

## BALTIMORE, MARYLAND.

Baltimore is situated at the head of tide water and navigation, on the Patapsco river, 14 miles from Chesapeake bay and 170 miles from the Atlantic ocean. The site of the city is rolling, the variations in level being from 4 to 420 feet above mean sea level. The soil is loam and sand underlaid by red clay, the latter celebrated for brickmaking. The underlying rock, which rises to the surface in the northern portion of the city, is compact gneiss, very hard and close grained. Four streams traverse the city and empty into the harbor. Of these Jones and Gwynns falls are the largest, are open, and receive the drainage of that portion of the city contiguous to them. Harford and Chatsworth runs have been covered in to some extent and used as storm water drains.

The land area of the city includes 29.48 square miles, or 18,867 acres, and the harbor has 2.05 square miles, or 1,312 acres. The land area only is used for all purposes of calculation herein. For the whole city the number of persons to an acre is 23.03; houses to an acre, 3.82; persons to each mile of streets and alleys, 556.97; and persons to each dwelling, 6.02. There are 780 miles of streets and alleys, and of those 459 miles, or 58.85 per cent, are paved.

The water supply of Baltimore is ample and is distributed through 407 miles of mains. No record could be obtained as to the number of taps or the number of wells.

Baltimore has no system of sewers. House wastes are carried into large cesspools, while the water from the kitchen and butler's pantry pours into the gutters. Owing to the large amount of cobblestone pavement in the city nearly all this matter percolates into the soil. Where houses are without plumbing privies are used, many being surface. There are 28 miles of storm water drains in Baltimore, which are theoretically used exclusively for the removal of surface water. They vary in diameter from 4 to 16 feet, the proportion over 30 inches being 92 per cent.

As the ward boundaries of the city of Baltimore have no relation to surface topography and include areas which are very irregular in form and which are very unsatisfactory for statistical purposes, certain sanitary districts within these ward lines have been outlined for the purposes of this bulletin.

The ward lines of the city have been changed several times since 1880 and the apparently unequal changes in ward population between 1880 and 1890 are therefore probably due to the shifting of boundary lines more than to actual variations in the ratio of increase in different wards. Some such variations no doubt occurred, but probably not to the extent of working a decrease of population in any ward during the decade, as might be inferred from comparison of the ward figures for 1880 and 1890.

There were also changes in several of the wards of the city in the month of March, 1890, when the work on these vital statistics had progressed to a considerable extent upon the ward lines prior to that date. It being inadvisable, if not impracticable, to make changes in the work done up to that date, the changes in ward lines referred to were ignored, and the data contained in this report therefore relate to the wards as they existed prior to March, 1890.

Owing to the changes referred to, the population of each ward as given at the Tenth Census could not be used to compute mean population for the ward areas as they existed March 1, 1890, upon which to base average annual death rates for the 6 years, and such rates are therefore based upon mean population for wards and sanitary districts obtained by assuming a uniform ratio of increase.

In the following detailed statement concerning wards and sanitary districts, the altitude, area, number of dwellings, population and density figures given, and also the characteristics mentioned, relate to the 1st day of June, 1890, while the rates (unless otherwise specified) are the average annual rates for 6 years.

The following is a brief description of the wards and districts:

### WARD 1.

This ward was in the extreme southeastern portion of the city. At one time two main branches of the Harford run united near the northern limit of the ward and flowing through the center entered the harbor. Total area, 595 acres; total population, 22,162, of which 21,737 were whites and 425 were colored; total number of dwellings, 3,603. There were 37.25 persons and 6.06 dwellings to each acre of total area, and 6.15 persