence of consumption in different parts of New York and Brooklyn, merit careful examination in connection with the maps showing the relative total mortality of different districts. They indicate that consumption was upon the whole more fatal in those districts where the ground water is nearest the surface, but not in all of them, and upon examining the detailed tables for the several districts which show either an exceptionally high mortality from consumption or one below the average it will be found that the controlling factors are the race and age distribution of the population, its density, and the altitude of the locality.

PNEUMONIA.

The deaths from pneumonia in New York during the 6-year period aggregate 24,090, making the average annual death rate due to this cause 287.89 per 100,000 of mean population. The number of deaths during the census year was 5,112 and the death rate 337.36, which was considerably higher than the average rate for the 6 years.

In Brooklyn pneumonia caused 9,965 deaths during the 6 years and 2,261 deaths during the census year, the average annual death rate per 100,000 of mean population for the whole 6 years being 230.06, against a rate of 280.40 for the census year.

The death rates due to pneumonia in each city during the census year, at four groups of ages, per 100,000 population of corresponding ages are shown in Table 33.

TABLE 33.

LOCALITIES.	DEATH RATES PER 100,000 OF POPULATION.			
	Under 5 years.	5 to 15 years.	15 to 45 years.	45 years and over.
New York	1,148.85	55.25	187.04	622.75
Brooklyn	659.61	71.32	169.70	610.61

Table 34 shows the death rates due to pneumonia during the census year in each city per 100,000 of population, with distinction of color, nativity, parental nativity, and certain birthplaces of mothers.

TABLE 34.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
White	336.46	277.47
Native	349.15	240.90
Both parents native	311.29	244.41
One or both parents *foreign*	366.74	238.39
Foreign	319.47	352.48
Colored	389.50	493.33
Birthplaces of mothers:		
United States (white)	310.40	224.17
Ireland	428.20	375.82
Germany	244.44	233.56

The average annual death rates due to this cause during the 6-year period in New York per 100,000 mothers of the specified nativities were: mothers born in Italy, 455.89; Bohemia, 350.29; Ireland, 343.99; Hungary, 279.76; United States (white), 272.87; England and Wales, 268.97; Scotland, 261.09; Germany, 214.12; Canada, 211.77; Scandinavia, 210.64; France, 180.79; Russia and Poland, 170.17; other foreign mothers, 204.97.

The corresponding rates for the 6 years in Brooklyn, according to nativities of mothers, were: mothers born in Bohemia, 347.22; Ireland, 281.97; Italy, 280.33; United States (white), 210.63; Germany, 207.63; England and Wales, 198.10; Scotland, 180.36; Scandinavia, 154.78; France, 146.16; Hungary, 140.90; Russia and Poland, 127.06; Canada, 116.33; other foreign mothers, 265.11.

The highest annual death rate due to this cause in New York during the 6 years was 593.61 per 100,000 of mean population in ward 2 and the lowest was 40.04 in sanitary district B of ward 19.

In Brooklyn the highest rate for the 6 years was 438.77 in sanitary district D of ward 14 and the lowest was 59.21 in sanitary district I of ward 18.

The shaded maps, which show the relative prevalence of pneumonia in different parts of New York and Brooklyn, indicate that most of the districts in which it was especially fatal are either waterside districts or of low altitude, yet it was not especially fatal in all such districts. In a general way the maps correspond to those for consumption, and in New York there are some special resemblances between the pneumonia map and that for diarrheal diseases. The race factor is one of great importance in studying the relative prevalence of this disease in different localities. The relations of the areas of filled ground in New York city to the local prevalence of pneumonia are also specially interesting, as will be seen by applying the transparent outline map over the pneumonia map. The influence of filled areas upon the prevalence of such diseases as pneumonia, malarial fevers, and diarrheal diseases is probably connected with the presence, in the soil of such areas, of more than the average number of the micro-organisms which cause such diseases, and this may depend on the greater moisture of the soil, on the greater amount of organic matter contained in the material used for filling, or on the imperfect condition of the sewers in some of these localities leading to continuous soil pollution, or to combinations of all these circumstances.

DIARRHEAL DISEASES.

The total number of deaths due to diarrheal diseases in New York during the 6-year period was 26,514, the average annual death rate per 100,000 of mean population being 316.85. In the census year the number of deaths from these causes was 4,565 and the death rate was 301.26, or less than the average for the 6 years.

The same diseases caused 12,240 deaths in Brooklyn during the 6 years, or an average annual death rate per 100,000 of mean population of 282.58. For the census year the number was 1,890 and the death rate 234.39, also below the average for the 6 years.

The death rates resulting from these causes were therefore much less in Brooklyn than in New York for both the whole 6 years and the census year.

Table 35 shows the death rates due to diarrheal diseases during the census year in each city at three groups of ages per 100,000 population of corresponding ages.

TABLE 35.

LOCALITIES.	DEATH RATES PER 100,000 OF POPULATION.		
	Under 1 year.	Under 5 years.	45 years and over.
New York	8,552.70	2,359.64	173.19
Brooklyn	6,820.44	1,772.91	131.05

Table 36 shows the death rates due to diarrheal diseases during the census year in each city per 100,000 of population, with distinction of color, nativity, parental nativity, and certain birthplaces of mothers.

TABLE 36.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
White	301.62	233.59
Native	464.67	311.97
Both parents native	360.46	269.57
One or both parents foreign	513.60	342.20
Foreign	83.36	72.87
Colored	280.44	292.34
Birthplaces of mothers:		
United States (white)	371.95	281.23
Ireland	237.89	178.74
Germany	238.49	208.52

Taking the whole 6-year period, the average annual death rates from diarrheal diseases in New York per 100,000 mothers of the specified nativities were: mothers born in Bohemia, 766.73; Italy, 425.58; United States (white), 398.34; Scandinavia, 358.36; Hungary, 328.07; Canada, 309.96; Germany, 281.36; England and Wales, 240.71; Ireland, 237.64; France, 217.37; Scotland, 204.74; Russia and Poland, 195.55; other foreign mothers, 275.60.

The corresponding rates in Brooklyn for the 6 years were as follows: mothers born in Bohemia, 1,215.28; United States (white), 342.25; Scandinavia, 320.68; Germany, 296.00; Italy, 281.76; Hungary, 261.67; Russia and Poland, 225.35; Ireland, 215.19; Canada, 211.98; England and Wales, 172.83; Scotland, 145.08; France, 134.31; other foreign mothers, 363.48.

The locality in New York having the highest average annual death rate due to diarrheal diseases during the 6-year period was sanitary district G of ward 12 (523.51), and that having the lowest rate was sanitary district K of ward 22 (49.16).

In Brooklyn the locality having the highest average annual death rate from diarrheal diseases was sanitary district B of ward 18 (530.17), and that having the lowest was district B of ward 20 (75.06).

The shaded maps, which show the relative prevalence of diarrheal diseases in New York and Brooklyn, indicate that the districts in which these diseases were especially fatal were those low lying and tenement house districts in which there was a comparatively large proportion of children, and especially of German and Italian children. It will be observed that there are a number of coincidences between these maps and those for pneumonia, in relation to which see the remarks on the causes of pneumonia, page 39.

DISEASES OF THE NERVOUS SYSTEM.

During the 6-year period the number of deaths in New York due to causes of this class was 20,217, the average annual death rate per 100,000 of population being 241.96. In the census year the deaths numbered 3,468 and the rate was 228.87, or somewhat below the average for the 6 years.

In Brooklyn the number of deaths during the 6 years from this class was 11,724, making an average annual death rate of 270.67 per 100,000 of population. Of this number 2,382 deaths occurred in the census year, the rate for which was 295.41, or considerably above the average annual rate for the 6 years, being just the reverse of the comparison in New York.

This class embraces certain diseases, such as inflammation of the brain, convulsions, trismus nascentium, etc., which are peculiar to or more fatal in children under 5 years of age, and also other diseases, such as apoplexy, paralysis, etc., which occur but seldom in persons under 5 years of age. For this reason the remarks heretofore made concerning the differences in the proportion of children existing in the native and foreign classes, and also the excess of children having native mothers, should be remembered in comparing the rates given below.

Table 37 shows the death rates due to diseases of the nervous system during the census year in each city at four groups of ages per 100,000 population of corresponding ages.

TABLE 37.

LOCALITIES.	DEATH RATES PER 100,000 OF POPULATION.			
	Under 5 years.	5 to 15 years.	15 to 45 years.	45 years and over.
New York	864.08	40.52	66.48	570.54
Brooklyn	1,351.16	77.69	60.91	568.14

It appears from this statement that the death rates from these causes at and above 15 years of age were very nearly equal in New York and Brooklyn, the excessive death rate in the latter city being entirely in the ages under 15 years.

The number of deaths occurring in New York from causes in this class during the 6 years at ages under 5 years was 456.31 out of 1,000 deaths of all ages. For the census year the proportion was considerably less, being 390.35 per 1,000 of all ages.

In Brooklyn the proportion of all deaths in this class which occurred under 5 years of age was higher than in New York, and higher in the census year than for the 6 years, the numbers being 494.29 for the average of the 6 years and 515.11 for the census year.

Table 38 shows the death rates resulting from diseases of the nervous system during the census year in each city per 100,000 of population, with distinction of color, nativity, parental nativity, and certain birthplaces of mothers.

TABLE 38.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
White	228.92	294.19
Native	243.13	323.38
Both parents native	259.90	359.43
One or both parents foreign	235.33	297.66
Foreign	209.89	234.35
Colored	225.91	383.70
Birthplaces of mothers:		
United States (white)	250.06	357.71
Ireland	242.40	286.19
Germany	189.46	234.08

For the whole 6 years the average annual death rates from these causes in New York per 100,000 mothers of the specified nativities were as follows: mothers born in Bohemia, 336.76; United States (white), 293.48; Italy, 258.73; Ireland, 242.44; England and Wales, 240.71; Scotland, 236.67; France, 218.45; Germany, 197.39; Canada, 196.37; Hungary, 192.13; Scandinavia, 168.24; Russia and Poland, 117.68; other foreign mothers, 165.76.

In Brooklyn the corresponding rates for the 6 years were: mothers born in Bohemia, 607.64; United States (white), 323.83; Ireland, 257.43; England and Wales, 247.16; Germany, 223.90; France, 209.37; Italy, 205.96; Scotland, 202.58; Scandinavia, 183.85; Canada, 155.11; Russia and Poland, 148.64; Hungary, 60.39; other foreign mothers, 271.78.

Comparing the different sanitary districts in New York for the 6-year period, we find that the highest average annual death rate due to the causes of this class was 487.06 in ward 2, and the lowest was 95.17 in sanitary district M of ward 22.

In Brooklyn the corresponding rates were: highest, 406.12 in sanitary district A of ward 18, and the lowest 115.07 in district A of ward 8.

DIPHTHERIA AND CROUP.

The total number of deaths from diphtheria and croup in New York during the 6-year period was 15,199, the average annual death rate per 100,000 of population being 181.63. For the census year the rate was considerably less, being 123.41 and the number of deaths 1,870.

In Brooklyn diphtheria and croup caused 7,122 deaths during the 6 years, and 1,366 in the census year, the rate for the latter, which was 169.41, being slightly in excess of the average annual rate for the 6 years, namely, 164.42.

Table 39 shows for each city the death rates due to diphtheria and croup during the census year at five groups of ages per 100,000 population of similar ages.

TABLE 39.

LOCALITIES.	DEATH RATES PER 100,000 OF POPULATION.				
	Under 1 year.	Under 5 years.	5 to 15 years.	15 to 45 years.	45 years and over.
New York	534.04	909.61	120.09	4.18	4.56
Brooklyn	292.23	1,060.44	239.45	5.21	4.39

Table 40 shows the death rates due to diphtheria and croup during the census year in each city per 100,000 of population, with distinction of color, nativity, parental nativity, and certain birthplaces of mothers.

TABLE 40.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
White	124.53	171.11
Native	203.60	243.51
Both parents native	186.70	225.09
One or both parents foreign	211.46	256.65
Foreign	18.68	22.63
Colored	58.42	45.68
Birthplaces of mothers:		
United States (white)	207.63	240.96
Ireland	81.88	131.95
Germany	92.62	131.41

The highest average annual death rate due to diphtheria and croup during the 6 years in New York was 302.88 in sanitary district C of ward 19, and the lowest was 32.71 in district D of ward 18.

In Brooklyn the highest rate for the same time was 440.79 in sanitary district D of ward 8, and the lowest was 34.11 in district A of ward 24.

The shaded maps, which show the relative prevalence of diphtheria and croup in different parts of New York and Brooklyn, indicate that the districts in which it was especially fatal were mostly low lying, with ground water not far from the surface, and in New York, that it was especially prevalent in some of the districts containing much filled ground. It was most prevalent as a rule in the most densely populated districts, but to this there are some exceptions.

DISEASES OF THE URINARY ORGANS.

During the 6-year period the number of deaths in New York due to this class was 14,537, the average annual death rate per 100,000 of population being 173.72. In the census year the deaths numbered 2,542 and the rate was 167.76, being somewhat below the average for the 6 years.

In Brooklyn the number of deaths during the 6 years from this class of causes was 4,889, making an average annual death rate of 112.87 per 100,000 of population. There were 977 deaths from this class during the census year, or a death rate of 121.16, which was above the average for the 6 years, being just the reverse of the comparison in New York.

Table 41 shows the death rates due to diseases of the urinary organs during the census year in each city at three groups of ages per 100,000 population of corresponding ages.

TABLE 41.

LOCALITIES.	DEATH RATES PER 100,000 OF POPULATION.		
	Under 15 years.	15 to 45 years.	45 years and over.
New York	38.98	108.74	605.34
Brooklyn	31.47	82.24	404.14

It appears from this statement that the death rate for this class of causes was higher in New York than in Brooklyn, the excessive death rate in the former city being over 45 years of age.

Table 42 shows the death rates resulting from diseases of the urinary organs during the census year in each city per 100,000 of population, with distinction of color, nativity, parental nativity, and certain birthplaces of mothers.

TABLE 42.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
White	165.95	120.69
Native	108.84	82.48
Both parents native	130.88	90.31
One or both parents foreign	98.60	76.90
Foreign	242.30	199.06
Colored	272.65	155.31
Birthplaces of mothers:		
United States (white)	113.23	82.06
Ireland	261.43	204.71
Germany	142.16	93.02

For the 6-year period the average annual death rates from this class of causes in New York per 100,000 mothers of the specified nativities were as follows: mothers born in Ireland, 272.45; Scotland, 214.13; England and Wales, 206.13; Bohemia, 154.85; France, 150.65; Germany, 141.78; Canada, 134.77; United States (white), 124.14; Scandinavia, 106.69; Italy, 73.38; Hungary, 51.68; Russia and Poland, 48.34; other foreign mothers, 87.93.

In Brooklyn the corresponding rates for the 6 years were: mothers born in Bohemia, 260.42; Ireland, 171.38; England and Wales, 121.91; Scotland, 101.94; France, 94.81; Germany, 92.07; United States (white), 80.20; Canada, 77.56; Scandinavia, 53.02; Russia and Poland, 47.95; Italy, 40.05; other foreign mothers; 133.39. There were no deaths from this class of causes reported among those whose mothers were born in Hungary.

Comparing the different sanitary districts in New York for the 6-year period, we find that the highest average annual rate due to this class of causes was 334.86 in ward 2, and the lowest was 31.72 in sanitary district M of ward 22.

In Brooklyn the corresponding rates were highest (326.80) in sanitary district F of ward 17, and lowest (37.40) in sanitary district E of ward 24.

HEART DISEASE AND DROPSY.

The number of deaths from these causes during the 6-year period in New York was 11,568, and the average annual death rate per 100,000 of mean population was 138.24. During the census year the number was 1,952, and the death rate per 100,000 of population was 128.82.

In Brooklyn these diseases caused 5,681 deaths during the 6 years, the average annual death rate being 131.16. For the census year the number of deaths was 1,097 and the death rate was 136.05. The death rate due to heart disease and dropsy was therefore greater during the census year and less for the average of the 6 years in Brooklyn than in New York.

Table 43 shows the death rates due to heart disease and dropsy during the census year in each city at two groups of ages, per 100,000 population of corresponding ages.

TABLE 43.

LOCALITIES.	DEATH RATES PER 100,000 OF POPULATION.	
	15 to 45 years.	45 years and over.
New York	79.73	469.03
Brooklyn	75.84	492.00

Table 44 shows the death rates resulting from heart disease and dropsy during the census year in each city per 100,000 of population, with distinction of color, nativity, parental nativity, and certain birthplaces of mothers.

TABLE 44.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
White	128.09	134.90
Native	83.97	85.66
Both parents native	107.21	109.63
One or both parents foreign	73.18	68.57
Foreign	187.13	235.88
Colored	171.38	219.26
Birthplaces of mothers:		
United States (white)	93.81	91.37
Ireland	167.02	191.47
Germany	130.76	128.28

The average annual death rates during the 6-year period from these causes in New York per 100,000 mothers of the specified nativities were: mothers born in France, 189.39; Ireland, 179.79; Scotland, 171.87; England and Wales, 163.91; Germany, 135.74; United States (white), 113.15; Bohemia, 111.25; Canada, 105.89; Scandinavia, 77.96; Hungary, 67.41; Italy, 60.62; Russia and Poland, 39.81; other foreign mothers, 88.50.

The corresponding death rates in Brooklyn during the 6 years were: mothers born in Bohemia, 434.03; Ireland, 170.73; England and Wales, 156.10; Scotland, 150.30; Canada, 147.36; Germany, 125.20; France, 102.71; United States (white), 99.40; Scandinavia, 51.31; Italy, 42.91; Hungary, 40.26; Russia and Poland, 31.17; other foreign mothers, 145.06.

The highest average annual death rate due to these causes in New York during the 6 years was 410.96 in ward 2, and the lowest rate was 47.59 in sanitary district M of ward 22.

In Brooklyn the highest average annual rate for the same period was 219.34 in sanitary district B of ward 21 while the lowest rate was 36.02 in district D of ward 24, except in district F of ward 17, in which no deaths occurred from these causes in the 6 years.

CANCER AND TUMOR.

For the 6-year period the number of deaths from cancer and tumor in New York was 5,067, of which 953 occurred during the census year, the death rates being 60.55 and 62.89 per 100,000 of population, respectively.

In Brooklyn the deaths and death rates were as follows: deaths during the 6 years, 2,091; death rate, 48.27; deaths during the census year, 389; death rate, 48.24.

Table 45 shows the death rates in each city due to cancer and tumor during the census year, at two groups of ages, per 100,000 of population of corresponding ages.

TABLE 45.

LOCALITIES.	DEATH RATES PER 100,000 OF POPULATION.	
	15 to 45 years.	45 years and over.
New York	29.60	285.48
Brooklyn	18.96	223.30

Table 46 shows the death rates due to cancer and tumor during the census year in each city per 100,000 of population, with distinction of color, nativity, parental nativity, and certain birthplaces of mothers.

TABLE 46.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
White	63.24	47.77
Native	30.96	26.56
Both parents native	53.98	44.93
One or both parents foreign	20.27	13.46
Foreign	106.44	91.28
Colored	42.84	82.22
Birthplaces of mothers:		
United States (white)	45.71	39.54
Ireland	71.87	51.43
Germany	75.78	55.20

Taking the 6-year period, the average annual death rates from these causes in New York per 100,000 mothers, according to nativity of the mother, were as follows: France, 89.32; England and Wales, 82.12; Germany, 71.12; Scotland, 70.44; Ireland, 69.39; Bohemia, 69.16; Canada, 67.38; United States (white), 45.25; Scandinavia, 27.36; Italy, 24.88; Hungary, 24.72; Russia and Poland, 24.28; other foreign mothers, 48.14.

In Brooklyn the corresponding rates were: mothers born in Bohemia, 173.61; Scotland, 75.81; England and Wales, 58.35; Ireland, 58.20; Canada, 54.29; Germany, 48.81; France, 39.50; United States (white), 37.27; Scandinavia, 19.67; Italy, 11.44; Russia and Poland, 9.59; other foreign mothers, 65.03.

DISEASES OF THE LIVER.

In New York diseases of the liver caused 2,764 deaths during the 6-year period, or 33.03 deaths annually per 100,000 of mean population. For the census year the number of deaths was 478, the rate being 31.54 per 100,000 of population, or somewhat below the average for the 6 years.

In Brooklyn the death rates due to this cause were higher. There were 1,557 deaths during the 6-year period, the average rate per 100,000 of mean population being 35.95. The number of deaths during the census year was 283, and the death rate was 35.10, which was but little below the average for the 6 years.

Table 47 shows the death rates due to diseases of the liver during the census year at three groups of ages per 100,000 population of corresponding ages.

TABLE 47.

LOCALITIES.	DEATH RATES PER 100,000 OF POPULATION.		
	Under 15 years.	15 to 45 years.	45 years and over.
New York	8.25	19.22	116.43
Brooklyn	10.09	18.01	133.25

From this statement it appears that the higher death rate from this cause in Brooklyn was among those under 15 and over 45 years of age. The rate for those between 15 and 45 years of age was less in Brooklyn than in New York.

Table 48 shows the death rates due to diseases of the liver during the census year in each city per 100,000 of population, with distinction of color, nativity, parental nativity, and certain birthplaces of mothers.

TABLE 48.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
White	31.75	35.45
Native	16.65	19.08
Both parents native	23.29	26.51
One or both parents foreign	13.57	13.78
Foreign	51.96	69.04
Colored	19.47	9.14
Birthplaces of mothers:		
United States (white)	20.32	22.75
Ireland	48.33	57.54
Germany	32.20	38.84

The average annual death rates due to this cause during the 6-year period in New York per 100,000 mothers of the specified nativities were: mothers born in Ireland, 52.64; France, 48.42; England and Wales, 33.25; Germany, 32.38; Bohemia, 30.07; Scotland, 30.05; Canada, 23.10; Hungary, 21.35; United States (white), 20.55; Italy, 19.78; Scandinavia, 16.41; Russia and Poland, 5.69; other foreign mothers, 21.62.

The corresponding rates for the 6 years in Brooklyn according to nativities of mothers were: mothers born in Bohemia, 173.61; Ireland, 54.42; Scotland, 47.05; Canada, 38.78; Germany, 35.85; France, 35.55; England and Wales, 35.31; United States (white), 21.36; Hungary, 20.13; Italy, 14.30; Scandinavia, 10.26; Russia and Poland, 9.59; other foreign mothers, 33.35.

The highest average annual death rate due to this cause per 100,000 of mean population in New York during the 6 years was 91.32 in ward 2, and the lowest was 3.97 in sanitary district M of ward 22. There were no deaths reported from this cause in sanitary district C of ward 1 and sanitary district A B of ward 12.

In Brooklyn the highest rate for the 6 years was 65.36 in sanitary district F of ward 17, and the lowest was 6.55 in sanitary district D of ward 14.

MALARIAL FEVER.

During the 6-year period malarial fever caused 2,060 deaths in New York, or 24.62 deaths annually per 100,000 of mean population. During the census year it caused 243 deaths, or 16.04 per 100,000 of population, the rate being decidedly below the average for the 6 years.

In Brooklyn the total deaths from this cause during the 6 years were 1,413, or 32.62 per 100,000 of population. For the census year the deaths were 207, and the death rate 25.67 per 100,000 of population, being also below the average for the 6 years.

Table 49 shows the death rates in each city due to malarial fever during the census year at three groups of ages per 100,000 population of corresponding ages.

TABLE 49.

LOCALITIES.	DEATH RATES PER 100,000 OF POPULATION.		
	Under 15 years.	15 to 45 years.	45 years and over.
New York	17.43	11.34	29.83
Brooklyn	23.40	20.86	44.66

Table 50 shows the death rates due to malarial fever during the census year in each city per 100,000 of population, with distinction of color, nativity, parental nativity, and certain birthplaces of mothers.

TABLE 50.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
White	15.64	25.77
Native	16.42	23.19
Both parents native	16.64	19.77
One or both parents foreign	16.32	25.63
Foreign	14.60	31.07
Colored	38.95	18.27
Birthplaces of mothers:		
United States (white)	17.63	23.13
Ireland	22.54	36.16
Germany	10.40	18.40

The average annual death rates due to this cause during the 6-year period in New York per 100,000 mothers of specified nativities were: Ireland, 32.11; United States (white), 30.33; England and Wales, 28.93; Canada, 28.88; Scotland, 27.24; France, 25.83; Bohemia, 25.56; Italy, 21.06; Germany, 17.72; Scandinavia, 16.41; Hungary, 4.49; Russia and Poland, 4.37; other foreign mothers, 13.55.

The corresponding rates for the 6 years in Brooklyn according to birthplaces of mothers were: Canada, 43.95; Ireland, 41.51; Italy, 34.33; Scotland, 31.37; England and Wales, 31.22; United States (white), 29.28; Scandinavia, 28.22; Germany, 27.09; France, 19.75; Russia and Poland, 4.79; other foreign mothers, 36.68.

No deaths from malarial fever were reported as occurring during the 6 years in two sanitary districts in each city.

The highest annual death rate from this cause per 100,000 of mean population in New York was 84.38 in ward 24, and the lowest was 4.73 in sanitary district P of ward 12.

In Brooklyn the highest annual rate was 85.13 in sanitary district D of ward 14, and the lowest was 9.31 in district C of ward 22. It should be remembered that in those districts where malaria was prevalent a considerable part of its effects does not appear in the death rates attributed to "malarial fevers", since it complicates other forms of disease and increases the death rates from pneumonia and diseases of the digestive and nervous system. The relations of the death rate from malarial fevers to altitude are given in Tables 73 and 74.

TYPHOID FEVER.

Typhoid fever caused 2,031 deaths in New York during the 6-year period, the average annual death rate from this cause per 100,000 of mean population being 24.27. For the census year the number of deaths was 348 and the death rate 22.97 per 100,000 of population, or less than the average for the 6 years.

The number of deaths from this cause in Brooklyn during the 6 years was 1,002, the average annual rate being 23.13, and the number of deaths in the census year was 194, making a death rate of 24.06 per 100,000 of population. In the Metropolitan district during the census year the death rate from typhoid fever was 30.58.

The average death rate from this cause in Brooklyn was less than in New York for the 6-year period but greater for the census year, during which last period it was less in each city than it was in the rest of the Metropolitan district.

Table 51 shows the death rate due to typhoid fever during the census year in each city at three groups of ages per 100,000 population of those ages.

TABLE 51.

LOCALITIES.	DEATH RATES PER 100,000 OF POPULATION.		
	5 to 15 years.	15 to 45 years.	45 years and over.
New York	11.42	30.56	20.71
Brooklyn	14.65	35.31	13.18

These figures show that the excess of the death rate in Brooklyn during the census year occurred under 45 years, the rate for New York exceeding that of Brooklyn for the ages 45 years and over.

Table 52 shows the death rate per 100,000 of population due to typhoid fever during the census year in each city, with distinction of color, nativity, parental nativity, and certain birthplaces of mothers.

TABLE 52.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
White	22.89	24.39
Native	18.53	20.95
Both parents native	19.22	24.26
One or both parents foreign	18.21	18.58
Foreign	28.73	31.45
Colored	27.26	.....
Birthplaces of mothers:		
United States (white)	17.03	22.01
Ireland	26.04	27.50
Germany	25.01	18.40

Taking the 6 years, the average annual death rates from typhoid fever in New York per 100,000 mothers of the specified nativities were as follows: mothers born in Scandinavia, 43.77; England and Wales, 28.93; Canada, 28.88; Germany, 28.01; Italy, 26.16; Ireland, 25.56; Scotland, 24.42; France, 18.29; Bohemia, 18.04; United States (white), 17.40; Hungary, 12.36; Russia and Poland, 9.19; other foreign mothers, 23.64.

The corresponding rates in Brooklyn were: mothers born in Scandinavia, 32.50; Ireland, 22.32; England and Wales, 22.30; Germany, 21.82; Russia and Poland, 21.58; United States (white), 21.57; Hungary, 20.13; Scotland, 19.60; Canada, 18.10; France, 11.85; Italy, 10.01; other foreign mothers, 26.68.

There were no deaths from this cause in two sanitary districts in New York and three sanitary districts in Brooklyn during the 6 years.

Of the districts in New York in which deaths occurred from this cause the highest annual rate per 100,000 of population was 76.10 in ward 2 and the lowest was 4.35 in sanitary district E of ward 12.

The sanitary district having the highest annual death rate from this cause in Brooklyn during the 6 years was district B of ward 23 (69.66), while the lowest rate for the same time was 3.75 in district G of ward 18.

CHILDBIRTH AND PUERPERAL DISEASES.

The death rates per 100,000 of population due to childbirth and puerperal diseases vary greatly in different localities in New York and Brooklyn, but these differences depend so much on the proportion of women of childbearing ages present in the different districts that they have little scientific interest or value.

If we take the women between 15 and 45 years of age we find that during the census year out of each 100,000 of such women there died of childbirth and puerperal diseases in New York 83.11, in Brooklyn 64.44.

Table 53 shows the death rates due to childbirth and puerperal diseases during the census year in each city per 100,000 women between the ages of 15 and 45 years, with distinction of color, nativity, parental nativity, and birthplaces of mothers.

TABLE 53.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 WOMEN 15 TO 45 YEARS OF AGE.	
	New York.	Brooklyn.
White	83.81	66.03
Native	66.27	54.26
Both parents native	49.72	50.21
One or both parents foreign	73.52	56.79
Foreign	101.77	86.08
Colored	81.54	29.04
Birthplaces of mothers:		
United States (white)	48.54	54.61
England and Wales	45.56	51.38
Ireland	85.95	73.62
Scotland	76.75	103.68
France	80.10	.....
Germany	96.29	67.08
Russia and Poland	81.36	89.69
Canada	103.95	49.12
Scandinavia	.....	64.06
Hungary	175.25	.....
Bohemia	177.41	.....
Italy	196.95	121.90
Other foreign countries	67.23	58.58

From this it would appear that the death rate from these causes in New York was more than twice as great among the foreign as it was among the native of native parents and greater than it was among the colored; that it was greatest of all in both cities among the Italians, and that it was very high among the Germans and the Russians and Poles.

The actual number of deaths from these causes was too small to make the ratios derived from them of much value, and the reason why the death rates are higher among the foreign born is probably the fact that a much larger proportion of women of this class are attended by ignorant and unskilled midwives than is the case for American women.

STILLBIRTHS.

The number of stillbirths during the 6-year period in New York was 18,862, the average annual number per 100,000 of mean population being 225.41. For the census year the number was 3,302 and the rate per 100,000 of population 217.91, being slightly less than the average for the 6 years.

In Brooklyn 7,754 stillbirths were reported as occurring during the 6 years, the average annual number per 100,000 of mean population being 179.01. The rate for the census year was 165.31, which was also below the average for the 6 years. The actual number of stillbirths in the census year was 1,333.

Table 54 shows for New York and Brooklyn the average annual number of stillbirths during the 6-year period per 100,000 of mean population, with distinction of color and birthplaces of mothers for the whites.

TABLE 54.

COLOR AND BIRTHPLACES OF MOTHERS.	DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
White	224.09	180.48
Colored	300.66	75.91
Birthplaces of mothers:		
United States	340.00	270.38
England and Wales	174.55	91.43
Ireland	134.83	108.93
Scotland	125.85	87.57
France	150.65	82.96
Germany	173.22	147.71
Russia and Poland	203.64	170.21
Canada	111.66	126.67
Scandinavia	157.30	136.82
Hungary	196.62	60.39
Bohemia	408.92	260.42
Italy	383.15	273.18

The remarks made above with regard to the death rates from childbirth and puerperal diseases apply also to a considerable extent to the death rates from stillbirths. Since the ratios to total population are so much affected by the number of women of childbearing ages in each class they are of little scientific value.

Table 55 shows for New York and Brooklyn for the census year the number of stillbirths per 100,000 of women from 15 to 45 years of age, with distinction of color and birthplaces of mothers.

TABLE 55.

COLOR AND BIRTHPLACES OF MOTHERS.	RATES PER 100,000 WOMEN 15 TO 45 YEARS OF AGE.	
	New York.	Brooklyn.
White	773.22	619.59
Colored	850.32	290.36
Birthplaces of mothers:		
United States (white)	1,376.12	1,036.03
England and Wales	579.28	234.88
Ireland	356.51	288.22
Scotland	287.80	336.96
France	561.12	231.12
Germany	539.92	549.66
Russia and Poland	1,164.51	2,690.58
Canada	658.35	392.93
Scandinavia	585.06	448.43
Hungary	1,489.50	386.10
Bohemia	1,064.46	.....
Italy	2,059.74	1,665.99
Other foreign countries	770.12	175.75

From this table it will be seen that the proportion of stillbirths was greater in New York among the colored than among the whites, while the reverse was the case in Brooklyn. In New York city it was greatest of all among the Italian mothers, next among the Hungarian mothers, and next among the American mothers, while it was lowest among the Scotch and Irish mothers. In Brooklyn it was greatest among the Russian and Polish, the Italian and the native American mothers and lowest among the French and English mothers.

The number of stillbirths per 100,000 of total population varies greatly in different localities, being greatest as a rule in the tenement house districts, but for the reason stated above these rates have little scientific value.

SUICIDES.

During the 6-year period there were 1,311 suicides in New York, or 15.67 annually per 100,000 of mean population. During the census year there were 227 or 14.98 per 100,000 of population, the rate being below the average.

In Brooklyn the death rate from this cause was much less; 365 deaths due to it occurred during the 6 years and 78 during the census year, the rates per 100,000 of population being for the 6 years 8.43 and for the census year 9.67. The rate for the census year was higher than that for the 6 years.

Table 56 shows the death rates per 100,000 of population due to suicides during the census year at two groups of ages.

TABLE 56.

LOCALITIES.	DEATH RATES PER 100,000 OF POPULATION.	
	15 to 45 years.	45 years and over.
New York	10.71	36.05
Brooklyn	7.82	32.95

From this table it appears that the death rates from this cause were higher in New York than in Brooklyn at both groups of ages, the greater excess being among those under 45 years of age.

Table 57 shows the death rates per 100,000 of population over 15 years of age due to suicides in New York and Brooklyn during the census year, with distinction of color, nativity, parental nativity, and birthplaces of mothers.

TABLE 57.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 OF POPULATION OVER 15 YEARS OF AGE.	
	New York.	Brooklyn.
White	21.24	14.17
Native	12.74	10.11
Both parents native	20.05	10.27
One or both parents foreign	8.62	9.98
Foreign	28.06	19.28
Colored	9.03	.....
Birthplaces of mothers:		
United States (white)	15.31	9.80
England and Wales	23.48	7.75
Ireland	9.99	6.46
Scotland	13.05	37.03
France	7.57	.....
Gomany	28.43	23.10
Russia and Poland	14.18	.....
Canada	14.45	19.86
Scandinavia	97.72	6.60
Hungary	50.20	.....
Bohemia	30.01	.....
Italy	14.35	.....
Other foreign countries	36.83	29.14

The actual number of suicides in most of the groups by birthplaces of mothers was too small to make the rates of much value, but the high rate from this cause among the Germans as compared with the Irish and the Americans is really significant.

OTHER ACCIDENTS AND INJURIES.

During the 6-year period there were 8,212 deaths in New York due to accidents and injuries, excluding suicides, or 98.14 deaths annually per 100,000 of mean population. During the census year there were 1,497 deaths, or 98.79 per 100,000 of population, the rate being slightly above the average.

In Brooklyn the death rates due to this cause were less both in the census year and in the average for the 6 years. The number of deaths due to this cause during the 6 years was 2,644, or 61.04 annually per 100,000 of population. During the census year there were 441 deaths, or 54.69 per 100,000 of population, the death rate being below the average for the 6 years.

For persons from 15 to 45 years of age the death rate from accidents per 100,000 of population was, in New York, 85.82; in Brooklyn, 47.64; while for those 45 years of age and upward it was in New York 158.69, and in Brooklyn 97.38.

Table 58 shows the death rates due to accidents and injuries per 100,000 of population during the census year, with distinction of color, nativity, parental nativity, and certain birthplaces of mothers.

TABLE 58.

COLOR, NATIVITY, AND PARENTAL NATIVITY.	DEATH RATES PER 100,000 OF POPULATION.	
	New York.	Brooklyn.
White	98.28	54.82
Native	85.50	41.52
Both parents native	89.10	47.62
One or both parents foreign	83.83	37.17
Foreign	115.39	82.08
Colored	128.53	45.68
Birthplaces of mothers:		
United States (white)	72.00	36.93
Ireland	130.71	65.69
Germany	69.10	38.33

This shows that in New York the death rate from accidents was highest among the Irish and the colored.

Table 59 shows for each ward and sanitary district in New York the number of deaths due to suicides and to accidents during the 6-year period, with the corresponding average annual death rates.

TABLE 59.

WARDS AND SANITARY DISTRICTS.	DEATHS.		RATES PER 100,000 OF POPULATION.	
	Suicides.	Accidents.	Suicides.	Accidents.
Total	1,311	8,212	15.67	98.14
Ward 1	28	249	36.35	323.28
A	17	158	30.20	280.68
B	11	77	63.00	441.01
C	.....	14	.....	428.13
Ward 2	10	46	152.21	700.15
Ward 3	19	87	85.38	390.94
Ward 4	22	158	19.60	140.74
A	10	80	22.08	176.67
B	12	78	17.91	116.45
Ward 5	14	142	17.50	177.48
A	8	98	17.06	208.97
B	6	44	18.12	132.87
Ward 6	28	152	21.02	114.11
A	7	16	62.00	141.92
B	8	55	21.11	145.16
C	13	81	15.47	96.39
Ward 7	32	328	9.68	99.27
A	8	91	13.95	158.63
B	5	90	7.60	136.82
C	13	90	10.04	69.50
D	6	57	7.71	73.29
Ward 8	20	178	10.24	91.14
A	8	76	11.76	111.75
B	4	49	7.50	91.94
C	8	53	10.81	71.63
Ward 9	38	354	11.63	108.36
A	7	99	12.76	180.41
B	15	86	11.76	67.45
C	5	110	8.32	182.93
D	11	59	13.04	69.95
Ward 10	63	216	19.31	66.20
A	34	121	19.68	70.05
B	29	95	18.89	61.87
Ward 11	72	308	16.36	69.97
A	23	78	16.13	54.70
B	14	57	12.12	49.36
C	19	84	25.65	113.39
D	16	89	14.81	82.38
Ward 12	152	901	14.37	85.17
A	11	20	49.89	90.70
B	3	34	5.21	59.02
C	3	41	5.82	79.57
D	1	41	3.31	135.66
E	4	22	8.70	47.86
F	2	29	5.49	79.67
G	13	75	16.85	97.19
H	5	22	17.37	76.42
I	16	83	15.87	82.31
K	2	18	9.86	88.70
L	3	15	9.30	46.51
M	25	154	14.65	90.26
N	17	61	15.30	54.88
O	17	108	14.14	89.80
P	6	27	28.41	127.84
R	1	44	2.04	89.97
S	19	93	26.66	130.47
AB	4	14	34.92	122.23
Ward 13	21	182	8.08	70.07
A	11	97	7.02	61.94
B	10	85	9.70	82.41
Ward 14	29	162	16.84	94.07
A	16	58	28.43	103.06
B	13	104	11.21	89.71
Ward 15	43	137	26.36	83.97
A	11	53	17.71	85.31
B	13	32	42.53	104.68
C	9	27	19.79	59.36
D	10	25	40.04	100.11
Ward 16	46	279	15.32	92.94
A	4	67	8.18	137.07
B	19	74	18.74	72.99
C	6	72	14.37	172.44
D	17	66	15.72	61.02
Ward 17	122	378	19.62	60.78
A	26	69	24.26	64.38
B	37	92	20.39	50.70
C	17	38	23.95	53.54
D	12	36	12.72	38.15
E	10	62	15.15	93.93
F	20	81	19.62	79.45
Ward 18	71	372	18.42	96.49
A	6	24	25.48	101.94
B	12	36	17.76	53.28
C	17	208	11.41	139.64
D	8	20	18.69	46.73
E	28	84	27.27	81.82
Ward 19	143	842	11.43	67.28
A	8	43	20.63	110.90
B	16	78	15.24	74.30
C	10	107	12.07	129.11
D	5	26	13.77	71.59
E	9	59	9.83	64.45
F	14	66	13.24	62.44
G	17	30	27.66	48.81
H	9	90	8.83	88.34
I	4	34	11.60	98.59
K	3	17	7.74	43.85
L	10	66	9.39	61.99
M	5	38	8.88	67.45
N	11	30	14.31	39.04
O	14	78	9.22	51.40
P	5	58	3.95	45.84
R	3	22	8.15	59.74
Ward 20	58	514	11.40	100.99
A	3	103	4.10	140.63
B	10	86	16.09	86.76
C	7	81	9.68	112.03
D	15	69	16.19	74.49
E	9	125	9.43	130.91
F	14	50	18.37	65.62
Ward 21	55	361	14.31	93.93
A	5	22	16.17	71.14
B	8	47	13.42	78.82
C	12	97	16.69	134.95
D	4	16	12.63	48.13
E	7	40	13.88	79.33
F	4	10	20.61	51.52
G	4	20	10.40	52.02
H	11	109	13.69	135.62
Ward 22	79	704	9.42	83.96
A	12	152	9.75	123.51
B	19	119	10.16	63.66
C	7	53	9.07	68.20
D	3	69	5.50	126.54
E	12	94	9.22	72.22
F	5	41	9.32	76.44
G	3	67	5.38	120.12
H	3	25	8.53	71.06
I	5	42	8.77	73.65
K	1	15	3.78	56.73
L	1	17	7.83	133.15
M	8	10	31.72	39.65
Ward 23	38	222	14.24	83.20
Ward 24	18	123	16.88	115.32
Unknown	90	817	.....	.....

Table 60 shows for each ward and sanitary district in Brooklyn the number of deaths due to suicides and to accidents during the 6-year period, with the corresponding average annual death rates.

TABLE 60

WARDS AND SANITARY DISTRICTS.	DEATHS.		RATES PER 100,000 OF POPULATION.	
	Suicides.	Accidents.	Suicides.	Accidents.
Total	365	2,644	8.43	61.04
Ward 1	6	74	5.09	62.81
A	3	44	4.85	71.07
B	3	30	5.37	53.66
Ward 2	6	68	11.03	125.01
Ward 3	12	46	10.75	41.20
A	6	30	9.52	47.62
B	6	16	12.33	32.89
Ward 4	4	43	5.35	57.47
Ward 5	8	67	6.78	56.79
A	3	32	5.28	56.27
B	5	35	8.18	57.27
Ward 6	12	140	5.41	63.06
A	2	18	3.86	34.76
B	7	92	6.63	87.15
C	3	30	4.64	46.40
Ward 7	15	87	7.26	42.08
A	3	29	5.04	48.72
B	5	19	10.24	38.90
C	5	18	9.87	35.52
D	2	21	4.19	44.03
Ward 8	18	111	11.45	70.60
A	2	23	9.21	105.86
B	9	56	12.05	74.95
C	5	29	9.54	55.35
D	2	3	23.83	35.74
Ward 9	5	62	4.94	61.31
A	4	23	8.42	48.40
B	1	33	2.19	72.11
C	.....	6	.....	76.45
Ward 10	12	105	6.20	55.03
A	6	30	7.61	38.05
B	5	46	6.76	62.21
C	1	29	2.63	76.32
Ward 11	12	69	8.93	51.38
A	6	44	8.44	61.93
B	6	25	9.49	39.52
Ward 12	9	161	5.84	104.40
A	3	54	7.96	143.29
B	3	45	11.17	167.49
C	3	62	3.35	69.15
Ward 13	17	63	13.21	48.96
A	5	26	14.93	77.62
B	7	28	13.18	52.74
C	5	9	11.88	21.38
Ward 14	11	116	6.86	72.33
A	3	28	7.65	71.42
B	4	38	7.68	73.01
C	3	40	5.57	74.28
D	1	10	6.55	65.49
Ward 15	15	73	9.48	46.13
A	.....	18	.....	62.54
B	4	18	7.36	33.12
C	11	37	14.65	49.27
Ward 16	31	135	11.53	50.23
A	3	15	9.14	45.69
B	14	36	19.06	49.02
C	7	43	8.41	51.64
D	7	41	8.84	51.75
Ward 17	15	145	6.64	64.21
A	4	44	7.71	84.86
B	.....	13	.....	34.73
C	5	37	9.45	69.96
D	5	38	6.98	53.01
E	1	8	9.59	76.72
F	.....	5	.....	326.80
Ward 18	28	161	8.77	50.42
A	6	29	13.39	64.71
B	2	6	19.28	57.84
C	4	19	23.78	112.93
D	4	23	6.92	39.80
E	8	23	13.82	39.74
F	1	14	3.24	45.41
G	1	5	3.75	18.73
H	.....	14	.....	47.50
I	.....	3	.....	22.20
K	2	25	6.43	80.36
Ward 19	23	101	11.47	50.37
A	6	40	12.36	82.30
B	4	21	7.58	39.78
C	13	40	13.11	40.33
Ward 20	12	60	8.28	41.40
A	6	24	9.95	39.80
B	2	11	5.36	29.49
C	4	25	8.45	52.84
Ward 21	20	110	7.61	41.87
A	2	22	3.82	42.04
B	3	17	8.55	48.42
C	7	34	8.95	43.48
D	1	6	2.61	15.65
E	7	31	11.91	52.76
Ward 22	22	83	8.95	33.75
A	3	20	4.34	28.94
B	2	5	6.83	17.07
C	1	6	4.65	27.93
D	9	22	14.86	36.32
E	2	10	15.48	77.41
F	5	20	9.52	38.07
Ward 23	12	36	8.44	25.31
A	4	8	8.64	17.28
B	4	16	8.71	34.83
C	4	12	8.00	24.01
Ward 24	3	32	3.61	38.56
A	1	8	5.68	45.48
B	1	8	3.25	26.03
C	1	8	9.71	77.70
D	.....	2	.....	24.02
E	.....	6	.....	37.40
Ward 25	9	72	4.34	34.70
A	1	27	1.71	46.16
B	2	14	4.97	34.76
C	1	13	2.42	31.44
D	4	11	10.83	29.78
E	1	7	3.29	23.01
Ward 26	14	82	9.96	58.36
Unknown	14	342	.....	.....

SANITARY DISTRICTS.

The location and boundaries of the wards and sanitary districts in each city are shown by the maps and are given in detail in the description of each district.

The death rates of the different districts during the 6-year period are shown by the following tables.

Table 61 shows for the 6 years ending May 31, 1890, the average annual death rates, inclusive of stillbirths, in the different sanitary districts in New York, with distinction of color, nativity, and parental nativity.

TABLE 61.

WARDS AND SANITARY DISTRICTS.	DEATH RATES, INCLUDING STILLBIRTHS.						
	Aggregate.	White.					Colored.
		Total.	Native.			Foreign.	
			Total.	Both parents native.	One or both parents foreign.		
Total	29.92	29.86	34.96	33.51	35.62	23.15	33.27
Ward 1—A	50.15	50.19	53.33	69.16	50.24	46.83	37.04
B	39.12	39.77	38.33	58.33	30.80	41.74	24.93
C	17.74	18.41	21.31	17.68	32.20	12.52	.....
Ward 2	59.21	58.83	58.48	75.76	49.59	59.20	74.07
Ward 3	33.48	33.61	33.43	36.45	31.78	33.83	17.24
Ward 4—A	44.15	44.17	44.75	54.34	42.06	43.43	40.82
B	44.17	44.10	50.59	48.97	51.04	37.31	59.75
Ward 5—A	41.54	41.43	45.23	54.95	42.63	36.61	93.75
B	35.88	35.82	41.09	45.74	39.82	29.29	39.91
Ward 6—A	33.53	33.28	35.13	49.31	31.98	31.44	62.50
B	41.83	41.67	50.72	56.72	49.62	32.86	59.52
C	44.85	43.43	71.91	63.48	72.74	25.71	97.91
Ward 7—A	41.70	41.64	49.87	91.98	41.92	32.00	83.33
B	34.87	34.81	39.45	59.38	34.06	28.43	277.78
C	27.91	27.97	35.44	62.53	31.46	20.51	.....
D	30.51	30.53	34.09	45.60	30.37	25.29	12.82
Ward 8—A	33.22	33.14	34.21	38.61	32.37	31.47	48.02
B	45.41	44.18	61.62	68.93	59.57	27.30	72.35
C	33.35	33.10	38.89	35.59	40.22	26.00	42.96
Ward 9—A	32.40	32.30	31.50	29.32	33.27	33.99	88.24
B	29.48	29.62	30.57	30.19	30.88	27.52	26.65
C	30.12	29.99	30.82	31.82	30.19	28.28	68.63
D	25.95	26.02	25.40	25.44	25.36	27.53	20.95
Ward 10—A	29.02	29.04	58.49	90.72	56.05	14.97	19.44
B	27.24	27.25	45.89	59.03	43.88	15.94	24.04
Ward 11—A	28.29	28.27	51.61	66.38	49.85	14.71	44.44
B	26.17	26.18	31.38	40.25	29.85	20.34	15.15
C	32.06	32.05	38.15	50.37	34.66	24.17	45.45
D	29.01	29.00	31.96	35.98	30.93	24.70	37.04
Ward 12—A	15.46	15.60	15.67	10.81	23.73	15.45	3.88
B	26.83	26.81	29.19	35.28	25.97	22.72	31.25
C	31.44	31.01	40.59	48.54	38.47	19.02	48.88
D	29.75	29.70	32.01	40.45	29.02	25.43	55.56
E	17.79	17.85	19.31	18.09	20.33	14.73	4.76
F	28.10	27.84	30.67	37.00	28.10	22.92	49.05
G	35.76	35.52	49.89	69.21	45.33	19.38	38.87
H	19.35	19.48	17.69	12.17	23.63	23.48	8.62
I	37.46	37.45	45.85	46.60	45.59	25.22	43.01
K	18.53	18.53	19.09	15.60	22.92	17.32	18.52
L	17.30	17.39	17.53	18.80	16.50	17.06	4.50
M	35.62	35.61	42.19	42.56	42.01	25.17	37.92
N	20.61	20.70	21.91	19.35	25.13	17.71	16.36
O	31.17	31.10	33.70	35.78	31.98	25.37	35.18
P	26.04	25.94	29.36	27.17	30.66	20.13	55.56
R	17.93	17.81	17.40	16.39	18.75	18.98	27.78
S	20.45	20.66	21.06	21.32	20.84	19.86	14.53
AB	29.77	30.51	34.24	11.66	63.98	23.40	9.80
Ward 13—A	27.15	27.06	49.90	75.10	46.96	13.45	79.71
B	31.31	31.26	38.57	53.20	34.24	21.78	97.22
Ward 14—A	48.37	48.41	76.95	86.26	75.48	27.17	42.79
B	42.93	42.74	66.47	63.95	67.00	25.91	80.81

TABLE 61—Continued.

WARDS AND SANITARY DISTRICTS.	DEATH RATES, INCLUDING STILLBIRTHS.						
	Aggregate.	White.					Colored.
		Total.	Native.			Foreign.	
			Total.	Both parents native.	One or both parents foreign.		
Ward 15—A	36.99	37.09	53.50	58.29	51.29	22.02	36.53
B	40.40	38.98	49.00	40.77	53.50	28.85	110.56
C	23.92	23.61	25.47	22.35	30.47	20.47	29.89
D	29.35	29.43	31.12	28.19	36.03	27.14	24.88
Ward 16—A	34.86	34.86	35.32	35.73	35.13	34.06	34.31
B	32.28	32.45	31.25	31.39	31.16	34.54	28.93
C	31.95	31.90	32.58	29.07	35.40	30.67	46.67
D	21.94	21.34	22.23	21.86	22.57	19.82	28.76
Ward 17—A	29.66	29.64	39.38	46.15	37.84	21.06	34.59
B	28.69	28.66	41.19	56.53	39.06	18.95	65.48
C	24.43	24.42	27.53	35.07	25.67	21.09	28.99
D	25.30	25.31	30.34	38.97	29.18	20.12	9.80
E	29.63	29.61	31.32	28.86	32.37	27.38	32.26
F	32.74	32.76	38.63	49.55	36.55	26.01	.....
Ward 18—A	22.55	22.75	26.19	19.69	43.51	17.49	14.34
B	26.16	26.22	28.65	28.93	28.44	22.79	21.01
C	38.87	38.88	43.66	61.04	40.53	32.58	20.83
D	14.32	14.34	16.37	13.24	33.14	11.05	13.62
E	29.55	29.47	30.43	27.46	31.93	28.02	51.47
Ward 19—A	23.47	23.93	29.12	26.12	36.59	16.29	10.56
B	29.24	29.22	32.80	36.16	31.37	24.03	31.53
C	38.02	38.04	44.55	56.15	42.41	29.65	31.53
D	20.73	20.56	25.03	22.92	29.69	13.51	30.74
E	28.75	28.81	33.96	36.34	33.01	21.45	23.37
F	28.90	28.92	33.71	37.34	32.89	22.97	16.67
G	30.41	30.48	39.13	33.22	44.74	17.22	24.43
H	32.78	32.38	38.43	39.28	38.21	24.52	173.47
I	34.48	34.53	45.72	45.07	45.84	21.74	33.02
K	15.84	15.89	17.58	22.04	15.15	13.46	11.26
L	31.56	31.53	42.11	54.95	39.95	20.70	47.62
M	29.25	29.26	47.08	60.24	45.28	15.15	.....
N	16.42	16.52	18.31	19.87	17.30	13.66	13.56
O	24.28	24.29	29.00	32.05	27.95	18.02	22.99
P	19.25	19.25	23.28	27.47	22.11	13.29	25.64
R	12.52	12.59	35.58	24.98	43.67	2.54	8.33
Ward 20—A	38.69	38.52	41.47	50.30	38.74	34.18	63.22
B	34.84	33.04	36.45	37.94	35.63	28.19	46.35
C	33.62	33.37	35.26	42.92	32.54	30.39	142.86
D	28.13	27.68	30.03	31.71	29.00	24.02	32.73
E	35.85	35.79	40.43	49.23	38.04	29.05	44.55
F	29.95	30.20	32.38	30.63	33.32	26.65	27.12
Ward 21—A	20.34	20.73	24.42	21.11	36.05	15.01	6.94
B	28.86	28.75	32.31	28.06	34.89	23.96	41.20
C	35.23	35.21	39.66	44.61	38.35	29.86	41.67
D	16.46	16.54	19.80	17.23	28.17	11.33	13.33
E	25.72	25.82	27.31	24.48	29.24	23.60	12.82
F	19.27	19.48	25.46	24.64	27.51	11.20	13.39
G	24.84	24.83	25.98	20.42	30.54	23.07	25.93
H	38.65	38.66	41.66	58.06	38.48	34.66	30.30
Ward 22—A	35.15	35.06	38.57	40.56	37.90	29.30	194.44
B	29.66	29.34	33.00	36.52	31.33	23.35	57.25
C	24.05	24.40	26.02	23.25	30.01	21.31	21.22
D	37.89	38.01	40.74	48.41	38.25	33.60	27.51
E	27.94	27.66	30.34	29.61	30.82	23.11	41.57
F	22.95	22.90	24.07	19.37	30.69	20.74	24.03
G	33.38	35.48	45.18	65.07	40.26	23.03	7.62
H	25.07	25.09	29.16	32.02	27.70	18.30	20.83
I	21.15	21.26	23.07	21.09	24.87	17.01	17.68
K	9.23	9.40	10.04	9.88	10.26	8.12	4.44
L	23.65	23.89	23.48	25.49	21.37	24.96	5.95
M	10.47	10.52	11.41	11.14	11.82	8.61	4.50
Ward 23	25.57	25.50	26.85	29.65	25.41	22.85	32.14
Ward 24	23.06	22.91	21.81	22.65	21.25	25.17	32.82

Table 62 shows for the 6 years ending May 31, 1890, the average annual death rates, inclusive of stillbirths, in the different sanitary districts in Brooklyn, with distinction of color, nativity, and parental nativity.

TABLE 62.

WARDS AND SANITARY DISTRICTS.	DEATH RATES, INCLUDING STILLBIRTHS.						
	Aggregate.	White.					Colored.
		Total.	Native.			Foreign.	
			Total.	Both parents native.	One or both parents foreign.		
Total	25.97	25.90	27.69	28.40	27.10	22.26	30.54
Ward 1—A	19.54	19.63	21.71	21.40	22.00	16.33	13.97
B	20.73	20.80	22.95	23.35	22.36	16.82	15.50
Ward 2	36.71	36.76	43.16	50.39	41.04	29.12	31.65
Ward 3—A	24.48	24.45	25.99	32.87	21.85	21.82	26.84
B	21.13	20.99	22.09	21.87	22.37	18.68	32.65
Ward 4	27.41	26.94	28.11	30.92	25.92	24.65	37.94
Ward 5—A	30.37	30.98	34.47	40.12	32.71	26.30	5.77
B	34.07	33.66	34.94	44.70	30.75	31.08	46.13
Ward 6—A	21.99	22.00	24.99	32.11	20.78	16.82	21.74
B	33.46	33.45	42.34	65.23	38.62	23.52	41.67
C	21.19	21.19	22.82	22.89	22.77	18.46	21.13
Ward 7—A	28.28	28.28	29.35	38.09	25.05	26.15	27.40
B	20.68	20.92	20.97	19.60	23.24	20.78	6.17
C	18.61	18.47	18.42	18.94	17.24	18.64	22.65
D	21.43	21.64	21.03	23.31	18.54	23.47	8.84
Ward 8—A	19.61	19.58	20.27	18.85	21.47	18.10	27.78
B	32.34	32.31	38.82	38.68	38.90	22.79	43.21
C	27.29	27.22	30.40	36.40	27.41	21.22	119.05
D	28.23	28.38	34.43	40.40	32.21	18.83	.....
Ward 9—A	25.51	25.02	24.59	24.12	24.94	25.98	38.83
B	29.02	29.18	31.35	40.87	28.00	25.67	19.90
C	27.91	27.77	31.42	66.67	24.36	21.28	.....
Ward 10—A	26.06	25.95	27.25	31.16	25.01	23.53	48.31
B	32.32	32.63	36.34	49.97	30.92	26.40	25.08
C	29.21	29.26	31.18	35.52	29.26	25.87	26.40
Ward 11—A	32.20	32.44	34.64	47.64	28.30	28.38	30.13
B	24.09	23.60	24.11	25.35	22.46	22.23	31.00
Ward 12—A	33.70	33.68	43.24	49.25	41.59	23.03	47.62
B	33.46	33.35	34.27	31.75	35.17	31.90	.....
C	31.46	31.47	34.50	45.20	31.61	26.75	.....
Ward 13—A	28.12	28.13	28.79	31.60	25.55	26.16	26.88
B	24.13	24.12	25.41	27.81	23.43	21.37	30.30
C	23.45	23.33	23.14	24.93	20.93	24.03	34.72
Ward 14—A	28.49	28.47	31.30	39.22	29.23	23.93	166.67
B	35.81	35.81	43.47	39.29	45.35	25.54	41.67
C	30.29	30.26	32.44	35.53	30.63	26.28	111.11
D	42.37	42.37	46.22	37.95	52.74	35.21	.....
Ward 15—A	31.83	31.78	33.96	42.53	29.17	26.67	55.56
B	26.68	26.68	26.17	28.87	23.37	28.45	25.64
C	26.01	26.06	26.76	32.19	23.38	24.33	13.61
Ward 16—A	22.11	21.54	20.84	24.64	17.84	23.47	41.40
B	31.33	31.17	37.94	47.60	35.70	22.43	45.24
C	34.31	34.31	40.73	55.40	37.66	25.49	55.56
D	29.42	29.04	35.85	48.48	33.12	20.35	78.43
Ward 17—A	28.23	28.26	31.88	36.18	29.62	21.84	.....
B	23.53	23.57	26.08	26.51	25.65	17.08	10.42
C	34.76	34.74	40.90	51.88	37.78	25.31	66.67
D	23.66	23.64	24.03	25.39	22.75	22.57	66.67
E	18.51	18.51	19.01	13.56	23.10	17.47	.....
F	50.98	50.98	52.80	144.44	43.38	47.87	.....
Ward 18—A	40.66	40.65	44.70	59.68	39.10	32.71	55.56
B	31.14	31.14	36.45	55.89	32.77	22.97	.....
C	35.43	35.29	41.02	64.76	35.79	25.89	166.67
D	32.40	32.36	41.97	64.14	37.66	18.50	125.00
E	26.26	26.29	30.77	43.42	26.61	18.77	11.11
F	21.02	21.00	23.00	26.50	20.09	16.14	33.33
G	15.24	15.27	17.02	18.94	15.54	10.98	.....
H	14.01	14.01	13.76	14.57	12.75	14.92	18.52
I	11.77	11.71	11.21	12.14	10.28	13.03	55.56
K	23.40	23.38	26.72	32.19	24.50	17.33	83.34

TABLE 62—Continued.

WARDS AND SANITARY DISTRICTS.	DEATH RATES, INCLUDING STILLBIRTHS.						
	Aggregate.	White.					Colored.
		Total.	Native.			Foreign.	
			Total.	Both parents native.	One or both parents foreign.		
Ward 19—A	25.02	25.08	25.53	25.10	25.90	24.03	11.11
B	17.79	17.76	16.90	18.76	13.90	21.06	24.51
C	26.01	25.73	29.89	36.07	27.51	18.70	34.79
Ward 20—A	25.72	25.72	25.14	27.91	22.84	27.26	26.32
B	16.38	16.56	17.21	18.18	15.24	14.67	7.87
C	19.51	19.66	20.31	20.91	19.18	17.92	17.77
Ward 21—A	26.07	25.86	29.27	43.43	23.88	20.06	111.11
B	24.75	24.74	25.23	27.89	21.88	23.29	27.78
C	31.01	30.85	36.46	46.84	33.53	22.18	47.04
D	17.87	17.90	17.81	17.55	18.24	18.25	8.33
E	24.01	24.00	25.54	27.17	24.42	20.38	26.32
Ward 22—A	15.51	15.49	16.19	15.94	16.54	13.68	18.52
B	15.50	15.54	16.30	15.76	17.02	13.51	6.94
C	18.06	18.09	18.16	19.24	16.31	17.87	13.89
D	21.28	21.28	21.85	20.76	22.99	19.88	20.83
E	34.76	34.64	35.95	42.96	31.33	31.83	166.67
F	28.46	28.49	29.64	29.99	29.37	25.90	10.42
Ward 23—A	20.57	20.47	20.50	21.77	17.65	20.36	40.54
B	17.72	17.80	18.68	19.22	17.28	14.00	7.81
C	17.68	17.77	18.03	18.37	17.34	16.92	9.36
Ward 24—A	16.48	16.74	16.98	15.14	21.14	15.93	.....
B	22.58	20.40	22.40	32.57	15.94	15.73	44.86
C	30.01	28.41	31.20	40.40	26.96	22.97	49.24
D	10.57	10.51	12.29	14.32	11.31	7.11	13.89
E	20.19	19.56	22.06	25.47	20.09	14.54	30.70
Ward 25—A	24.57	23.55	24.47	24.66	24.20	20.70	43.88
B	18.08	18.08	18.12	18.77	17.05	17.06	15.87
C	21.57	21.83	21.08	19.69	23.87	25.24	7.87
D	24.99	24.69	26.21	33.27	21.79	21.11	31.29
E	17.39	17.26	17.49	18.41	16.53	16.48	33.33
Ward 26	22.22	22.04	23.53	25.45	22.24	18.90	44.74

Table 63 shows for the 6 years ending May 31, 1890, the average annual death rates of the whites in the different sanitary districts in New York, exclusive of stillbirths, with distinction of nativity and parental nativity and of children under 5 years of age.

TABLE 63.

WARDS AND SANITARY DISTRICTS.	DEATH RATES, EXCLUDING STILLBIRTHS.							
	Aggregate		White.					
			Native.				Foreign.	
			Total.		Both parents native.			
	All ages.	Under 5 years.	All ages.	Under 5 years.	All ages.	Under 5 years.	All ages.	Under 5 years.
Total	27.66	109.48	31.01	110.37	30.22	112.41	23.15	74.28
Ward 1—A	47.43	171.97	48.05	166.67	61.55	149.43	46.83	477.78
B	38.20	124.64	36.88	123.70	58.33	120.37	41.74	.....
C	16.51	62.96	19.41	62.96	17.05	35.35	12.52	.....
Ward 2	56.77	178.79	54.55	172.84	73.98	120.00	59.20	.....
Ward 3	32.08	133.67	30.92	134.72	35.08	171.05	33.83	.....
Ward 4—A	42.05	149.83	41.01	151.03	49.25	160.74	43.43	83.33
B	41.83	138.11	45.99	139.87	45.05	161.13	37.31	109.29
Ward 5—A	38.89	151.40	40.53	151.78	47.70	153.47	36.61	115.38
B	33.10	127.22	36.17	125.71	41.60	134.22	29.29	133.33
Ward 6—A	32.29	120.92	32.80	119.37	47.34	222.22	31.44	160.67
B	39.40	132.52	45.92	133.56	53.22	143.33	32.86	105.07
C	41.87	159.30	63.01	159.30	59.93	254.90	25.71	156.25
Ward 7—A	39.13	137.02	45.12	141.64	84.25	201.72	32.00	41.67
B	32.56	104.67	35.48	108.81	53.83	135.06	28.43	40.74
C	25.76	87.59	31.12	89.38	55.15	154.18	20.51	46.38
D	28.50	102.90	30.72	105.60	41.27	137.39	25.29	32.16
Ward 8—A	31.39	118.03	31.22	116.74	35.64	123.72	31.47	153.85
B	41.28	150.29	53.56	148.88	62.00	180.72	27.30	138.89
C	30.96	118.86	34.70	116.09	32.62	109.77	26.00	166.67
Ward 9—A	30.43	102.97	28.59	102.25	26.81	94.51	33.99	136.36
B	27.63	108.60	27.92	107.86	28.01	107.47	27.52	111.11
C	28.37	106.73	28.26	106.01	29.20	108.39	28.28	145.83
D	24.41	102.38	23.24	102.70	23.63	97.80	27.53	51.28
Ward 10—A	25.90	89.97	48.80	96.05	82.31	323.23	14.97	43.75
B	24.55	84.54	38.74	89.18	52.70	149.24	15.94	38.70
Ward 11—A	25.43	90.49	43.85	94.51	59.20	187.17	14.71	50.10
B	24.10	91.21	27.46	92.44	33.80	96.47	20.34	65.08
C	29.37	97.39	33.38	98.58	44.75	117.65	24.17	69.65
D	27.13	97.36	28.79	96.73	32.15	82.05	24.70	129.17
Ward 12—A	14.38	68.08	14.08	67.86	9.96	50.47	15.45	55.56
B	24.93	108.79	26.16	106.49	31.53	102.68	22.72	270.83
C	28.63	110.88	35.76	110.34	44.13	115.28	19.02	102.94
D	27.86	109.82	29.10	110.50	36.15	113.74	25.43	68.63
E	16.18	57.58	16.94	58.70	15.70	53.10	14.73	34.19
F	26.10	104.54	27.45	105.82	33.18	112.46	22.92	41.67
G	33.24	121.86	45.11	123.80	62.85	160.42	19.38	72.92
H	17.33	52.58	14.74	52.19	9.32	32.71	23.48	74.07
I	34.38	143.74	40.65	143.56	41.44	138.78	25.22	144.28
K	16.90	66.28	16.70	65.60	13.67	55.91	17.32	125.00
L	16.68	62.31	16.64	62.42	18.80	59.34	17.06	55.56
M	32.85	133.28	37.64	133.71	38.47	126.30	25.17	106.06
N	19.40	85.96	20.19	84.82	18.00	72.64	17.71	105.56
O	28.89	122.29	30.41	122.62	32.95	124.67	25.37	77.78
P	24.38	103.00	26.72	104.05	24.94	89.24	20.13	37.04
R	16.32	65.67	15.19	65.21	14.54	60.38	18.98	18.52
S	19.11	66.91	19.01	67.91	19.05	67.24	19.86	40.54
AB	28.20	183.16	31.76	179.08	11.66	54.64	23.40	750.00
Ward 13—A	24.29	81.54	42.29	84.54	66.21	186.77	13.45	47.89
B	28.60	96.38	33.83	97.98	47.25	135.03	21.78	57.35
Ward 14—A	44.67	177.14	68.35	182.18	78.25	227.82	27.17	107.00
B	39.71	157.34	58.75	160.70	58.41	192.93	25.91	120.75
Ward 15—A	34.03	147.49	47.33	153.59	53.34	200.58	22.02	88.89
B	38.14	178.34	44.49	175.57	38.52	366.67	28.85	111.11
C	22.34	115.35	23.23	112.72	20.62	90.70	20.47	83.33
D	27.00	167.95	28.71	169.40	27.17	123.56	27.14	277.78

TABLE 63—Continued.

WARDS AND SANITARY DISTRICTS.	DEATH RATES, EXCLUDING STILLBIRTHS.							
	Aggregate.		White.					
			Native.				Foreign.	
			Total.		Both parents native.			
	All ages.	Under 5 years.	All ages.	Under 5 years.	All ages.	Under 5 years.	All ages.	Under 5 years.
Ward 16—A	33.06	117.03	32.48	117.61	33.33	109.14	34.06	89.74
B	30.11	116.83	27.86	116.41	28.63	123.97	34.54	144.93
C	29.60	113.10	28.91	115.68	25.96	110.84	30.67	10.42
D	20.57	95.60	20.21	89.57	20.47	91.37	19.82	136.36
Ward 17—A	26.81	110.14	33.31	112.72	40.03	119.40	21.06	56.86
B	25.96	92.32	34.96	95.77	48.73	117.32	18.95	45.61
C	22.22	93.02	23.25	94.43	30.12	90.04	21.09	33.33
D	23.23	95.11	26.29	94.64	33.65	74.93	20.12	123.46
E	27.47	124.00	27.57	125.90	25.43	114.33	27.38	79.17
F	29.95	112.06	33.40	112.91	42.56	104.88	26.01	88.71
Ward 18—A	21.41	136.22	24.25	133.66	18.41	65.36	17.49	666.67
B	24.06	132.77	25.07	133.45	26.17	129.97	22.79	133.33
C	36.15	133.63	38.88	134.86	54.40	147.73	32.58	87.30
D	13.20	133.33	14.54	133.33	12.37	81.30	11.05	333.33
E	27.34	105.16	26.77	104.69	24.27	105.39	28.02	104.17
Ward 19—A	22.05	108.11	26.66	109.30	24.61	86.78	16.29	55.56
B	27.07	118.99	29.16	119.75	32.45	121.32	24.03	86.81
C	35.50	135.42	40.06	135.10	51.89	147.09	29.65	145.83
D	19.05	110.84	22.33	106.97	20.66	72.30	13.51	83.34
E	26.42	129.30	30.03	130.48	32.23	128.17	21.45	75.76
F	26.94	106.85	30.19	107.82	34.00	107.26	22.97	69.44
G	28.62	175.85	36.14	175.21	30.65	88.78	17.22	266.67
H	30.46	125.06	34.48	125.52	35.21	123.22	24.52	94.77
I	31.81	115.53	40.81	116.05	39.83	126.26	21.74	65.48
K	14.55	75.25	15.37	74.86	19.91	58.17	13.46	.....
L	28.70	114.05	36.45	116.63	47.58	139.67	20.70	45.79
M	27.34	101.28	42.74	105.78	54.89	135.88	15.15	31.91
N	15.26	83.44	16.41	85.05	17.64	78.92	13.66	64.10
O	22.55	96.08	25.95	96.41	28.79	107.34	18.02	74.71
P	17.48	62.68	20.31	62.29	24.08	65.26	13.29	79.23
R	8.09	753.79	21.06	763.57	14.48	611.11	2.54	166.67
Ward 20—A	36.20	133.95	37.29	134.63	44.92	149.17	34.18	90.91
B	32.35	152.06	32.67	140.18	34.86	157.79	28.19	102.56
C	31.49	112.68	31.77	113.37	38.42	120.44	30.39	58.14
D	25.85	125.00	26.59	120.83	28.60	130.98	24.02	71.43
E	32.90	117.11	35.43	117.80	42.23	111.96	29.05	75.16
F	27.87	123.66	29.10	124.07	28.26	115.58	26.65	106.67
Ward 21—A	19.14	96.60	22.45	98.04	19.42	54.46	15.01	55.56
B	25.90	113.79	27.15	113.54	24.32	101.85	23.96	52.08
C	31.94	115.81	33.72	120.41	38.55	117.62	29.86	40.00
D	15.19	76.75	17.84	77.63	15.98	50.72	11.33	55.56
E	23.94	117.17	24.30	118.35	22.51	95.67	23.60	71.43
F	17.67	88.41	22.71	89.39	22.83	78.28	11.20	41.67
G	23.46	107.96	23.73	107.44	19.08	95.99	23.07	129.63
H	36.49	145.53	37.89	145.73	53.23	152.19	34.66	126.67
Ward 22—A	32.44	116.82	34.21	117.51	35.46	115.34	29.30	84.58
B	27.37	111.91	29.37	110.64	32.27	108.92	23.35	127.66
C	22.51	133.23	23.73	134.56	21.45	143.76	21.31	500.00
D	35.47	128.17	36.86	129.71	43.50	121.73	33.60	97.22
E	25.93	108.27	27.25	107.10	26.74	107.08	23.11	76.67
F	21.36	115.15	21.74	112.17	17.88	111.78	20.74	266.67
G	31.02	102.56	40.80	108.12	57.93	127.76	23.03	103.60
H	22.99	82.24	25.83	83.75	28.52	100.75	18.30	39.22
I	18.04	84.11	18.63	86.52	17.58	83.96	17.01	62.50
K	8.81	54.13	9.45	55.81	9.58	56.35	8.12	83.34
L	21.38	80.10	20.30	79.29	22.49	79.21	24.96	.....
M	9.36	54.01	9.83	54.57	9.78	49.08	8.61	33.33
Ward 23	23.64	82.05	23.95	82.34	26.40	80.72	22.85	55.02
Ward 24	22.06	67.46	20.39	66.76	21.42	57.69	25.17	39.22

Table 64 shows for the 6 years ending May 31, 1890, the average annual death rates of the whites in the different sanitary districts in Brooklyn, exclusive of stillbirths, with distinction of nativity and parental nativity and of children under 5 years of age.

TABLE 64.

WARDS AND SANITARY DISTRICTS.	DEATH RATES, EXCLUDING STILLBIRTHS.							
	Aggregate.		White.					
			Native.				Foreign.	
			Total.		Both parents native.			
	All ages.	Under 5 years.	All ages.	Under 5 years.	All ages.	Under 5 years.	All ages.	Under 5 years.
Total	24.17	93.42	25.00	93.78	25.48	91.92	22.26	54.96
Ward 1—A	18.53	70.68	20.02	71.30	20.12	74.07	16.33	21.74
B	19.59	92.63	21.16	92.81	21.85	99.40	16.82	150.00
Ward 2	34.40	131.24	38.86	137.28	43.92	124.53	29.12	51.95
Ward 3—A	22.90	86.60	23.47	85.72	29.42	99.62	21.82	80.00
B	19.61	84.98	19.85	83.02	19.38	80.67	18.68	102.56
Ward 4	25.53	111.05	25.28	109.84	27.89	112.16	24.65	11.11
Ward 5—A	28.61	135.44	31.33	139.22	35.10	156.25	26.30	58.56
B	31.75	120.35	31.42	120.90	39.22	116.52	31.08	13.51
Ward 6—A	20.60	86.13	22.79	87.74	28.82	85.71	16.82	37.04
B	31.05	112.82	37.78	114.05	56.50	139.22	23.52	60.76
C	20.08	87.23	21.03	89.61	21.21	78.92	18.46	19.23
Ward 7—A	26.09	91.72	26.05	91.84	34.09	107.28	26.15	74.07
B	18.98	80.76	18.70	82.44	17.63	68.77	20.78	55.56
C	17.51	70.68	16.97	68.55	17.54	64.76	18.64	.....
D	20.21	80.25	19.41	80.45	21.45	80.09	23.47	138.89
Ward 8—A	18.50	64.19	18.65	64.37	17.51	60.91	18.10	37.04
B	30.28	113.75	35.37	115.38	35.15	115.90	22.79	73.33
C	25.25	89.46	27.28	90.48	32.72	99.25	21.22	53.92
D	26.33	91.67	31.30	94.62	33.91	88.54	18.83	23.81
Ward 9—A	23.91	105.17	22.28	104.24	21.39	81.05	25.98	70.51
B	27.05	82.47	28.11	82.85	36.04	106.84	25.67	41.67
C	25.87	113.10	28.24	115.20	57.14	217.95	21.28	.....
Ward 10—A	24.53	97.49	24.87	96.65	28.30	96.49	23.53	87.30
B	30.31	108.89	33.04	111.66	44.35	116.82	26.40	39.86
C	27.16	93.94	27.91	94.04	31.15	79.98	25.87	73.53
Ward 11—A	30.05	124.65	31.09	124.80	41.06	139.15	28.38	108.33
B	22.83	121.49	22.33	115.36	23.28	123.49	22.23	138.89
Ward 12—A	31.10	110.85	38.30	112.65	42.02	121.38	23.03	69.44
B	31.23	98.35	30.61	99.04	27.78	93.45	31.90	62.50
C	29.88	112.50	31.90	113.31	40.46	116.67	26.75	86.31
Ward 13—A	26.00	117.39	25.98	119.16	28.68	108.54	26.16	20.83
B	22.62	89.64	23.19	91.14	25.24	91.40	21.37	45.98
C	22.07	88.24	21.36	89.06	22.82	81.53	24.03	83.33
Ward 14—A	26.86	97.24	28.05	97.97	35.61	106.67	23.93	66.67
B	33.56	124.40	39.54	128.11	35.71	115.73	25.54	50.85
C	28.41	109.53	29.54	112.24	31.95	117.72	26.28	39.47
D	39.55	137.51	41.89	138.81	34.06	126.62	35.21	83.33
Ward 15—A	29.74	109.71	30.98	109.93	38.10	112.24	26.67	83.33
B	24.80	87.52	23.75	87.75	25.66	84.59	28.45	64.82
C	23.98	97.18	23.90	97.32	28.27	100.61	24.33	97.22
Ward 16—A	20.22	67.86	18.23	66.45	20.76	66.57	23.47	33.33
B	28.81	102.43	33.42	104.17	39.82	105.72	22.43	54.60
C	31.24	117.16	35.41	118.77	46.76	120.27	25.49	63.22
D	27.43	92.34	32.29	93.50	43.75	108.70	20.35	26.32
Ward 17—A	26.21	99.36	28.71	99.44	31.99	104.65	21.84	96.15
B	21.91	101.16	23.81	102.61	24.07	102.71	17.08	44.44
C	32.54	120.17	37.24	121.48	45.66	125.64	25.31	65.66
D	21.94	76.72	21.69	77.22	22.64	77.59	22.57	43.48
E	17.26	63.35	17.16	64.34	11.57	51.44	17.47	27.78
F	45.10	190.48	43.48	184.52	111.11	145.83	47.87	.....

TABLE 64—Continued.

WARDS AND SANITARY DISTRICTS.	DEATH RATES, EXCLUDING STILLBIRTHS.							
	Aggregate.		White.					
			Native.				Foreign.	
			Total.		Both parents native.			
	All ages.	Under 5 years.	All ages.	Under 5 years.	All ages.	Under 5 years.	All ages.	Under 5 years.
Ward 18—A	37.76	137.14	40.32	138.23	53.74	144.08	32.71	41.67
B	28.24	83.33	31.68	84.70	48.90	84.47	22.97	23.81
C	32.93	112.24	36.99	112.65	56.26	121.21	25.89	74.07
D	29.85	114.83	37.69	117.46	56.22	136.03	18.50	36.67
E	24.28	84.43	27.59	84.86	39.29	112.73	18.77	61.11
F	19.63	73.78	21.02	73.92	24.17	79.34	16.14	55.56
G	13.93	48.51	15.17	48.23	17.24	44.80	10.98	83.33
H	13.03	42.28	12.51	42.51	13.02	36.64	14.92	33.33
I	10.51	34.95	9.48	34.86	10.72	36.71	13.03	.....
K	21.50	66.67	23.77	67.87	27.69	68.30	17.33	21.74
Ward 19—A	23.44	87.68	23.24	87.98	22.70	76.51	24.03	75.76
B	16.71	62.71	15.53	62.57	17.16	57.32	21.06	.....
C	23.68	87.17	26.14	86.76	30.60	90.74	18.70	44.72
Ward 20—A	24.33	83.25	23.21	83.90	25.52	82.67	27.26	33.33
B	15.52	64.01	16.03	63.38	16.97	63.75	14.67	.....
C	17.97	77.03	18.07	76.04	19.12	93.14	17.92	83.33
Ward 21—A	23.93	82.41	25.86	82.58	37.26	113.64	20.06	36.59
B	23.50	91.24	23.55	93.39	25.84	98.15	23.29	9.80
C	28.34	108.36	32.04	108.03	39.78	103.59	22.18	102.15
D	16.77	64.65	16.43	65.15	16.14	62.63	18.25	37.04
E	22.43	83.70	23.28	84.30	24.84	78.84	20.38	16.67
Ward 22—A	14.48	52.23	14.76	52.69	14.71	47.21	13.68	24.69
B	14.24	55.56	14.56	55.43	14.02	46.23	13.51	66.67
C	16.29	50.79	15.76	50.15	17.05	58.51	17.87	83.33
D	19.69	68.03	19.62	67.89	18.47	63.15	19.88	68.18
E	29.88	101.17	28.78	100.79	35.22	121.86	31.83	125.00
F	26.29	98.54	26.50	98.45	26.88	93.80	25.90	114.04
Ward 23—A	19.16	73.48	18.75	73.63	19.87	74.45	20.36	55.56
B	16.78	59.94	17.52	60.08	17.98	58.58	14.00	.....
C	16.52	65.96	16.51	66.10	16.92	60.32	16.92	30.30
Ward 24—A	15.58	62.50	15.78	63.38	14.49	49.38	15.93	.....
B	21.25	107.37	20.36	98.98	29.29	141.76	15.73	95.24
C	28.46	100.93	28.81	104.35	35.86	125.60	22.97	.....
D	9.97	39.47	11.36	41.97	14.32	41.67	7.11	.....
E	18.70	95.14	19.78	91.81	23.04	114.23	14.54	.....
Ward 25—A	22.86	95.76	22.13	90.06	22.45	94.90	20.70	41.67
B	16.66	58.17	16.32	57.62	17.24	57.26	17.96	133.33
C	20.00	75.58	19.13	76.18	18.02	67.03	25.24	125.00
D	22.95	82.25	23.22	81.37	28.86	92.43	21.11	27.78
E	15.75	53.97	15.35	54.02	15.99	56.13	16.48	13.89
Ward 26	20.91	74.38	21.59	74.30	23.16	77.66	18.90	61.40

Tables 63 and 64, compared with Tables 61 and 62, show the differences in the death rates for the aggregate and for the total of each class due to the number of stillbirths, and compared with Tables 65 and 66, show the difference in the rates under 5 years of age due to the same cause. The rates given in Tables 65 and 66 for 5 years of age and over are not affected by the exclusion of the stillbirths.

Table 65 shows for the 6 years ending May 31, 1890, the average annual death rates for the whites in the different sanitary districts in New York, inclusive of stillbirths, with distinction of nativity and parental nativity, of children under 5 years of age, and of persons 5 years of age and upward.

TABLE 65.

WARDS AND SANITARY DISTRICTS.	DEATH RATES, INCLUDING STILLBIRTHS.							
	Aggregate.		White.					
			Native.				Foreign.	
			Total.		Both parents native.			
	Under 5 years.	5 years and over.	Under 5 years.	5 years and over.	Under 5 years.	5 years and over.	Under 5 years.	5 years and over.
Total	130.31	17.74	131.73	13.06	133.50	15.04	74.28	22.66
Ward 1—A	199.01	33.52	194.15	19.88	175.29	24.88	477.78	45.39
B	136.23	30.78	134.07	22.76	120.37	38.15	.....	41.17
C	77.78	12.33	77.78	13.03	46.40	14.43	.....	12.52
Ward 2	227.27	50.32	212.96	41.67	133.33	66.87	.....	59.20
Ward 3	159.90	26.39	161.49	20.15	197.37	27.58	.....	33.89
Ward 4—A	173.35	31.50	174.74	20.43	184.43	18.75	83.33	43.29
B	158.58	29.38	161.45	20.51	181.19	16.82	109.29	36.49
Ward 5—A	176.98	25.92	177.57	15.74	186.47	17.90	115.38	36.31
B	152.78	21.62	150.85	14.42	157.82	21.93	133.33	28.80
ard 6—A	136.17	24.43	134.01	16.41	236.11	18.39	166.67	30.71
B	152.16	26.26	153.74	18.55	160.09	29.26	105.07	31.80
C	181.75	23.94	183.62	17.18	279.41	26.95	156.25	23.69
Ward 7—A	157.87	25.42	163.54	18.34	225.09	26.16	41.67	31.87
B	122.25	21.65	127.44	15.65	153.53	18.89	46.74	28.18
C	104.45	16.70	106.97	12.16	180.45	16.48	46.38	20.23
D	119.68	18.40	123.02	12.72	156.52	13.14	32.16	25.21
Ward 8—A	136.82	22.08	135.64	15.20	140.52	16.74	153.85	31.11
B	183.65	25.89	181.25	21.98	218.88	35.65	138.89	26.20
C	140.07	19.79	136.77	14.06	126.89	16.40	166.67	24.05
Ward 9—A	121.41	21.77	120.90	15.02	110.98	14.62	136.36	33.61
B	127.93	19.66	127.03	15.10	124.59	16.40	111.11	27.12
C	122.23	18.42	121.47	12.84	125.10	14.51	145.83	27.70
D	125.09	18.73	125.44	14.92	117.77	16.23	51.28	27.46
Ward 10—A	110.98	14.70	119.85	16.37	378.79	39.34	43.75	14.21
B	104.21	15.01	110.81	13.87	177.02	20.63	38.70	15.46
Ward 11—A	108.98	13.56	114.81	12.52	213.62	11.57	50.10	13.90
B	108.24	14.82	110.27	9.16	119.22	9.00	65.08	19.82
C	117.87	19.11	119.95	14.63	138.89	18.52	69.65	23.60
D	111.85	16.66	111.47	10.16	93.71	7.75	120.17	24.13
Ward 12—A	82.16	9.88	82.14	7.36	59.86	5.94	55.56	15.34
B	129.46	16.39	127.37	12.51	126.93	18.51	270.83	22.15
C	130.81	15.10	129.94	11.35	132.41	19.43	102.94	18.25
D	126.79	17.61	127.99	12.86	138.51	19.86	68.63	25.01
E	70.41	10.25	72.10	7.97	66.99	7.91	34.19	14.41
F	122.53	16.26	124.80	11.40	132.69	14.71	41.67	22.78
G	138.19	17.02	140.45	13.39	182.52	23.34	72.92	18.76
H	71.66	13.02	71.10	7.83	55.30	5.95	74.07	23.17
I	167.67	18.20	168.18	13.14	164.67	16.47	144.28	24.04
K	82.13	11.26	81.63	8.15	70.97	7.45	125.00	16.92
L	68.36	11.47	68.57	8.92	59.34	11.27	55.56	16.84
M	156.21	19.01	157.51	14.97	149.85	20.01	106.06	24.26
N	99.88	13.03	98.94	11.26	85.56	11.68	105.56	17.20
O	146.04	18.98	146.57	15.71	147.42	19.96	77.78	25.11
P	119.38	15.54	120.91	12.35	103.67	13.19	37.04	20.01
R	84.40	11.66	84.43	8.69	79.34	9.57	18.52	18.98
S	80.10	13.67	81.46	10.28	84.05	11.49	40.54	19.66
AB	198.78	10.87	195.04	4.58	54.64	2.36	750.00	21.10
Ward 13—A	99.20	13.23	103.65	14.35	222.44	26.24	47.89	12.69
B	116.01	17.77	118.19	14.16	158.17	16.91	57.35	21.33
Ward 14—A	204.72	24.17	211.36	20.72	258.99	26.53	107.00	25.04
B	182.18	22.21	188.23	19.08	217.58	19.42	120.75	23.63
Ward 15—A	177.91	21.79	184.72	21.08	237.40	30.44	88.89	21.33
B	206.12	25.74	204.41	20.15	411.11	20.98	111.11	28.25
C	148.05	17.60	142.10	15.85	123.58	16.73	83.33	20.23
D	211.54	23.48	215.85	21.01	149.43	23.22	277.78	26.71

TABLE 65—Continued.

WARDS AND SANITARY DISTRICTS.	DEATH RATES, INCLUDING STILLBIRTHS.							
	Aggregate.		White.					
			Native.				Foreign.	
			Total.		Both parents native.			
	Under 5 years.	5 years and over.	Under 5 years.	5 years and over.	Under 5 years.	5 years and over.	Under 5 years.	5 years and over.
Ward 16—A	132.20	21.75	133.19	13.57	121.51	15.12	89.74	33.56
B	144.38	22.70	144.21	15.54	150.19	17.41	144.93	34.11
C	140.87	21.90	144.23	16.13	140.78	16.12	10.42	30.80
D	117.74	15.63	110.40	12.78	109.14	14.43	136.36	19.61
Ward 17—A	138.78	17.62	142.70	13.15	147.17	17.62	56.86	20.73
B	112.72	15.72	117.63	10.72	140.60	14.21	45.61	18.50
C	120.16	15.94	122.29	10.32	113.03	13.67	33.33	21.04
D	114.57	14.60	114.32	8.57	89.34	9.54	123.46	19.76
E	152.64	19.57	155.26	13.17	144.93	14.22	79.17	26.94
F	135.36	18.75	136.96	11.32	125.25	9.96	88.71	25.51
Ward 18—A	179.49	18.28	178.22	19.26	107.84	16.94	666.67	17.06
B	172.55	18.00	173.20	14.36	165.14	17.32	133.33	22.67
C	156.16	22.76	158.03	13.88	169.44	13.25	87.30	32.14
D	240.00	11.93	245.24	12.57	158.54	11.57	333.33	10.93
E	130.18	19.80	129.90	13.52	132.35	13.38	104.17	27.75
Ward 19—A	149.40	18.99	151.94	21.58	119.83	21.63	55.56	16.24
B	142.02	17.50	143.16	12.53	147.67	17.90	86.81	23.60
C	154.85	20.60	154.91	12.20	161.89	13.34	145.83	29.03
D	160.92	15.87	155.89	17.38	113.97	17.70	83.34	13.45
E	155.31	16.32	156.65	12.32	156.25	15.81	75.76	21.26
F	123.72	16.45	125.04	10.22	122.65	13.72	69.44	22.69
G	196.48	14.63	196.09	12.89	101.62	16.12	266.67	16.90
H	144.40	17.52	144.54	10.56	142.58	11.78	94.77	24.03
I	133.22	16.94	133.45	11.24	145.20	6.76	65.48	21.27
K	98.34	10.95	98.40	9.19	77.18	15.09	.....	13.49
L	136.02	15.96	139.50	10.11	169.26	17.05	45.79	20.43
M	112.95	12.81	118.21	8.95	152.87	17.60	31.91	14.84
N	102.43	10.84	104.94	9.14	100.99	10.74	64.10	13.52
O	112.08	13.62	112.82	9.82	125.44	11.51	74.71	17.71
P	74.83	9.72	74.63	7.00	77.60	8.45	79.23	12.81
R	1,371.21	2.71	1,383.72	3.25	116.67	3.00	166.67	2.50
Ward 20—A	155.80	23.57	156.85	14.71	173.23	14.88	90.91	33.79
B	183.16	21.92	167.53	15.42	184.91	19.16	102.56	27.86
C	130.75	20.05	132.03	12.97	141.52	16.17	58.14	30.14
D	154.84	17.61	148.15	13.00	158.54	15.52	71.43	23.77
E	139.26	19.94	140.53	12.24	135.77	13.21	75.16	28.68
F	146.61	18.36	146.98	13.25	134.16	15.48	106.67	26.20
Ward 21—A	135.88	16.71	137.25	18.45	94.06	17.86	55.56	14.94
B	155.57	19.17	155.99	15.20	138.89	15.61	52.08	23.85
C	145.23	21.41	151.20	12.99	141.43	11.54	40.00	29.71
D	122.81	13.46	122.15	15.09	85.14	14.67	55.56	11.20
E	144.01	17.29	145.87	12.80	113.60	13.47	71.43	23.40
F	133.33	15.06	134.85	18.40	113.64	19.85	41.67	11.10
G	125.84	16.40	125.34	11.66	116.76	11.34	129.63	22.69
H	164.88	22.85	165.42	12.34	169.00	13.21	126.67	34.25
Ward 22—A	137.14	19.37	138.21	11.99	136.04	9.33	84.58	28.82
B	133.20	17.16	131.84	12.53	131.87	14.87	127.66	22.93
C	164.82	16.82	166.36	15.12	181.67	15.37	500.00	20.95
D	146.79	21.61	148.70	13.04	139.18	12.95	97.22	32.93
E	127.86	16.50	126.34	11.98	127.24	13.43	76.67	22.77
F	143.77	15.87	139.24	13.23	140.72	12.75	266.67	20.33
G	117.75	17.82	124.18	15.55	151.57	28.07	103.60	22.23
H	96.74	13.10	98.88	9.44	116.92	8.58	39.22	17.97
I	114.49	10.53	117.85	7.42	111.25	7.76	62.50	16.74
K	61.97	6.27	63.35	5.54	59.95	5.38	83.34	8.01
L	103.56	15.09	102.75	11.04	102.31	14.03	.....	24.67
M	70.27	6.09	70.58	4.93	68.39	5.67	33.33	8.51
Ward 23	97.57	15.37	98.08	10.76	96.83	12.64	55.02	22.63
Ward 24	77.54	17.09	77.10	12.67	66.31	15.37	39.22	25.08

Table 66 shows for the 6 years ending May 31, 1890, the average annual death rates for the whites in the different sanitary districts in Brooklyn, inclusive of stillbirths, with distinction of nativity and parental nativity, of children under 5 years of age, and of persons 5 years of age and upward.

TABLE 66.

WARDS AND SANITARY DISTRICTS.	DEATH RATES, INCLUDING STILLBIRTHS.							
	Aggregate.		White.					
			Native.				Foreign.	
			Total.		Both parents native.			
	Under 5 years.	5 years and over.	Under 5 years.	5 years and over.	Under 5 years.	5 years and over.	Under 5 years.	5 years and over.
Total	109.46	15.48	110.30	11.61	110.77	13.28	54.96	21.99
Ward 1—A	83.86	14.16	84.96	12.81	91.11	15.73	21.74	16.30
B	113.14	15.27	114.11	14.60	123.32	16.66	150.00	16.41
Ward 2	151.26	21.72	159.06	14.69	151.57	18.58	51.95	28.68
Ward 3—A	102.39	15.86	102.04	12.09	123.70	17.65	80.00	21.44
B	107.21	14.81	105.56	12.87	114.92	14.57	102.56	18.26
Ward 4	134.89	18.18	134.17	14.16	137.05	16.18	11.11	24.70
Ward 5—A	154.25	17.59	158.97	10.89	182.64	6.68	58.56	26.00
B	141.50	20.81	142.83	14.32	140.49	16.29	13.51	31.28
Ward 6—A	102.24	14.41	104.46	12.93	109.52	19.69	37.04	16.65
B	130.68	18.32	133.55	12.71	165.88	16.23	60.76	23.08
C	100.59	13.97	103.51	10.90	94.82	14.39	19.23	18.46
Ward 7—A	110.03	17.21	110.58	11.97	127.20	15.69	74.07	25.88
B	104.52	14.22	107.06	12.23	90.26	12.48	55.56	20.61
C	87.96	13.87	86.42	12.44	83.33	13.68	.....	18.68
D	96.52	15.36	96.89	12.72	98.48	14.88	138.89	23.11
Ward 8—A	73.20	12.12	73.56	8.82	68.53	8.28	37.04	17.95
B	129.18	17.41	131.46	13.46	132.42	13.21	73.33	22.03
C	104.03	14.78	105.46	10.60	114.98	12.37	53.92	20.85
D	105.00	15.43	108.51	12.88	111.98	12.97	23.81	18.76
Ward 9—A	124.25	16.47	124.31	11.64	102.17	12.53	70.51	25.49
B	96.53	18.04	97.33	12.36	128.21	15.35	41.67	25.56
C	132.14	15.41	134.80	11.40	269.23	20.47	.....	21.46
Ward 10—A	113.81	16.95	113.26	12.92	114.37	15.30	87.30	23.23
B	125.16	19.20	128.79	14.22	138.94	19.71	39.86	26.26
C	108.99	16.61	109.96	10.81	96.49	13.56	73.53	25.14
Ward 11—A	146.37	19.64	148.47	14.53	168.99	19.13	108.33	27.95
B	140.22	15.68	135.02	13.04	149.10	14.47	138.89	21.96
Ward 12—A	129.72	18.34	132.39	13.39	149.46	14.47	69.44	22.46
B	114.88	20.74	116.02	11.77	109.83	6.78	62.50	31.62
C	125.13	18.03	126.33	11.58	133.96	11.74	86.31	26.17
Ward 13—A	145.83	18.64	147.83	15.89	135.85	19.11	20.83	26.19
B	104.93	15.29	106.96	12.12	111.93	15.76	45.98	21.12
C	104.03	15.75	105.25	13.01	98.65	14.50	83.33	23.87
Ward 14—A	109.68	16.24	110.71	10.45	120.00	9.32	66.67	23.59
B	140.88	19.22	145.46	13.62	132.05	13.30	50.85	25.13
C	126.06	18.03	129.42	12.72	137.13	12.52	39.47	26.12
D	158.41	24.30	160.20	17.30	145.02	9.28	83.33	34.77
Ward 15—A	124.51	16.62	125.06	11.62	130.39	14.12	83.33	26.11
B	103.93	16.70	104.45	12.90	103.78	13.79	64.82	28.12
C	115.49	14.88	115.82	10.44	122.72	12.65	97.22	24.09
Ward 16—A	83.98	13.90	82.80	9.06	85.73	9.12	33.33	23.40
B	119.88	16.39	122.43	10.14	130.60	9.82	54.60	22.07
C	138.39	16.68	140.63	8.64	145.02	7.37	63.22	25.11
D	105.41	15.73	107.03	10.41	122.81	10.97	26.32	20.27
Ward 17—A	116.19	16.20	116.70	12.80	127.91	15.99	96.15	21.21
B	118.02	13.43	119.90	11.93	123.00	13.34	44.44	16.84
C	135.45	17.71	137.17	11.59	148.21	15.22	65.66	24.93
D	90.28	14.01	90.89	10.33	94.00	11.60	43.48	22.42
E	73.15	10.55	74.42	6.60	63.79	3.94	27.78	17.35
F	244.05	27.17	238.10	13.78	208.33	71.43	.....	46.10

TABLE 66—Continued.

WARDS AND SANITARY DISTRICTS.	DEATH RATES, INCLUDING STILLBIRTHS.							
	Aggregate.		White.					
			Native.				Foreign.	
			Total.		Both parents native.			
	Under 5 years.	5 years and over.	Under 5 years.	5 years and over.	Under 5 years.	5 years and over.	Under 5 years.	5 years and over
Ward 18—A	157.45	21.19	158.77	13.76	165.76	19.62	41.67	32.67
B	99.36	16.11	101.09	9.88	100.46	21.28	23.81	22.96
C	128.12	18.13	128.86	11.99	143.25	15.54	74.07	25.48
D	130.77	13.71	133.83	9.42	158.88	13.80	36.67	18.27
E	97.67	13.66	98.40	10.03	129.09	14.49	61.11	18.41
F	85.19	12.08	85.48	10.13	93.48	13.31	55.56	15.98
G	58.38	8.64	58.22	7.66	54.02	11.01	83.33	10.64
H	50.25	8.90	50.62	7.04	45.58	8.06	33.33	14.74
I	44.09	6.61	44.12	3.64	43.65	4.07	.....	13.11
K	77.78	12.21	79.27	8.42	84.59	12.20	21.74	17.28
Ward 19—A	104.44	16.72	105.00	13.19	94.54	14.44	75.76	23.80
B	78.81	13.40	78.78	11.19	73.98	12.91	.....	21.11
C	104.56	13.86	104.48	9.92	112.04	9.78	44.72	18.52
Ward 20—A	96.57	17.45	97.48	13.14	98.16	15.09	33.33	27.22
B	82.47	13.16	82.16	12.86	83.79	13.97	.....	14.69
C	101.91	14.06	104.02	13.02	123.37	14.47	83.33	17.66
Ward 21—A	97.20	14.03	97.87	9.62	138.59	12.16	36.59	19.84
B	105.73	17.09	108.38	14.74	116.67	16.81	9.80	23.45
C	128.67	16.21	128.70	11.38	127.82	13.52	102.15	21.69
D	78.30	12.59	79.03	11.04	76.60	10.90	37.04	18.12
E	97.26	14.34	98.13	11.34	92.32	13.53	16.67	20.41
Ward 22—A	63.85	10.83	64.65	9.57	58.45	10.72	24.69	13.59
B	69.26	10.04	69.29	8.68	59.00	8.93	66.67	13.31
C	69.53	12.69	69.40	10.88	78.01	11.79	83.33	17.44
D	81.70	13.35	81.81	10.38	77.57	10.05	68.18	19.51
E	142.02	20.22	142.29	13.75	170.25	18.75	125.00	31.28
F	116.23	16.10	116.49	11.36	112.11	13.21	114.04	25.28
Ward 23—A	91.78	14.65	92.18	13.07	95.18	14.36	55.56	20.22
B	73.72	13.64	73.97	13.64	73.57	14.34	.....	14.03
C	80.67	12.29	81.13	10.94	76.85	12.74	30.30	16.84
Ward 24—A	74.85	11.84	75.90	10.69	56.79	11.11	.....	16.00
B	120.51	11.52	113.54	7.54	165.71	11.42	95.24	15.33
C	111.55	16.04	115.62	8.48	147.34	12.13	.....	23.31
D	44.96	6.34	47.96	5.73	41.67	7.22	.....	7.28
E	111.34	10.92	108.05	8.05	131.09	7.60	.....	14.57
Ward 25—A	113.01	14.84	108.37	12.21	113.61	12.79	41.67	20.58
B	72.16	11.99	71.71	10.26	70.09	11.82	133.33	17.55
C	91.08	13.73	92.21	11.22	80.43	11.06	125.00	24.58
D	97.04	13.52	96.60	9.13	112.55	11.02	27.78	21.04
E	65.27	9.23	65.56	6.53	68.55	6.31	13.89	16.50
Ward 26	84.07	12.56	84.20	8.74	89.06	9.39	61.40	18.58

It will be seen that there are great differences in the death rates of the different districts, and the causes of these differences are worth careful study. These causes are many and various, and the data given in this report with regard to them are necessarily imperfect, and can only indicate the locations in which special and detailed investigation seems most desirable. The great influence of age and race peculiarities upon death rates must be constantly borne in mind in comparing the mortality of different districts.

Table 67 shows for four groups of localities in New York city the death rates per 1,000 of population during the census year, stillbirths included, with distinction of ages. The stillbirths affect only the rates for all ages and for those under 1 and under 5 years of age.

TABLE 67.

AGE GROUPS.	Group A.	Group B.	Group C.	Group D.
All ages	26.25	33.14	41.92	18.64
Under 1 year	294.35	407.11	447.70	351.57
Under 5 years	121.81	159.05	225.68	129.44
5 to 15 years	3.99	5.58	6.13	5.05
15 to 25 years	7.55	10.33	13.38	4.41
25 to 65 years	21.64	27.56	33.24	13.79
65 years and over	104.72	98.88	135.07	81.32

In the above table group A includes wards 7, 10, and 13, being those inhabited by Russian and Polish Jews.

Group B includes 18, C; 21, C and H; 19, C; 22, A and D; and 20, A and E, being water side districts with comparatively heavy death rates.

Group C includes wards 1, 2, 4, 14, 15 B, 5 and 8 B, being localities in the lower part of the city having heavy death rates.

Group D includes 18, D; 16, D; 21, D and F; 19, A, D, K, and N; 22, C, F, I, K, and M; and 12, A, E, H, K, and L, being the localities on high and good ground covered by the better class of residences.

It appears from the above table that the aggregate death rate is lowest where we should expect to find it, namely, in group D, but that the death rate of children under 1 year of age, under 5 years of age, and between 5 and 15 years of age is lowest in group A, where the general conditions of life are much more unfavorable, but where the population is composed of Russian and Polish Jews. At ages above 15 the death rates are greater in group A than those in group D, but are lower than those of the other groups. For the ages from 15 to 65 the highest death rate exists throughout in group C, in which the aggregate death rate and the death rate of those from 15 to 65 years of age are more than double the corresponding rates in group D.

Table 68 shows the death rate per 100,000 of total population due to certain causes in these different groups of districts.

TABLE 68.

CAUSES.	Group A.	Group B.	Group C.	Group D.
All causes	2,625.49	3,313.95	4,191.58	1,864.31
Scarlet fever	22.38	41.41	28.70	8.99
Typhoid fever	12.43	21.50	35.88	22.12
Malarial fever	7.46	23.10	16.74	8.99
Diphtheria	79.58	101.15	93.28	55.99
Croup	46.01	42.21	55.01	16.59
Diarrheal diseases	293.45	399.01	398.23	159.68
Consumption	328.89	458.74	576.42	202.54
Pneumonia	381.11	363.97	548.91	219.13
Measles	21.76	22.30	88.50	2.07
Whooping cough	31.71	35.04	28.70	18.66
Cancer and tumor	44.76	52.56	63.38	68.43
Heart disease and dropsy	94.50	130.61	180.58	116.13
Childbirth and puerperal diseases	22.38	27.08	16.74	18.66
Diseases of the liver	25.49	39.03	47.84	20.05
Diseases of the nervous system	192.11	254.06	281.03	167.97
Diseases of the urinary organs	137.40	197.52	245.16	131.34
Old age	19.89	28.67	27.51	17.97
Stillbirths	257.39	258.04	309.73	176.96
All other causes	606.17	815.55	1,148.05	431.34
Unknown	0.62	2.39	1.20	0.69

On June 1, 1890, the total population in group A, being wards 7, 10, and 13, was 160,846, of whom 312 were colored, 59,961 had Russian and Polish mothers, 34,104 had German mothers, 29,387 had Irish mothers, 15,648 had mothers born in the United States, 2,768 had English mothers, 2,143 had Hungarian mothers, and 1,015 had Italian mothers.

Almost all of those reported as having mothers born in Germany, Hungary, or Italy were of the Jewish race, and the same is the case for a considerable proportion of those whose mothers were born in other countries, the total Jewish population of this region being about 110,000 at that date. Among the 29,387 having Irish mothers 1,059 deaths occurred during the census year. Among the 59,961 having Russian and Polish mothers 1,002 deaths occurred during the same period, giving a death rate for those of Irish mothers of 36.04 and for those of Russian and Polish mothers of 16.71 per 1,000.

Table 69 shows the death rates in this region during the census year for certain age groups and for certain causes of death, with distinction of color, nativity, and parental nativity, the rates for the ages being per 1,000 of population of corresponding ages and those for causes per 100,000 of population of each class.

TABLE 69.

AGE GROUPS AND CAUSES.	WHITE.						Colored.
	Aggregate.	Total.	Native.			Foreign.	
			Total.	Both parents native.	One or both parents foreign.		
Total	26.25	26.25	38.55	50.67	36.34	16.28	28.85
Under 1 year	294.35	293.76	293.68	412.79	274.76	302.33	.....
Under 5 years	121.81	121.58	130.51	194.10	120.35	35.50	625.00
5 to 15 years	3.99	3.99	4.73	5.68	4.56	2.29	.....
15 to 25 years	7.55	7.56	10.88	11.32	10.82	5.14	.....
25 to 65 years	21.64	21.66	29.15	26.56	29.87	19.69	17.17
65 years and over	104.72	104.80	116.40	143.94	52.63	103.85	.....
Scarlet fever	22.38	22.43	45.93	27.05	49.37	3.38	.....
Typhoid fever	12.43	12.46	9.74	18.03	8.23	14.66	.....
Malarial fever	7.46	7.48	4.18	9.02	3.29	10.15	.....
Diphtheria	79.58	79.73	165.62	288.50	143.18	10.15	.....
Croup	46.01	46.10	90.46	147.20	85.58	10.15	.....
Diarrheal diseases	293.45	294.02	598.44	676.16	584.26	47.36	.....
Consumption	328.89	327.66	340.97	351.00	339.03	316.87	961.54
Pneumonia	381.11	381.85	520.51	504.87	523.36	269.51	.....
Measles	21.76	21.80	44.54	36.11	41.14	3.38	.....
Whooping cough	31.71	31.77	69.59	162.28	52.67	1.13	.....
Cancer and tumor	44.76	44.85	16.70	9.02	18.10	67.65	.....
Heart disease and dropsy	94.50	94.68	64.02	99.17	57.60	119.53	.....
Childbirth and puerperal diseases (a)	88.41	88.48	96.18	.....	111.96	84.66	.....
Diseases of the liver	25.49	25.54	5.57	18.03	3.29	41.72	.....
Diseases of the nervous system	192.11	191.86	265.82	468.81	228.77	131.93	320.51
Diseases of the urinary organs	137.40	137.04	111.34	162.28	102.04	157.87	320.51
Old age	19.89	19.93	4.17	27.05	.....	32.70	.....
Stillbirths	257.39	256.64	573.39	531.91	580.96	.....	641.03
All other causes	606.17	606.10	994.62	1,532.64	789.98	364.23	641.03
Unknown	0.62	0.62	1.39	.....	1.05	.....	.....

a Per 100,000 female population from 15 to 45 years of age.

Table 70 shows the death rate in this region during the census year, with distinction of certain groups of ages and of certain causes of death by birthplaces of mothers, the rates of the age groups being per 1,000 of population of the same age and for causes per 100,000 of population of each birthplace of mother.

TABLE 70.

AGE GROUPS AND CAUSES.	Total.	United States. (a)	England and Wales.	Ireland.	Scotland.	France.	Germany.	Russia and Poland.	Canada.	Scandinavia.	Hungary.	Bohemia.	Italy.	Other foreign countries.
Total	26.25	45.18	35.77	36.04	45.55	25.70	22.14	16.71	28.01	39.53	28.93	111.11	62.07	23.08
Under 15 years	41.28	62.25	47.57	40.71	72.92	57.14	30.38	32.31	13.61	74.07	61.46	166.67	120.79	46.59
15 to 25 years	7.55	9.43	10.89	15.15	13.89	.....	7.14	2.53	65.57	48.39	6.57	83.33	22.86	7.38
25 to 65 years	21.64	25.92	29.01	39.51	39.43	23.81	21.20	7.99	13.89	30.90	12.20	.....	31.65	11.49
65 years and over	104.72	105.96	200.00	120.92	142.86	50.00	88.51	84.51	500.00	.....	83.33	.....	166.67	66.67
Scarlet fever	22.38	31.95	36.13	20.42	.....	.....	8.80	28.35	.....	395.26	.....	.....	.....	14.56
Typhoid fever	12.43	12.78	36.13	6.81	.....	.....	20.53	10.01	.....	197.63	.....	.....	.....	.....
Malarial fever	7.46	12.78	.....	23.82	.....	.....	.....	.....	.....	197.63	.....	.....	.....	14.56
Diphtheria	79.58	255.62	108.38	51.04	216.92	.....	67.44	60.04	.....	.....	46.66	.....	295.57	43.69
Croup	46.01	121.42	.....	13.61	.....	.....	26.39	36.69	.....	.....	139.99	.....	295.57	101.95
Diarrheal diseases	293.45	683.79	289.02	217.78	.....	233.64	225.78	251.83	.....	197.63	513.30	.....	689.66	298.57
Consumption	328.89	268.40	397.40	752.63	650.76	467.29	372.39	106.74	1,460.56	790.51	93.33	1,851.85	492.61	225.75
Pneumonia	381.11	498.47	650.29	704.39	1,084.60	233.64	284.42	220.14	563.22	592.89	186.65	1,851.85	689.66	364.11
Measles	21.76	63.91	.....	3.40	.....	.....	11.73	23.35	.....	.....	.....	.....	98.52	29.13
Whooping cough	31.71	159.76	72.25	17.01	.....	.....	14.66	16.68	.....	.....	46.66	1,851.85	.....	14.56
Cancer and tumor	44.76	6.39	36.13	64.65	.....	233.64	73.31	33.36	.....	.....	46.66	.....	.....	21.85
Heart disease and dropsy	94.50	95.86	289.02	132.71	433.84	233.64	140.75	33.36	28.11	197.63	139.99	1,851.85	197.04	36.41
Childbirth and puerperal diseases (b)	88.41	.....	161.81	78.43	.....	.....	112.75	88.37	.....	.....	151.52	.....	438.60	80.91
Diseases of the liver	25.49	12.78	.....	71.46	.....	233.64	32.25	5.00	.....	.....	.....	.....	197.04	7.28
Diseases of the nervous system	192.11	364.26	289.02	268.83	650.76	.....	134.88	115.07	.....	197.63	186.65	.....	197.04	211.19
Diseases of the urinary organs	137.40	121.42	216.76	350.50	216.92	.....	129.62	45.03	280.11	197.63	.....	.....	197.04	72.82
Old age	19.89	19.17	.....	44.24	216.92	233.64	17.59	10.01	.....	.....	.....	.....	.....	7.28
Stillbirths	257.39	466.51	216.76	74.86	216.92	233.64	164.20	278.51	.....	197.63	466.64	.....	591.13	371.40
All other causes	606.17	1,322.85	903.18	758.84	867.68	467.29	460.36	375.24	280.11	790.51	979.93	3,703.70	2,167.49	451.50
Unknown	0.62	.....	.....	3.40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a Includes colored.

b Per 100,000 female population from 15 to 45 years of age.

In this connection attention is invited to the very interesting report by Dr. Roger S. Tracy on the tenement house census and tenement house mortality in 1891, contained in the annual report of the board of health for New York for the year 1891 (pages 206–214). This report relates to 37,358 houses, each containing more than 2 families living independent of each other, but excluding first class apartment houses, lodging houses, and hotels. These 37,358 tenement houses were found to contain 276,565 families, including 160,708 children under 5 years of age and 1,064,713 persons 5 years of age and over, or a total population of 1,225,421. The same divisions into districts were made as those used in this report, and a comparison of the results obtained for certain localities by the census work and the board of health work is given in the following tables.

Table 71 shows for certain localities in New York the population, deaths, and death rates during the census year ending May 31, 1890, with distinction of certain age groups, as returned at the Eleventh Census.

TABLE 71.

LOCALITIES.	POPULATION.			DEATHS.			RATES PER 1,000 POPULATION.		
	Total.	Under 5 years.	5 years and over.	Total.	Under 5 years.	5 years and over.	Total.	Under 5 years.	5 years and over.
Bordering on East river, below Eighty-sixth street (*a*)	217,568	21,468	196,100	6,632	3,038	3,594	30.48	141.51	18.33
Bordering on North river, below Eighty-sixth street (*b*)	155,541	14,256	141,285	5,255	2,300	2,955	33.79	161.34	20.92
Former marsh land (*c*)	174,963	17,137	157,826	5,453	2,611	2,842	31.17	152.36	18.01
Made land (*d*)	87,892	7,448	80,444	3,183	1,321	1,862	36.21	177.36	23.15
Vicinity of slaughterhouses (*e*)	64,187	6,814	57,373	2,071	1,029	1,042	32.27	151.01	18.16
Vicinity of gashouses (*f*)	125,560	12,254	113,306	4,161	1,949	2,212	33.14	159.05	19.52

a Comprising First ward, district B; Second ward; Fourth ward, districts A and B; Seventh ward, districts A and B; Thirteenth ward, district B; Eleventh ward, districts C and D; Eighteenth ward, district C; Twenty-first ward, districts C and H; Nineteenth ward, districts C, F, I, M, and P.

b Comprising First ward, district A; Third ward; Fifth ward, district A; Eighth ward, district A; Ninth ward, districts A and C; Sixteenth ward, districts A and C; Twentieth ward, districts A, C, and E; Twenty-second ward, districts A, D, G, H, and L.

c Comprising Fourth ward, district B; Seventh ward, districts A and B; Eleventh ward, districts B, C, and D; Twelfth ward, districts C, D, G, and I; Fifth ward, districts A and B; Eighth ward, districts A and B.

d Comprising First ward, districts A and B; Second ward; Fourth ward, district A; Sixth ward, district B; Eighteenth ward, district G; Twenty-first ward, district H; Ninth ward, district C; Sixteenth ward, districts A and C.

e Comprising Nineteenth ward, district C; Twentieth ward, district E; Twenty-second ward, districts A and G.

f Comprising Eighteenth ward, district C; Sixteenth ward, district A; Eleventh ward, district D; Twelfth ward, districts G and M.

Table 72 shows for certain localities in New York the population, deaths, and death rates during the year 1891, with distinction of certain age groups, as reported by the board of health.

TABLE 72.

LOCALITIES.	POPULATION.			DEATHS.			RATES PER 1,000 POPULATION.		
	Total.	Under 5 years.	5 years and over.	Total.	Under 5 years.	5 years and over.	Total.	Under 5 years.	5 years and over.
Bordering on East river, below Eighty-sixth street (*a*)	200,737	28,170	172,567	5,549	2,668	2,881	27.64	94.70	16.70
Bordering on North river, below Eighty-sixth street (*b*)	129,630	15,516	114,114	3,953	1,846	2,107	30.49	118.60	18.46
Former marsh lands (*c*)	161,294	22,530	138,764	4,302	2,178	2,124	26.66	96.67	15.31
Made land (*d*)	73,865	8,606	65,259	2,175	926	1,249	30.84	107.60	19.14
Vicinity of slaughterhouses (*e*)	63,753	8,284	55,469	1,764	896	868	27.67	108.15	15.65
Vicinity of gashouses (*f*)	106,620	13,637	92,983	2,810	1,457	1,353	26.36	106.86	14.55

a, b, c, d, e, f See descriptions following Table 71.

In considering the results shown by these tables it must be remembered that the board of health gives only population of and deaths in tenement houses, while the census gives total population and deaths in the districts named, which, however, were largely tenement house districts, and that the board of health gives the population a year later than the census, when it may be presumed to have increased. The census death rates are in every group higher than those of the board of health, the differences being greatest for the children under 5 years of age. Both give the heaviest death rates to the made land districts, and neither show a specially heavy death rate in the districts in the vicinity of slaughterhouses for persons 5 years of age and upward, although the death rate of the children in these districts is rather high. The board of health report gives the lowest death rates to the localities in the vicinity of gas houses, the census report to the districts bordering on the East river. The differences in the rates shown by the two reports are due in part to the fact that they relate to two different years and in part to the fact that the board of health report shows a greater number of children under 5 years of age than does the census report. The conclusions of the two reports as to the relative healthfulness of different localities as indicated by death rates, and especially by the death rates of those 5 years of age and upward, are in most respects the same.

ALTITUDE.

The influence of the topographical peculiarities of the different districts in New York and Brooklyn upon the death rates is due largely to the relative altitude of each district and to the proportion of filled ground which it contains.

The following tables show the relations between altitude and death rates.

Table 73 shows the average altitude of the different districts in New York and the average annual death rates, exclusive of stillbirths, during the 6 years ending May 31, 1890, per 1,000 of mean population; also the average annual death rates per 100,000 of mean population due to certain specified causes.

TABLE 73.

Wards and sanitary districts.	Average altitude (in feet) June 1, 1890.	Average annual death rates, excluding stillbirths. Per 1,000 of mean population. Aggregate. All ages.	Aggregate. Under 5 years.	White. Native. Total. All ages.	Total. Under 5 years.	Both parents native. All ages.	Both parents native. Under 5 years.	Foreign. All ages.	Foreign. Under 5 years.	Per 100,000 of mean population. Due to— Malarial fever.	Consumption.	Diarrheal diseases.
The city	.....	27.66	109.48	31.01	110.37	30.22	112.41	23.15	74.28	24.62	391.75	316.85
Ward 1—C	10	16.51	62.96	19.41	62.96	17.05	35.35	12.52	.....	.....	30.58	183.49
Ward 5—A	10	38.89	151.40	40.53	151.78	47.70	153.47	36.01	115.38	25.59	541.62	411.55
Ward 8—A	10	31.39	118.03	31.22	116.74	35.64	123.72	31.47	153.85	17.64	486.69	279.37
Ward 9—A	10	30.43	102.97	28.59	102.25	26.81	94.51	33.99	136.36	32.80	384.50	262.41
Ward 9—C	10	28.37	106.73	28.26	106.01	29.20	108.39	28.28	145.83	24.95	340.92	296.02
Ward 11—C	10	29.37	97.39	33.38	98.58	44.75	117.65	24.17	69.65	21.60	349.61	307.77
Ward 11—D	10	27.13	97.36	28.79	96.73	32.15	82.05	24.70	129.17	10.18	357.27	329.25
Ward 12—G	10	33.24	121.86	45.11	123.80	62.85	160.42	19.38	72.92	49.24	344.68	523.51
Ward 12—I	10	34.38	143.74	40.65	143.56	41.44	138.78	25.22	144.28	32.72	330.22	471.03
Ward 16—A	10	33.06	117.03	32.48	117.61	33.33	109.14	34.06	89.74	38.87	417.33	347.78
Ward 16—C	10	29.60	113.10	28.91	115.68	25.96	110.84	30.67	10.42	26.34	399.96	268.24
Ward 18—C	10	36.15	133.63	38.88	134.86	54.40	147.73	32.58	87.39	21.48	494.80	443.10
Ward 19—R	10	8.09	753.79	21.06	763.57	14.48	611.11	2.54	166.67	.....	76.03	62.45
Ward 11—B	12	24.10	91.21	27.46	92.44	33.80	96.47	20.34	65.08	12.12	318.70	307.44
Ward 8—B	13	41.28	150.29	53.56	148.88	62.00	180.72	27.30	138.89	20.64	576.01	384.63
Ward 12—M	13	32.85	133.28	37.64	133.71	38.47	126.30	25.17	106.06	42.79	374.53	429.62
Ward 13—B	13	28.60	96.38	33.83	97.98	47.25	135.03	21.78	57.35	19.39	338.38	343.22
Ward 1—A	14	47.43	171.97	48.05	166.67	61.55	149.43	46.83	477.78	40.19	724.79	360.62
Ward 7—A	14	39.13	137.02	45.12	141.64	84.25	201.72	32.00	41.67	20.92	461.95	395.70
Ward 7—B	14	32.56	104.67	35.48	108.81	53.83	135.06	28.43	40.74	13.68	410.47	345.10
Ward 20—A	14	36.20	133.95	37.29	134.63	44.92	149.17	34.18	90.91	27.31	544.77	409.60
Ward 21—H	14	36.49	145.53	37.89	145.73	53.23	152.19	34.66	126.67	43.55	538.76	429.26
Ward 1—B	15	38.20	124.64	36.88	123.70	58.33	120.37	41.74	.....	63.00	486.83	286.37
Ward 6—B	15	39.40	132.52	45.92	133.56	53.22	149.33	32.86	105.07	10.56	551.60	337.82
Ward 5—B	16	33.10	127.22	36.17	125.71	41.60	134.22	29.29	133.33	18.12	465.06	359.36
Ward 4—B	17	41.83	138.11	45.99	139.87	45.05	161.13	37.31	109.29	32.84	635.97	349.34
Ward 12—O	17	28.89	122.29	30.41	122.62	32.95	124.67	25.37	77.78	46.56	355.05	309.32
Ward 12—AB	17	28.20	183.16	31.76	179.08	11.66	54.64	23.40	750.00	17.46	296.84	497.64
Ward 17—D	17	23.23	95.11	26.29	94.64	33.65	74.93	20.12	123.46	5.30	314.75	246.92
Ward 11—A	18	25.43	90.49	43.85	94.51	59.20	187.17	14.71	50.10	8.41	300.82	322.56
Ward 22—A	18	32.44	116.82	34.21	117.51	35.46	115.34	29.30	84.58	38.19	408.72	395.72
Ward 12—R	19	16.32	65.67	15.19	65.21	14.54	60.38	18.98	18.52	20.45	184.03	141.09
Ward 2	20	56.77	178.79	54.55	172.84	73.98	120.00	59.20	.....	30.44	776.26	319.63
Ward 3	20	32.08	133.67	30.92	134.72	35.08	171.05	33.83	.....	22.47	458.34	179.74
Ward 4—A	21	42.05	149.83	41.01	151.03	49.25	160.74	43.43	83.33	35.33	689.02	329.05
Ward 12—D	21	27.86	109.82	29.10	110.50	36.15	113.74	25.43	68.63	23.16	357.36	344.12
Ward 17—F	21	29.95	112.06	33.40	112.91	42.56	104.88	26.01	88.71	13.73	436.48	367.82
Ward 21—C	22	31.94	115.81	33.72	120.41	38.55	117.62	29.86	40.00	41.74	495.27	350.58
Ward 6—A	23	32.29	120.92	32.80	119.37	47.34	222.22	31.44	166.67	35.48	434.63	212.88
Ward 9—B	23	27.63	108.60	27.92	107.86	28.01	107.47	27.52	111.11	24.31	425.88	256.47
Ward 16—B	24	30.11	116.83	27.86	116.41	28.63	123.97	34.54	144.93	35.51	434.99	243.63
Ward 12—L	25	16.68	62.31	16.64	62.42	18.80	59.34	17.06	55.56	27.91	210.85	151.94
Ward 18—B	25	24.06	132.77	25.07	133.45	26.17	129.97	22.79	133.33	31.08	313.74	170.19
Ward 18—E	25	27.34	105.16	26.77	104.69	24.27	105.39	28.02	104.17	24.35	421.78	249.37
Ward 19—M	25	27.34	101.28	42.74	105.78	54.89	135.88	15.15	31.91	14.20	259.17	457.98
Ward 20—C	25	31.49	112.68	31.77	113.37	38.42	120.44	30.39	58.14	29.05	445.37	326.42
Ward 16—D	26	20.57	95.60	20.21	89.57	20.47	91.37	19.82	136.36	14.79	295.84	146.99

TABLE 73—Continued.

WARDS AND SANITARY DISTRICTS.	Average altitude (in feet) June 1, 1890.	AVERAGE ANNUAL DEATH RATES, EXCLUDING STILLBIRTHS. Per 1,000 of mean population. Aggregate. All ages.	Aggregate. Under 5 years.	White. Native. Total. All ages.	Total. Under 5 years.	Both parents native. All ages.	Both parents native. Under 5 years.	Foreign. All ages.	Foreign. Under 5 years.	Per 100,000 of mean population. Due to— Malarial fever.	Consumption.	Diarrheal diseases.
Ward 20—E	26	32.90	117.11	35.43	117.80	42.23	111.96	29.05	75.16	24.09	432.53	359.88
Ward 22—D	26	35.47	128.17	36.86	129.71	43.50	121.73	33.60	97.22	40.35	451.14	429.14
Ward 8—C	27	30.96	118.86	34.70	116.09	32.62	109.77	26.00	166.67	12.16	456.81	277.06
Ward 9—D	29	24.41	102.38	23.24	102.70	23.63	97.80	27.53	51.28	24.90	368.71	177.83
Ward 6—C	30	41.87	159.30	63.91	159.30	59.93	254.90	25.71	156.25	26.18	605.69	433.15
Ward 7—D	30	28.50	102.90	30.72	105.60	41.27	137.39	25.29	32.16	20.57	365.14	329.14
Ward 15—A	30	34.03	147.49	47.33	153.59	53.34	200.58	22.02	88.89	25.75	523.15	367.01
Ward 15—C	30	22.34	115.35	23.29	112.72	20.62	90.70	20.47	83.33	17.50	290.20	134.11
Ward 17—B	30	25.96	92.32	34.96	95.77	48.73	117.32	18.95	45.61	9.92	338.80	340.54
Ward 19—I	30	31.81	115.53	40.81	116.05	39.83	126.26	21.74	65.48	23.20	365.34	507.42
Ward 13—A	31	24.29	81.54	42.29	84.54	66.21	186.77	13.45	47.89	8.94	248.39	313.53
Ward 14—A	32	44.67	177.14	68.35	182.18	78.25	227.82	27.17	107.00	14.21	508.17	454.87
Ward 17—E	32	27.47	124.00	27.57	125.90	25.43	114.33	27.38	79.17	21.21	387.84	222.71
Ward 18—D	32	13.20	133.33	14.54	133.33	12.37	81.30	11.05	333.33	9.35	133.18	63.09
Ward 20—B	32	32.35	152.06	32.67	140.18	34.86	157.79	28.19	102.56	19.17	466.07	304.66
Ward 7—C	33	25.76	87.59	31.12	89.38	55.15	154.18	20.51	46.38	10.04	319.08	284.93
Ward 17—C	33	22.22	93.02	23.25	94.43	30.12	90.04	21.09	33.33	8.45	322.65	202.89
Ward 21—B	34	25.90	113.79	27.15	113.54	24.32	101.85	23.96	52.08	25.16	392.43	159.32
Ward 22—G	34	31.02	102.56	40.80	108.12	57.93	127.76	23.03	103.60	21.51	380.09	399.81
Ward 21—E	35	23.94	117.17	24.30	118.35	22.51	95.67	23.60	71.43	21.82	303.43	188.40
Ward 10—B	36	24.55	84.54	38.74	89.18	52.70	149.24	15.94	38.70	11.07	330.18	304.13
Ward 14—B	36	39.71	157.34	58.75	160.70	58.41	192.93	25.91	120.75	18.11	502.88	412.31
Ward 17—A	36	26.81	110.14	33.31	112.72	40.03	119.40	21.66	56.86	9.33	365.73	302.28
Ward 19—C	36	35.50	135.42	40.06	135.10	51.89	147.09	29.65	145.83	33.79	441.64	431.99
Ward 19—P	36	17.48	62.68	20.31	62.20	24.08	65.26	13.29	79.23	15.02	198.38	234.74
Ward 18—A	37	21.41	136.22	24.25	133.66	18.41	65.36	17.49	666.67	16.99	293.07	84.95
Ward 21—A	37	19.14	96.60	22.45	98.04	19.42	54.46	15.01	55.56	32.34	210.19	67.91
Ward 22—B	37	27.37	111.91	29.37	110.64	32.27	108.92	23.35	127.66	25.68	360.02	296.89
Ward 15—D	38	27.99	167.95	28.71	169.40	27.17	123.56	27.14	277.78	24.09	372.42	164.18
Ward 19—F	38	26.94	106.85	30.19	107.82	34.00	107.26	22.97	69.44	9.46	327.34	321.66
Ward 20—D	38	25.85	125.00	26.59	120.83	28.60	130.98	24.02	71.43	18.35	341.15	252.62
Ward 12—C	39	28.63	110.88	35.76	110.34	44.13	115.28	19.02	102.94	19.41	308.57	405.60
Ward 15—B	39	38.14	178.34	44.49	175.57	38.52	366.67	28.85	111.11	16.36	529.93	320.58
Ward 10—A	40	25.90	89.97	48.80	96.05	82.31	323.23	14.97	43.75	5.79	286.01	306.85
Ward 23	40	23.64	82.05	23.95	82.34	26.40	80.72	22.85	55.02	43.10	275.45	245.84
Ward 12—F	41	26.10	104.54	27.45	105.82	33.18	112.46	22.92	41.67	35.71	296.60	288.45
Ward 20—F	42	27.87	123.66	29.10	124.07	28.26	115.58	26.65	106.67	18.37	368.77	297.90
Ward 21—G	42	23.46	107.96	23.73	107.44	19.08	95.99	23.07	129.63	33.81	299.11	200.27
Ward 19—B	43	27.07	118.99	29.16	119.75	32.45	121.32	24.03	86.81	31.43	364.82	238.14
Ward 12—N	45	19.40	85.96	20.19	84.82	18.00	72.64	17.71	105.56	34.19	213.24	186.24
Ward 19—E	46	26.42	129.30	30.03	130.48	32.23	128.17	21.45	75.76	25.12	289.47	271.99
Ward 19—L	50	28.70	114.05	36.45	116.63	47.58	139.67	20.70	45.79	15.03	358.79	389.78
Ward 22—H	51	22.99	82.24	25.83	83.75	28.52	100.75	18.30	39.22	51.16	216.01	329.70
Ward 22—C	52	22.51	133.23	23.73	134.56	21.45	143.76	21.31	500.00	24.45	276.66	147.98
Ward 21—D	53	15.19	76.75	17.84	77.63	15.98	50.72	11.33	55.56	12.03	141.40	75.21
Ward 19—O	55	22.55	96.08	25.95	96.41	28.79	107.34	18.02	74.71	17.13	256.32	253.68
Ward 19—H	56	30.46	125.06	34.48	125.52	35.21	123.22	24.52	94.77	33.37	357.28	369.06
Ward 22—L	62	21.38	80.10	20.30	79.29	22.49	79.21	24.96	.....	62.66	203.63	180.14
Ward 19—A	63	22.05	108.11	26.66	109.30	24.61	86.78	16.29	55.56	15.48	226.97	126.38
Ward 19—D	63	19.05	110.84	22.33	106.97	20.66	72.30	13.51	83.34	33.04	162.45	104.63
Ward 22—E	64	25.93	108.27	27.25	107.10	26.74	107.08	23.11	76.67	35.34	325.00	252.01
Ward 19—G	69	28.62	175.85	36.14	175.21	30.65	88.78	17.22	266.67	17.90	218.04	388.88
Ward 19—K	69	14.55	75.25	15.37	74.86	19.91	58.17	13.46	.....	15.48	103.17	82.53
Ward 22—F	69	21.36	115.15	21.74	112.17	17.88	111.78	20.74	266.67	26.10	272.18	152.87
Ward 21—F	73	17.67	88.41	22.71	89.39	22.83	78.28	11.20	41.67	10.30	164.86	56.67
Ward 22—I	74	18.04	84.11	18.63	86.52	17.58	83.96	17.01	62.50	15.78	210.42	187.62
Ward 19—N	78	15.26	83.44	16.41	85.05	17.64	78.92	13.66	64.10	15.61	191.27	131.42
Ward 12—K	80	16.90	66.28	16.70	65.60	13.67	55.91	17.32	125.00	19.71	192.19	206.98
Ward 12—P	80	24.38	103.00	26.72	104.05	24.94	89.24	20.13	37.04	4.73	336.17	194.13
Ward 22—M	81	9.36	54.01	9.83	54.57	9.78	49.08	8.61	33.33	15.86	103.10	79.31
Ward 12—A	83	14.38	68.08	14.08	67.86	9.96	50.47	15.45	55.56	22.68	176.87	117.91

TABLE 73—Continued.

WARDS AND SANITARY DISTRICTS.	Average altitude (in feet) June 1, 1890.	AVERAGE ANNUAL DEATH RATES, EXCLUDING STILLBIRTHS. Per 1,000 of mean population. Aggregate. All ages.	Aggregate. Under 5 years.	White. Native. Total. All ages.	Total. Under 5 years.	Both parents native. All ages.	Both parents native. Under 5 years.	Foreign. All ages.	Foreign. Under 5 years.	Per 100,000 of mean population. Due to— Malarial fever.	Consumption.	Diarrheal diseases.
Ward 12—E	86	16.18	57.58	16.94	58.70	15.70	53.10	14.73	34.19	21.75	178.37	163.14
Ward 12—S	87	19.11	66.01	19.01	67.91	19.05	67.24	19.86	40.54	25.25	192.20	186.59
Ward 22—K	87	8.81	54.13	9.45	55.81	9.58	56.35	8.12	83.34	22.69	49.16	49.16
Ward 12—B	96	24.93	108.70	26.16	106.49	31.53	102.68	22.72	270.83	24.30	262.10	218.70
Ward 12—H	100	17.33	52.58	14.74	52.19	9.32	32.71	23.48	74.07	27.79	156.32	145.89
Ward 24	100	22.06	67.46	26.39	66.76	21.42	57.69	25.17	30.22	84.38	327.22	173.45
RECAPITULATION BY GROUPS.												
Districts under 20 feet in altitude		31.48	118.59	35.22	119.54	38.33	125.66	26.41	85.12	26.14	404.63	353.93
Districts 20 to 40 feet in altitude		28.25	110.60	32.33	111.42	32.00	120.05	23.14	74.53	19.86	378.09	296.13
Districts 40 to 60 feet in altitude		24.79	100.63	28.21	102.11	26.78	103.44	20.16	57.79	26.77	291.27	265.78
Districts 60 to 80 feet in altitude		21.34	108.44	23.56	108.49	22.50	90.17	17.70	87.38	23.99	231.35	192.32
Districts 80 to 100 feet in altitude		17.88	74.45	18.33	74.84	17.05	67.17	17.29	59.19	21.38	192.42	164.15
Districts 100 feet and over in altitude		21.06	64.05	19.18	63.41	18.48	52.17	24.82	46.51	72.35	290.89	167.60

Table 74 shows the average altitude of the different districts in Brooklyn and their average annual death rates, exclusive of stillbirths, during the 6 years ending May 31, 1890, per 1,000 of mean population; also the average annual death rates per 100,000 of mean population due to certain specified causes.

TABLE 74.

WARDS AND SANITARY DISTRICTS.	Average altitude (in feet) June 1, 1890.	AVERAGE ANNUAL DEATH RATES, EXCLUDING STILLBIRTHS. Per 1,000 of mean population. Aggregate. All ages.	Aggregate. Under 5 years.	White. Native. Total. All ages.	Total. Under 5 years.	Both parents native. All ages.	Both parents native. Under 5 years.	Foreign. All ages.	Foreign. Under 5 years.	Per 100,000 of mean population. Due to— Malarial fever.	Consumption.	Diarrheal diseases.
The city		24.17	93.42	25.00	93.78	25.48	91.92	22.26	54.96	32.62	303.24	282.58
Ward 12—A	5	31.10	110.85	38.30	112.65	42.02	121.38	23.03	69.44	71.64	286.58	358.22
Ward 12—B	5	31.23	98.35	30.61	99.04	27.78	93.45	31.90	62.50	26.05	342.41	327.53
Ward 17—C	8	32.54	120.17	37.24	121.48	45.66	125.64	25.31	65.66	56.73	312.06	495.42
Ward 14—D	10	39.55	137.51	41.89	138.81	34.06	126.02	35.21	83.33	85.13	432.22	510.81
Ward 15—A	10	29.74	109.71	30.98	109.93	38.10	112.24	26.67	83.33	38.22	243.21	371.76
Ward 17—B	10	21.91	101.16	23.81	102.61	24.07	102.71	17.08	44.44	18.70	248.44	221.72
Ward 19—C	10	23.68	87.17	26.14	86.70	30.60	90.74	18.70	44.72	15.12	324.62	315.55
Ward 10—C	11	27.16	93.94	27.91	94.04	31.15	79.98	25.87	73.53	15.79	278.96	365.81
Ward 17—A	11	26.21	99.36	28.71	99.44	31.99	104.65	21.84	96.15	28.93	277.71	337.50
Ward 6—B	12	31.05	112.82	37.78	114.95	56.50	139.22	23.52	60.76	41.68	350.48	407.31
Ward 12—C	12	29.88	112.50	31.90	113.31	40.46	116.67	26.75	86.31	47.06	288.86	371.39
Ward 17—D	13	21.94	76.72	21.69	77.22	22.64	77.59	22.57	43.48	26.51	228.79	235.76
Ward 10—B	14	30.31	108.89	33.04	111.66	44.35	116.82	26.40	30.86	25.70	319.16	354.32
Ward 14—A	15	26.86	97.24	28.65	97.97	35.61	106.67	23.93	66.67	25.51	288.24	339.25
Ward 14—C	15	28.41	109.53	29.54	112.24	31.95	117.72	26.28	39.47	35.28	389.97	335.55
Ward 17—F	15	45.10	190.48	43.48	184.52	111.11	145.83	47.87	.....	.....	1,045.75	392.16
Ward 21—A	15	23.93	82.41	25.86	82.58	37.26	113.64	20.06	36.59	15.29	286.06	330.62
Ward 19—A	16	23.44	87.68	23.24	87.98	22.70	76.51	24.03	75.76	24.72	282.17	218.32
Ward 16—D	18	27.43	92.34	32.29	93.50	43.75	108.70	20.35	26.32	23.98	297.87	397.58

TABLE 74—Continued.

WARDS AND SANITARY DISTRICTS.	Average altitude (in feet) June 1, 1890.	AVERAGE ANNUAL DEATH RATES, EXCLUDING STILLBIRTHS. Per 1,000 of mean population. Aggregate. All ages.	Aggregate. Under 5 years.	White. Native. Total. All ages.	Native. Total. Under 5 years.	Native. Both parents native. All ages.	Native. Both parents native. Under 5 years.	Foreign. All ages.	Foreign. Under 5 years.	Per 100,000 of mean population. Due to— Malarial fever.	Consumption.	Diarrheal diseases.
Ward 22—E	19	29.88	101.17	28.78	100.79	35.22	121.86	31.83	125.00	46.45	294.16	278.68
Ward 14—B	20	33.56	124.40	39.54	128.11	35.71	115.73	25.54	50.85	38.42	330.45	501.44
Ward 17—E	20	17.26	63.35	17.16	64.34	11.57	51.44	17.47	27.78	9.59	124.66	230.15
Ward 18—C	20	32.93	112.24	36.99	112.65	56.26	121.21	25.89	74.07	17.83	380.41	493.34
Ward 5—A	21	28.61	135.44	31.33	139.22	35.10	156.25	26.30	58.56	47.48	356.97	337.62
Ward 5—B	23	31.75	120.35	31.42	120.90	39.22	116.52	31.08	13.51	52.36	386.19	333.82
Ward 16—B	23	28.81	102.43	33.42	104.17	39.82	105.72	22.43	54.60	17.70	329.49	453.39
Ward 18—B	23	28.24	83.33	31.68	84.70	48.90	84.47	22.97	23.81	9.64	240.99	530.17
Ward 8—B	25	30.28	113.75	35.37	115.38	35.15	115.90	22.79	73.33	61.57	305.17	333.28
Ward 11—A	25	30.05	124.65	31.09	124.80	41.96	139.15	28.38	108.33	36.59	356.08	332.15
Ward 16—A	25	20.22	67.86	18.23	66.45	20.76	66.57	23.47	33.33	18.27	234.53	225.39
Ward 2	26	34.40	131.24	38.86	137.28	43.92	124.53	29.12	51.95	31.25	419.15	419.15
Ward 18—A	26	37.76	137.14	40.32	138.23	53.74	144.08	32.71	41.67	44.63	428.44	457.45
Ward 16—C	27	31.24	117.16	35.41	118.77	46.76	120.27	25.49	63.22	27.62	343.47	422.73
Ward 15—B	28	24.80	87.52	23.75	87.75	25.66	84.59	28.45	64.82	47.82	309.08	250.21
Ward 21—C	29	28.34	108.36	32.04	108.03	39.78	103.59	22.18	102.15	30.69	364.43	395.12
Ward 22—F	29	25.29	98.54	26.50	98.45	26.88	93.80	25.90	114.04	32.36	279.81	308.36
Ward 26	29	20.91	74.38	21.59	74.30	23.16	77.66	18.90	61.40	54.09	230.61	239.86
Ward 3—A	30	22.00	86.66	23.47	85.72	29.42	99.62	21.82	80.00	12.70	277.78	230.16
Ward 6—C	30	20.08	87.23	21.63	89.61	21.21	78.92	18.46	19.23	27.84	227.38	184.07
Ward 15—C	31	23.98	97.18	23.90	97.32	28.27	100.61	24.33	97.22	34.62	202.96	275.65
Ward 13—A	32	26.00	117.39	25.98	119.16	28.68	108.54	26.16	20.83	20.90	286.58	253.75
Ward 13—C	32	22.07	88.24	21.36	89.06	22.82	81.53	24.03	83.33	26.13	351.63	206.70
Ward 10—A	33	24.53	97.49	24.87	96.65	28.30	96.49	23.53	87.30	27.90	290.44	258.73
Ward 7—A	34	26.69	91.72	26.05	91.84	34.09	107.28	26.15	74.07	23.52	309.14	283.94
Ward 21—B	34	23.50	91.24	23.55	93.39	25.84	98.15	23.29	9.80	39.88	259.21	213.64
Ward 19—B	35	16.71	62.71	15.53	62.57	17.16	57.32	21.06	.....	17.05	229.22	134.50
Ward 13—B	36	22.62	89.64	23.19	91.14	25.24	91.40	21.37	45.98	33.00	295.70	216.60
Ward 20—A	36	24.33	83.25	23.21	83.90	25.52	82.67	27.26	33.33	34.83	315.09	218.91
Ward 8—A	37	18.50	64.19	18.65	64.37	17.51	60.91	18.10	37.04	50.63	179.51	156.49
Ward 3—B	38	19.61	84.98	19.85	83.02	19.38	80.67	18.68	102.56	22.61	283.67	168.56
Ward 18—K	39	21.50	66.67	23.77	67.87	27.69	68.30	17.33	21.74	32.14	202.51	366.44
Ward 6—A	41	20.60	86.13	22.79	87.74	28.82	85.71	16.82	37.04	28.97	225.93	239.45
Ward 18—H	41	13.03	42.28	12.51	42.51	13.02	36.64	14.92	33.33	10.18	128.94	132.33
Ward 18—G	42	13.93	48.51	15.17	48.23	17.24	44.80	10.98	83.33	11.24	153.56	205.99
Ward 21—D	42	16.77	64.65	16.43	65.15	16.14	62.63	18.25	37.04	46.96	177.39	127.82
Ward 11—B	43	22.83	121.49	22.33	115.36	23.28	123.49	22.23	138.89	31.62	300.39	224.50
Ward 18—F	46	19.63	73.78	21.02	73.92	24.17	79.34	16.14	55.56	35.68	181.65	201.12
Ward 25—C	47	20.00	75.58	19.13	76.18	18.02	67.03	25.24	125.00	45.95	237.02	229.77
Ward 23—A	48	19.16	73.48	18.75	73.63	19.87	74.45	20.36	55.56	38.89	207.39	157.70
Ward 18—D	49	29.85	114.83	37.60	117.46	56.22	136.03	18.50	36.67	34.61	323.61	529.54
Ward 18—E	49	24.28	84.43	27.59	84.86	39.29	112.73	18.77	61.11	20.73	288.55	350.75
Ward 23—B	50	16.78	59.94	17.52	60.08	17.98	58.58	14.00	.....	28.30	213.34	82.72
Ward 1—A	51	18.53	70.68	20.02	71.30	20.12	74.07	16.33	21.74	26.31	234.25	134.95
Ward 25—D	53	22.95	82.25	23.22	81.37	28.86	92.43	21.11	27.78	27.07	322.13	308.59
Ward 1—B	54	19.59	92.63	21.16	92.81	21.85	99.40	16.82	150.00	33.98	250.41	123.42
Ward 7—D	54	20.21	80.25	19.41	80.45	21.45	80.09	23.47	138.89	23.06	255.80	165.64
Ward 23—C	54	16.52	65.96	16.51	66.10	16.92	60.32	16.92	30.30	30.01	214.06	102.03
Ward 4	55	25.53	111.05	25.28	109.84	27.89	112.16	24.65	11.11	33.41	359.53	248.60
Ward 25—A	55	22.86	95.76	22.13	90.06	22.45	94.90	20.70	41.67	39.32	249.62	241.08
Ward 25—B	55	16.66	58.17	16.32	57.62	17.24	57.26	17.96	133.33	17.38	176.30	188.72
Ward 21—E	58	22.43	83.70	23.28	84.30	24.84	78.84	20.38	16.67	49.35	243.37	270.60
Ward 7—B	60	18.98	80.76	18.70	82.44	17.63	68.77	20.78	55.56	28.66	239.53	120.79
Ward 22—A	63	14.48	52.23	14.76	52.69	14.71	47.21	13.68	24.69	18.81	160.62	123.00
Ward 7—C	65	17.51	70.68	16.97	68.55	17.54	64.76	18.64	.....	27.63	211.17	122.36
Ward 20—B	70	15.52	64.01	16.03	63.38	16.97	63.75	14.67	.....	40.21	142.08	75.06
Ward 20—C	74	17.97	77.03	18.07	76.04	19.12	93.14	17.92	83.33	23.25	249.42	126.82
Ward 25—E	75	15.75	53.97	15.35	54.02	15.99	56.13	16.48	13.89	16.44	147.93	177.51
Ward 24—B	77	21.25	107.37	20.36	98.98	29.20	141.76	15.73	95.24	35.79	188.73	341.66
Ward 24—A	79	15.58	62.50	15.78	63.38	14.49	49.38	15.93	.....	11.37	221.69	79.58

TABLE 74—Continued.

WARDS AND SANITARY DISTRICTS.	Average altitude (in feet) June 1, 1890.	AVERAGE ANNUAL DEATH RATES, EXCLUDING STILLBIRTHS. Per 1,000 of mean population. Aggregate. All ages.	Aggregate. Under 5 years.	White. Native. Total. All ages.	Total. Under 5 years.	Both parents native. All ages.	Both parents native. Under 5 years.	Foreign. All ages.	Foreign. Under 5 years.	Per 100,000 of mean population. Due to— Malarial fever.	Consumption.	Diarrheal diseases.
Ward 24—C	81	28.46	100.93	28.81	104.35	35.86	125.60	22.97	.....	29.14	291.38	359.36
Ward 24—D	81	9.97	39.47	11.36	41.97	14.32	41.67	7.11	.....	12.01	132.08	144.09
Ward 22—B	89	14.24	55.56	14.56	55.43	14.02	46.23	13.51	66.67	17.07	198.05	122.93
Ward 22—C	90	16.29	50.79	15.76	50.15	17.05	58.51	17.87	83.33	9.31	139.63	134.97
Ward 18—I	95	10.51	34.95	9.48	34.86	10.72	36.71	13.03	.....	.....	96.21	140.62
Ward 9—B	102	27.05	82.47	28.11	82.85	36.04	106.84	25.67	41.67	37.15	288.45	371.49
Ward 24—E	105	18.70	95.14	19.78	91.81	23.04	114.23	14.54	.....	31.16	224.38	193.22
Ward 22—D	107	19.69	68.03	19.62	67.89	18.47	63.15	19.88	68.18	28.06	214.61	216.26
Ward 8—C	115	25.25	89.46	27.28	90.48	32.72	99.25	21.22	53.92	24.81	351.20	297.76
Ward 8—D	118	26.33	91.67	31.30	94.62	23.91	88.54	18.83	23.81	35.74	214.44	274.01
Ward 9—A	118	23.91	105.17	22.28	104.24	21.39	81.05	25.98	70.51	21.04	345.12	223.06
Ward 9—C	136	25.87	113.10	28.24	115.20	57.14	217.95	21.28	.....	25.48	280.33	305.81
RECAPITULATION BY GROUPS.												
Districts under 20 feet in altitude		27.67	100.69	29.96	101.64	33.47	105.59	23.72	57.31	32.47	304.50	346.41
Districts 20 to 40 feet in altitude		25.96	99.60	26.89	100.27	28.54	97.88	23.96	58.35	34.26	304.70	301.02
Districts 40 to 60 feet in altitude		20.78	83.21	21.29	82.67	21.83	81.56	19.04	48.64	31.10	247.23	220.75
Districts 60 to 80 feet in altitude		17.02	69.14	16.87	67.63	17.45	67.32	16.61	37.04	25.60	195.19	140.67
Districts 80 to 100 feet in altitude		15.50	56.18	15.27	56.10	15.90	54.02	15.01	24.51	13.27	171.27	160.42
Districts 100 feet and over in altitude		23.54	85.86	24.00	85.85	25.14	87.72	22.23	53.62	28.09	287.59	268.72

It will be seen from these tables that for the sanitary districts in New York which are under 20 feet in average altitude the average death rate is 31.48, while for those from 20 to 40 feet high it is 28.25; for those from 40 to 60 feet high it is 24.79; for those from 60 to 80 feet high it is 21.34, and for those from 80 to 100 feet high it is 17.88. In other words, the average death rate decreases as the average altitude increases. The exception to this rule is for the districts 100 feet or more in altitude, where the death rate is 21.06. If, however, we take the death rates of children under 5 years of age we find that the decrease continues to the higher altitude, the rates being for the districts under 20 feet high, 118.59; for those from 20 to 40 feet high, 110.60; for those from 40 to 60 feet high, 100.63; for those from 60 to 80 feet high, 108.44; for those from 80 to 100 feet high it is 74.45, and for those 100 feet and over it is 64.05. Much the same gradation occurs in Brooklyn, where the death rates for the districts under 20 feet in average altitude was 27.67; for those from 20 to 40 feet high, 25.96; for those from 40 to 60 feet high, 20.78; for those from 60 to 80 feet high, 17.02; for those from 80 to 100 feet high, 15.50. Here again in the districts 100 feet and over the death rates are higher, being 23.54.

In New York the districts 100 feet and over in altitude are 12 H, showing an aggregate death rate of 17.33, and ward 24, having an aggregate death rate of 22.06, per 1,000 of population, and a death rate from malarial fever of 84.38 against a city average of 24.62 per 100,000 of population.

In Brooklyn the districts over 100 feet in height are 9 B, death rate 27.05; 24 E, death rate, 18.70; 22 D, death rate, 19.69; 8 C, death rate, 25.25; 8 D, death rate, 26.33; 9 A, death rate, 23.91; and 9 C, death rate, 25.87.

The relations of altitude to the proportion of deaths caused by malarial fever, consumption, and diarrheal diseases are indicated by the table. They are well marked only for the deaths from consumption and diarrheal diseases. Thus, in New York city, in the districts under 20 feet in altitude, the deaths from consumption were 404.63 per 100,000 of the mean population; in those from 20 to 40 feet high, 378.09; in those from 40 to 60 feet high, 291.27; in those from 60 to 80 feet high, 231.35; and in those from 80 to 100 feet high, 192.42.

In Brooklyn the corresponding figures are for altitudes under 20 feet, 304.50; for those from 20 to 40 feet high, 304.70; for those from 40 to 60 feet high, 247.23; for those from 60 to 80 feet high, 195.19; and for those 80 to 100 feet high, 171.27.

In each city the proportion of deaths from consumption increases in the districts having an average altitude of 100 feet and over, it being in New York 290.89 and in Brooklyn 287.59.

Table 75 shows for New York and Brooklyn the area and proportion of area, the number and proportion of the population at different altitudes, and the corresponding death rates for the census year, with distinction of nativity and parental nativity.

TABLE 75.

CHARACTERISTICS OF ALTITUDE.	New York.	Brooklyn.
Average altitude (in feet)	65	47
Total area (in acres)	25,818	18,084
Population, aggregate	1,515,301	806,343
Native, white	852,641	534,672
Both parents native	270,487	222,573
Foreign, white	636,986	260,725
Death rates per 1,000 of population:		
Aggregate	28.63	25.54
Native, white	32.18	26.55
Both parents native	30.36	26.87
Foreign, white	23.52	23.06
Altitude under 20 feet:		
Area (in acres)	3,044	2,617
Per cent in this group	11.79	14.47
Population, aggregate	426,608	180,999
Per cent in this group	28.15	22.45
Native, white	242,164	112,232
Per cent in this group	28.40	20.99
Both parents native	64,800	33,668
Per cent in this group	23.96	15.13
Foreign, white	180,867	67,336
Per cent in this group	28.39	25.83
Death rates per 1,000 of population:		
Aggregate	32.09	29.68
Native, white	36.09	32.30
Both parents native	38.49	36.53
Foreign, white	26.44	24.89
Altitude 20 to 40 feet:		
Area (in acres)	3,261	8,539
Per cent in this group	12.63	47.22
Population, aggregate	632,000	307,290
Per cent in this group	41.71	38.11
Native, white	337,111	199,977
Per cent in this group	39.54	37.40
Both parents native	97,381	74,632
Per cent in this group	36.00	33.53
Foreign, white	281,374	103,904
Per cent in this group	44.17	39.85
Death rates per 1,000 of population:		
Aggregate	30.10	27.15
Native, white	34.83	28.22
Both parents native	32.93	29.20
Foreign, white	23.82	24.79
Altitude 40 to 60 feet:		
Area (in acres)	5,579	2,501
Per cent in this group	21.61	13.83
Population, aggregate	268,163	193,627
Per cent in this group	17.70	24.01
Native, white	153,585	135,877
Per cent in this group	18.01	25.41
Both parents native	51,379	69,526
Per cent in this group	18.99	31.24
Foreign, white	109,802	54,503
Per cent in this group	17.24	20.90
Altitude 40 to 60 feet—Continued.		
Death rates per 1,000 of population:		
Aggregate	25.17	21.66
Native, white	28.26	22.54
Both parents native	25.57	22.73
Foreign, white	20.68	19.01
Altitude 60 to 80 feet:		
Area (in acres)	1,145	1,067
Per cent in this group	4.43	5.90
Population, aggregate	97,042	61,723
Per cent in this group	*6.40*	*7.65*
Native, white	59,369	44,440
Per cent in this group	6.96	8.31
Both parents native	28,864	26,780
Per cent in this group	10.67	12.03
Foreign, white	35,193	15,340
Per cent in this group	5.52	5.88
Death rates per 1,000 of population:		
Aggregate	20.82	19.13
Native, white	22.62	18.65
Both parents native	21.69	19.57
Foreign, white	17.65	19.04
Altitude 80 to 100 feet:		
Area (in acres)	4,147	579
Per cent in this group	16.06	3.20
Population, aggregate	64,682	17,310
Per cent in this group	4.27	2.15
Native, white	42,293	12,236
Per cent in this group	4.96	2.29
Both parents native	19,729	6,426
Per cent in this group	7.29	2.89
Foreign, white	21,437	4,823
Per cent in this group	*3.37*	*1.85*
Death rates per 1,000 of population:		
Aggregate	19.40	19.70
Native, white	20.55	20.76
Both parents native	19.67	23.19
Foreign, white	17.49	17.00
Altitude 100 feet and over:		
Area (in acres)	8,642	2,781
Per cent in this group	33.47	15.38
Population, aggregate	26,806	45,394
Per cent in this group	1.77	5.63
Native, white	18,119	29,910
Per cent in this group	2.13	5.59
Both parents native	8,334	11,541
Per cent in this group	3.08	5.19
Foreign, white	8,313	14,819
Per cent in this group	1.31	5.68
Death rates per 1,000 of population:		
Aggregate	23.91	25.60
Native, white	22.24	26.21
Both parents native	22.08	27.64
Foreign, white	27.67	23.69

From this table it will be seen that the average altitude in Brooklyn is lower than in New York, but that a smaller proportion of the population of Brooklyn resides in the low districts than is the case in New York. The lower districts are, as a rule, less desirable places of residence, and contain a greater proportion of the foreign white population than of the native whites with native parents. But the death rates of the native whites are also greater than those of the foreign in other districts, because the former contain a greater proportion of infants and children than the latter.

The relation between the density of population and the death rates in the different localities is not as evident as that between the altitudes and death rates, but is nevertheless interesting. In New York, in those districts having a population of less than 100 persons to the acre, the death rate was 22.76; in those having a population of from 100 to 200 persons to the acre it was 29.53; in those having a population of from 200 to 300 persons to the acre it was 28.73; and in those having a population of 300 persons and over to the acre it was 27.57. It must be remembered, however, that in the most crowded or tenement house districts the proportion of the foreign white population to the native white population is greater than it is in other localities, and the relatively smaller number of young children among the foreign white population tends to decrease the death rate in these crowded districts. The age distribution of the population must be constantly borne in mind in considering these rates.

If we take the native white of native parents alone the gradation of the death rates in relation to density of population is well marked. Thus, in New York city, in districts having a density of less than 100 persons to the acre the death rate of this class was 21.80; in those districts having from 100 to 200 persons to the acre it was 31.04; in those districts having from 200 to 300 persons to the acre it was 34.11, and in those having 300 or more persons to the acre it was 43.12.

In Brooklyn, for the native whites of all ages, the death rate in those districts containing less than 40 persons to the acre was 21.10; in those containing from 40 to 80 persons to the acre, 22.26; in those containing from 80 to 120 persons to the acre, 25.28; and in those containing 120 or more persons to the acre it was 29.31.

Table 76 shows the area and population of the different districts in New York on June 1, 1890, and the average annual death rates during the 6 years ending May 31, 1890, per 1,000 of mean population, with distinction of color, nativity, and parental nativity, according to density of population.

TABLE 76.

JUNE 1, 1890.				AVERAGE ANNUAL DEATH RATES FOR 6 YEARS, EXCLUDING STILLBIRTHS.						
					White.					
					Native.				Foreign.	
					Total.		Both parents native.			
Districts and groups of districts.	Total area (in acres).	Population.	Persons to the acre, excluding parks and cemeteries.	Aggregate.	All ages.	Under 5 years.	All ages.	Under 5 years.	All ages.	Under 5 years.
Total	25,818	1,515,301	74.66	27.66	31.01	110.37	30.22	112.41	23.15	74.28
Ward 11—A	32	24,435	763.59	25.43	43.85	94.51	59.20	187.17	14.71	50.10
Ward 10—A	52	30,490	586.35	25.90	48.80	96.05	82.31	323.23	14.07	43.75
Ward 6—C	26	14,586	561.00	41.87	63.91	159.30	59.93	254.90	25.71	150.25
Ward 17—B	54	30,100	557.41	25.96	34.96	95.77	48.73	117.92	18.95	45.61
Ward 13—A	52	27,664	532.00	24.29	42.29	84.54	66.21	186.77	13.45	47.89
Ward 10—B	54	27,106	501.96	24.55	38.74	89.18	52.70	149.24	15.94	38.70
Ward 7—C	50	22,484	449.68	25.76	31.12	89.38	55.15	154.18	20.51	46.38
Ward 17—D	41	15,651	447.17	23.23	26.29	94.64	33.65	74.93	20.12	123.46
Ward 17—F	42	16,910	445.00	29.95	33.40	112.91	42.56	104.88	26.01	88.71
Ward 19—L	49	19,978	407.71	28.70	36.45	166.63	47.58	139.67	20.70	45.79
Ward 14—B	47	18,913	402.40	39.71	58.75	160.70	58.41	192.03	25.01	120.75
Ward 11—B	50	19,785	395.70	24.10	27.46	92.44	33.80	96.47	20.34	65.08
Ward 17—A	51	17,778	348.59	26.81	33.31	112.72	40.03	119.40	21.06	56.86
Ward 13—O	84	28,477	339.01	22.55	25.95	96.41	28.79	107.34	18.02	74.71
Ward 22—B	104	34,307	329.88	27.37	29.37	110.64	32.27	108.92	23.35	127.66
Ward 13—B	57	18,220	319.65	28.60	33.83	97.98	47.25	135.03	21.78	57.35
Ward 4—B	35	10,626	303.60	41.83	45.99	139.87	45.05	161.13	37.81	109.29
Ward 7—D	46	13,503	293.54	28.50	30.72	105.60	41.27	137.39	25.29	32.16
Ward 6—B	23	6,576	285.91	39.40	45.92	193.56	53.22	143.33	32.86	105.07
Ward 17—C	43	11,772	273.77	22.22	23.25	94.43	30.12	90.04	21.09	33.33
Ward 21—H	49	13,179	268.96	36.49	37.89	145.73	53.23	152.10	34.66	126.67
Ward 9—B	79	21,230	268.73	27.63	27.92	107.86	28.01	107.47	27.52	111.11
Ward 15—A	37	9,671	261.38	34.03	47.33	153.59	53.34	200.58	22.02	88.89
Ward 22—E	92	23,886	259.63	25.93	27.25	107.10	26.74	107.08	23.11	76.67
Ward 11—C	52	12,694	244.12	29.37	33.38	98.58	44.75	117.65	24.17	69.65
Ward 20—E	65	15,820	243.38	32.90	35.43	117.80	42.23	111.96	29.05	75.16
Ward 19—F	82	19,834	241.88	26.94	30.19	107.82	34.00	107.26	22.97	69.44
Ward 19—P	100	23,741	237.41	17.48	20.31	62.29	24.08	65.26	13.29	79.23
Ward 11—D	84	18,512	220.38	27.13	28.79	96.73	32.15	82.05	24.70	129.17
Ward 20—B	75	16,423	218.97	32.35	32.67	140.18	34.86	157.79	28.19	102.56
Ward 19—H	90	19,117	212.41	30.46	34.48	125.52	35.21	123.22	24.52	94.77
Ward 7—A	47	9,959	211.89	39.13	45.12	141.64	84.25	201.72	32.00	41.67
Ward 8—C	56	11,828	211.21	30.96	34.70	116.09	32.62	109.77	26.00	166.67
Ward 18—E	82	16,848	210.60	27.34	26.77	104.69	24.27	105.39	28.02	104.17

TABLE 76—Continued.

Districts and groups of districts.	JUNE 1, 1890. Total area (in acres).	Population.	Persons to the acre, excluding parks and cemeteries.	AVERAGE ANNUAL DEATH RATES FOR 6 YEARS, EXCLUDING STILLBIRTHS. Aggregate.	White. Native. Total. All ages.	Total. Under 5 years.	Both parents native. All ages.	Both parents native. Under 5 years.	Foreign. All ages.	Foreign. Under 5 years.
Ward 20—F	62	12,625	203.63	27.87	29.10	124.07	28.26	115.58	26.65	106.67
Ward 19—M	52	10,571	203.29	27.34	42.74	165.78	54.89	135.88	15.15	31.91
Ward 21—C	58	11,786	203.21	31.04	33.72	120.41	38.55	117.62	29.86	40.00
Ward 19—B	99	19,699	198.98	27.07	29.16	119.75	32.45	121.32	24.03	86.81
Ward 19—E	87	17,179	197.46	26.42	30.03	130.48	32.23	128.17	21.45	75.76
Ward 21—B	50	9,777	195.54	25.90	27.15	113.54	24.32	101.85	23.96	52.08
Ward 22—A	116	22,586	194.71	32.44	34.21	117.51	35.46	115.34	29.30	84.58
Ward 20—D	79	15,346	194.25	25.85	26.59	120.83	28.60	130.98	24.02	71.43
Ward 7—B	59	11,420	193.56	32.56	35.48	108.81	53.83	135.06	28.43	40.74
Ward 19—C	81	15,550	191.98	35.50	40.06	135.10	51.89	147.09	29.65	145.83
Ward 8—A	57	10,872	190.74	31.39	31.22	116.74	35.64	123.72	31.47	153.85
Ward 16—D	93	17,705	190.38	20.57	20.21	89.57	20.47	91.37	19.82	136.36
Ward 18—C	129	24,445	189.50	36.15	38.88	134.86	54.40	147.73	32.58	87.30
Ward 12—I	126	23,358	185.88	34.38	40.65	143.56	41.44	138.78	25.22	144.28
Ward 17—E	59	10,947	185.54	27.47	27.57	125.90	25.43	114.33	27.38	79.17
Ward 12—M	214	39,520	184.67	32.85	37.64	133.71	38.47	126.30	25.17	106.00
Ward 16—B	91	16,594	182.35	30.11	27.86	116.41	28.63	123.97	34.54	144.93
Ward 9—D	80	14,045	175.56	24.41	23.24	102.70	23.63	97.80	27.53	51.28
Ward 14—A	55	9,181	166.93	44.67	68.35	182.18	78.25	227.82	27.17	107.00
Ward 12—C	72	11,936	165.78	28.63	35.76	110.34	44.13	115.28	19.02	102.94
Ward 21—E	52	8,268	159.00	23.94	24.30	118.35	22.51	95.67	23.60	71.43
Ward 21—G	40	6,304	157.60	23.46	23.73	107.44	19.08	95.99	23.07	129.63
Ward 20—A	78	12,134	155.56	36.20	37.20	134.63	44.92	149.17	34.18	90.91
Ward 4—A	47	7,183	152.83	42.05	41.01	151.03	49.25	160.74	43.43	83.33
Ward 12—G	119	17,876	150.22	33.24	45.11	123.80	62.85	160.42	19.38	72.92
Ward 8—B	57	8,520	149.47	41.28	53.56	148.88	62.00	180.72	27.30	138.89
Ward 20—C	84	11,979	142.61	31.49	31.77	113.37	38.42	120.44	30.39	58.14
Ward 18—B	83	11,989	142.17	24.06	25.07	133.45	26.17	129.97	22.79	133.33
Ward 1—A	83	8,129	137.78	47.43	48.05	166.67	61.55	149.43	46.83	477.78
Ward 22—C	104	14,262	137.13	22.51	23.73	134.56	21.45	143.76	21.31	500.00
Ward 12—O	227	27,857	135.23	28.89	30.41	122.62	32.95	124.67	25.37	77.78
Ward 9—A	68	9,137	134.37	30.43	28.59	102.25	26.81	94.51	33.99	136.36
Ward 22—D	75	10,007	133.43	35.47	36.86	129.71	43.50	121.73	33.60	97.22
Ward 12—B	102	13,345	130.83	24.93	26.16	106.49	31.53	102.68	22.72	270.83
Ward 22—G	80	10,237	127.96	31.02	40.80	108.12	57.93	127.76	23.63	103.60
Ward 19—N	114	14,421	126.50	15.26	16.41	85.05	17.64	78.92	13.66	64.10
Ward 16—A	66	8,001	121.23	33.06	32.48	117.61	33.33	109.14	34.06	89.74
Ward 22—I	90	10,467	116.30	18.04	18.63	86.52	17.58	83.96	17.01	62.50
Ward 9—C	89	10,013	112.51	28.37	28.26	106.01	29.20	108.39	28.28	145.83
Ward 18—D	71	7,024	108.06	13.20	14.54	133.33	12.37	81.30	11.05	333.33
Ward 22—F	92	9,844	107.00	21.36	21.74	112.17	17.88	111.78	20.74	266.67
Ward 12—D	66	7,001	106.08	27.86	29.10	110.50	36.15	113.74	25.43	68.63
Ward 19—K	69	7,275	105.43	14.55	15.37	74.86	19.91	58.17	13.46	.....
Ward 15—C	81	7,081	99.73	22.34	23.23	112.72	20.62	90.70	20.47	83.33
Ward 15—B	48	4,759	99.15	38.14	44.49	175.57	38.52	366.67	28.85	111.11
Ward 21—D	58	5,451	93.98	15.19	17.84	77.63	15.08	50.72	11.33	55.56
Ward 5—A	80	7,259	90.74	38.89	40.53	151.78	47.70	153.47	36.61	115.38
Ward 21—A	58	5,071	87.43	19.14	22.45	98.04	19.42	54.46	15.01	55.56
Ward 19—G	270	11,533	86.07	28.62	36.14	175.21	30.65	88.78	17.22	266.67
Ward 19—I	77	6,471	84.04	31.81	40.81	116.05	39.83	126.26	21.74	65.48
Ward 16—C	82	6,834	83.34	29.60	28.91	115.68	25.96	110.84	30.67	10.42
Ward 12—F	112	8,432	75.29	26.10	27.45	105.82	33.18	112.46	22.92	41.67
Ward 12—N	385	25,744	70.73	19.40	20.19	84.82	18.00	72.64	17.71	105.56
Ward 21—F	45	3,183	70.73	17.67	22.71	89.39	22.83	78.28	11.20	41.67
Ward 12—E	167	10,648	68.70	16.18	16.94	58.70	15.70	53.10	14.73	34.19
Ward 19—D	100	6,815	68.15	19.05	22.33	106.97	20.66	72.30	13.51	83.34
Ward 19—A	117	7,275	67.99	22.05	26.66	109.30	24.61	86.78	16.29	55.56
Ward 18—A	60	3,864	65.49	21.41	24.25	133.66	18.41	65.36	17.49	666.67
Ward 5—B	82	5,126	62.51	33.10	36.17	125.71	41.60	134.22	29.29	133.33
Ward 15—D	63	3,888	61.71	27.99	28.71	169.40	27.17	123.56	27.14	277.78
Ward 22—M	370	4,628	58.58	9.36	9.83	54.57	9.78	49.08	8.61	33.33
Ward 22—H	116	6,457	57.65	22.99	25.83	83.75	28.52	100.75	18.30	39.22

TABLE 76—Continued.

Districts and groups of districts.	JUNE 1, 1890. Total area (in acres).	Population.	Persons to the acre, excluding parks and cemeteries.	AVERAGE ANNUAL DEATH RATES FOR 6 YEARS, EXCLUDING STILLBIRTHS. Aggregate.	White. Native. Total. All ages.	Native. Total. Under 5 years.	Native. Both parents native. All ages.	Native. Both parents native. Under 5 years.	Foreign. All ages.	Foreign. Under 5 years.
Ward 19—R	120	6,910	57.58	8.09	21.06	763.57	14.48	611.11	2.54	166.67
Ward 22—K	94	4,853	51.63	8.81	9.45	55.81	9.58	56.35	8.12	83.34
Ward 12—R	241	11,328	47.00	16.32	15.19	65.21	14.54	60.38	18.98	18.52
Ward 12—L	166	7,471	45.01	16.68	16.64	62.42	18.80	59.34	17.06	55.56
Ward 6—A	51	1,957	44.48	32.29	32.80	119.37	47.34	222.22	31.44	166.67
Ward 12—H	168	6,669	43.03	17.33	14.74	52.19	9.32	32.77	23.48	74.07
Ward 3	102	3,765	36.91	32.08	30.92	134.72	35.08	171.05	33.83	.....
Ward 12—A	555	5,107	29.02	14.38	14.08	67.86	9.96	50.47	15.45	55.56
Ward 1—B	104	2,521	24.24	38.20	36.88	123.70	58.33	120.37	41.74	.....
Ward 12—P	237	4,891	20.64	24.38	26.72	104.05	24.94	89.24	20.13	37.04
Ward 12—K	279	4,700	19.58	16.90	16.76	65.60	13.67	55.01	17.32	125.00
Ward 22—L	147	2,343	17.89	21.38	20.30	79.29	22.40	79.21	24.96	.....
Ward 23	4,241	53,948	13.43	23.64	23.95	82.34	26.40	80.72	22.85	55.02
Ward 2	76	929	12.22	56.77	54.55	172.84	73.98	120.00	59.20	.....
Ward 12—AB	300	2,653	8.84	28.20	31.76	179.08	11.66	54.64	23.40	750.00
Ward 12—S	2,343	16,510	7.61	19.11	19.01	67.91	19.05	67.24	19.86	40.54
Ward 1—C	77	472	6.13	16.51	19.41	62.96	17.05	35.35	12.52	.....
Ward 24	8,474	20,137	4.58	22.06	20.39	66.76	21.42	57.69	25.17	39.22
RECAPITULATION BY GROUPS.										
Under 100 to the acre	20,161	297,683	14.77	22.76	23.81	94.30	21.80	80.23	20.92	68.28
100 to 200 to the acre	3,503	540,533	154.31	29.53	31.51	123.37	31.04	122.41	26.51	101.12
200 to 300 to the acre	1,274	299,575	235.15	28.73	31.42	110.49	34.11	114.66	25.04	76.21
300 and over	880	377,510	428.99	27.57	36.56	104.42	43.12	131.41	19.72	63.20

Table 77 shows the area and population of the different districts in Brooklyn on June 1, 1890, and the average annual death rates during the 6 years ending May 31, 1890, per 1,000 of mean population, with distinction of color, nativity, and parental nativity, according to density of population.

TABLE 77.

Districts and groups of districts.	JUNE 1, 1890. Total area (in acres).	Population.	Persons to the acre, excluding parks, cemeteries, and water surface.	AVERAGE ANNUAL DEATH RATES FOR 6 YEARS, EXCLUDING STILLBIRTHS. Aggregate.	White. Native. Total. All ages.	Native. Total. Under 5 years.	Native. Both parents native. All ages.	Native. Both parents native. Under 5 years.	Foreign. All ages.	Foreign. Under 5 years.
Total	18,084	806,343	49.87	24.17	25.00	93.78	25.48	91.02	22.26	54.96
Ward 16—B	59	12,494	211.76	28.81	33.42	104.17	39.82	105.72	22.43	54.60
Ward 16—C	69	14,164	205.28	31.24	35.41	118.77	46.76	120.27	25.40	63.22
Ward 5—B	58	10,450	180.17	31.75	31.42	126.90	39.22	116.52	31.08	13.51
Ward 5—A	54	9,725	180.09	28.61	31.33	139.22	31.41	106.78	26.30	53.56
Ward 16—D	77	13,477	175.03	27.43	32.29	93.50	43.75	108.70	20.35	26.32
Ward 19—C	104	17,928	172.38	23.68	26.14	86.70	30.60	90.74	18.70	44.72
Ward 21—C	92	14,918	162.15	28.34	32.04	108.03	39.78	103.59	22.18	102.15
Ward 11—A	130	12,005	153.91	30.05	31.09	124.80	41.96	139.15	28.38	108.33
Ward 14—C	61	9,149	149.98	28.41	29.54	112.24	31.95	117.72	26.28	39.47
Ward 15—C	88	13,113	149.01	23.98	23.90	97.32	28.27	100.61	24.33	97.22
Ward 21—A	71	9,982	140.59	23.93	25.86	82.58	37.26	113.64	20.06	36.59
Ward 3—A	76	10,582	139.24	22.90	23.47	85.72	29.42	99.62	21.82	80.00
Ward 18—D	99	13,566	137.03	29.85	37.69	117.46	56.22	136.03	18.50	36.67

TABLE 77—Continued.

Districts and groups of districts.	JUNE 1, 1890. Total area (in acres).	Population.	Persons to the acre, excluding parks, cemeteries, and water surface.	AVERAGE ANNUAL DEATH RATES FOR 6 YEARS, EXCLUDING STILLBIRTHS. Aggregate.	White. Native. Total. All ages.	Total. Under 5 years.	Both parents native. All ages.	Both parents native. Under 5 years.	Foreign. All ages.	Foreign. Under 5 years.
Ward 10—A	109	14,064	133.94	24.53	24.87	96.65	28.30	96.49	23.53	87.30
Ward 6—C	83	10,977	132.25	20.08	21.03	89.01	21.21	78.92	18.46	19.23
Ward 6—B	136	17,924	131.79	31.05	37.78	114.95	56.50	139.22	23.52	60.76
Ward 16—A	45	5,585	124.11	20.22	18.23	66.45	20.76	66.57	23.47	33.33
Ward 15—B	77	9,492	123.27	24.80	23.75	87.75	25.66	84.59	28.45	64.82
Ward 10—B	109	13,189	121.00	30.31	33.04	111.66	44.35	116.82	26.40	39.86
Ward 6—A	77	8,792	114.18	20.60	22.79	87.74	28.82	85.71	16.82	37.04
Ward 13—C	63	7,074	112.29	22.07	21.36	89.06	22.82	81.53	24.03	83.33
Ward 4	112	12,324	110.04	25.53	25.28	109.84	27.89	112.16	24.65	11.11
Ward 11—B	123	10,688	109.06	22.83	22.33	115.36	23.28	123.49	22.23	138.89
Ward 13—B	83	8,924	107.52	22.62	23.19	91.14	25.24	91.40	21.37	45.98
Ward 20—A	186	10,043	106.84	24.33	23.21	83.90	25.52	82.67	27.26	33.33
Ward 14—B	83	8,843	106.54	33.56	39.54	128.11	35.71	115.73	25.54	50.85
Ward 18—E	128	13,588	106.16	24.28	27.59	84.86	39.29	112.73	18.77	61.11
Ward 17—D	130	13,149	101.15	21.94	21.69	77.22	22.64	77.59	22.57	43.48
Ward 1—A	116	10,530	98.41	18.53	20.02	71.30	20.12	74.07	16.33	21.74
Ward 7—A	105	10,286	97.96	26.09	26.05	91.84	34.09	107.28	26.15	74.07
Ward 22—A	145	14,122	97.39	14.48	14.76	52.69	14.71	47.21	13.68	24.69
Ward 3—B	84	8,172	97.29	19.61	19.85	83.02	19.38	80.67	18.68	102.56
Ward 17—C	102	9,701	95.11	32.54	37.24	121.48	45.66	125.04	25.31	65.66
Ward 2	95	8,986	94.59	34.40	38.86	137.28	43.92	124.53	29.12	51.95
Ward 21—E	132	11,209	84.92	22.43	23.28	84.30	24.84	78.84	20.38	16.67
Ward 21—B	80	6,697	83.71	23.50	23.55	93.39	25.84	98.15	23.29	9.80
Ward 22—F	129	10,736	83.22	26.29	26.50	98.45	26.88	93.80	25.90	114.04
Ward 12—C	193	15,912	82.45	29.88	31.90	113.31	40.46	116.67	26.75	86.31
Ward 17—A	116	9,512	82.00	26.21	28.71	99.44	31.99	104.65	21.84	96.15
Ward 14—A	82	6,660	81.22	26.86	28.65	97.97	35.61	106.67	23.93	66.67
Ward 7—D	103	8,242	80.02	20.21	19.41	86.45	21.45	80.09	23.47	138.89
Ward 1—B	120	9,510	79.25	19.59	21.16	92.81	21.85	99.40	16.82	150.00
Ward 23—A	134	9,553	75.82	19.16	18.75	73.63	19.87	74.45	20.36	55.56
Ward 18—F	96	7,238	75.40	19.63	21.02	73.92	24.17	79.34	16.14	55.56
Ward 18—A	141	10,521	74.62	37.76	40.23	138.23	53.74	144.08	32.71	41.67
Ward 25—B	117	8,665	74.06	16.66	16.32	57.62	17.24	57.26	17.96	133.33
Ward 21—D	100	7,312	73.12	16.77	16.43	65.15	16.14	62.63	18.25	37.04
Ward 15—A	69	5,025	72.83	29.74	36.98	109.93	38.10	112.24	26.67	83.33
Ward 7—B	116	8,441	72.77	18.98	18.70	82.44	17.63	68.77	20.78	55.56
Ward 10—C	95	6,778	71.35	27.16	27.91	94.04	31.15	79.98	25.87	73.53
Ward 7—C	123	8,757	71.20	17.51	16.97	63.55	17.54	64.76	18.64	.....
Ward 23—B	134	9,479	70.74	16.78	17.52	60.08	17.98	58.58	14.00	.....
Ward 13—A	80	5,630	70.38	26.03	25.98	119.16	28.68	108.54	26.16	20.83
Ward 20—C	112	7,880	70.36	17.97	18.07	76.04	19.12	93.14	17.92	83.33
Ward 8—C	587	10,410	70.34	25.25	27.28	90.48	32.72	99.25	21.22	53.92
Ward 19—B	140	9,541	68.15	16.71	15.59	62.57	17.16	57.32	21.06	.....
Ward 9—A	123	8,315	67.60	23.91	22.28	104.24	21.39	81.05	25.98	70.51
Ward 23—C	154	10,316	66.99	16.52	16.51	66.10	16.92	60.32	16.92	30.30
Ward 20—B	112	6,213	64.05	15.52	16.03	63.38	16.97	63.75	14.67	.....
Ward 22—D	710	12,378	63.15	19.69	19.62	67.89	18.47	63.15	19.88	68.18
Ward 18—G	101	6,268	62.06	13.93	15.17	48.23	17.24	44.80	10.98	83.33
Ward 9—B	132	8,008	60.67	27.05	28.11	82.85	36.04	106.84	25.67	41.67
Ward 18—H	120	6,919	57.66	13.03	12.51	42.51	13.02	36.64	14.92	33.33
Ward 25—A	219	12,584	57.46	22.86	22.13	90.06	22.45	94.90	20.70	41.67
Ward 12—A	169	6,688	56.20	31.10	38.30	112.65	42.02	121.38	23.03	69.44
Ward 17—B	123	6,867	55.83	21.91	23.81	102.61	24.07	102.71	17.08	44.44
Ward 25—C	162	8,896	54.91	20.00	19.13	76.18	18.02	67.03	25.24	125.00
Ward 25—D	154	7,948	51.61	22.95	23.22	81.37	28.86	92.43	21.11	27.78
Ward 18—C	77	3,950	51.30	32.93	36.99	112.65	56.26	121.21	25.89	74.07
Ward 8—B	479	14,844	50.49	30.28	35.37	115.38	35.15	115.90	22.79	73.33
Ward 19—A	178	8,775	49.30	23.44	23.24	87.98	22.70	76.51	24.03	75.76
Ward 14—D	54	2,594	48.04	39.55	41.89	138.81	34.06	126.62	35.21	83.33
Ward 22—B	136	5,984	44.00	14.24	14.56	55.43	14.02	46.23	31.51	66.67
Ward 18—B	61	2,435	39.92	28.24	31.68	84.70	48.90	84.47	22.97	23.81
Ward 25—E	166	6,545	39.43	15.75	15.35	54.02	15.99	56.13	16.48	13.89
Ward 22—C	112	4,390	39.20	16.29	15.76	50.15	17.05	58.51	17.87	83.33

TABLE 77—Continued.

Districts and groups of districts.	JUNE 1, 1890. Total area (in acres).	Population.	Persons to the acre, excluding parks, cemeteries, and water surface.	AVERAGE ANNUAL DEATH RATES FOR 6 YEARS, EXCLUDING STILLBIRTHS. Aggregate.	White. Native. Total. All ages.	Native. Total. Under 5 years.	Native. Both parents native. All ages.	Native. Both parents native. Under 5 years.	Foreign. All ages.	Foreign. Under 5 years.
Ward 24—B	162	6,210	38.33	21.25	20.36	98.98	29.29	141.76	15.73	95.24
Ward 18—I	97	3,172	36.46	10.51	9.48	34.86	10.72	36.71	13.03	.....
Ward 17—E	53	1,914	36.11	17.26	17.16	64.34	11.57	51.44	17.47	27.78
Ward 24—A	131	3,555	27.14	15.58	15.78	63.38	14.49	49.38	15.93	.....
Ward 12—B	394	4,768	21.77	31.23	30.61	99.04	27.78	93.45	31.90	62.50
Ward 22—E	123	2,640	21.46	29.88	28.78	100.79	35.22	121.86	31.83	125.00
Ward 24—D	103	1,683	16.34	9.97	11.36	41.97	14.32	41.67	7.11	.....
Ward 24—C	131	2,081	15.89	28.46	28.81	104.35	35.86	125.60	22.97	.....
Ward 8—A	290	4,317	14.89	18.50	18.65	64.37	17.51	60.91	18.10	37.04
Ward 9—C	182	1,373	11.84	25.87	28.24	115.20	57.14	217.95	21.28	.....
Ward 26	4,225	29,505	7.25	20.91	21.59	74.30	23.16	77.66	18.90	61.40
Ward 18—K	1,145	7,303	7.09	21.50	23.77	67.87	27.69	68.30	17.33	21.74
Ward 24—E	654	3,242	4.96	18.70	19.78	91.81	23.04	114.23	14.54	.....
Ward 8—D	393	1,668	4.24	26.33	31.30	94.62	33.91	88.54	18.83	23.81
Ward 17—F	231	281	1.22	45.10	43.48	184.52	111.11	145.83	47.87	.....
RECAPITULATION BY GROUPS.										
Under 40 to the acre	8,653	87,082	10.71	19.41	21.10	74.94	21.95	76.87	19.49	42.11
40 to 80 to the acre	5,367	262,287	63.11	21.99	22.26	86.99	21.75	81.51	21.31	63.04
80 to 120 to the acre	2,467	224,190	95.77	24.85	25.28	96.21	26.18	94.85	22.78	57.13
120 and over to the acre	1,597	232,784	151.06	27.04	29.31	103.88	34.13	108.32	23.30	51.51

To give some idea of the relations between filled ground, vicinity of parks and open spaces, character of habitations and other local peculiarities, and the death rates of the different districts, the following general topographical descriptions of the two cities and of each ward and sanitary district therein are appended.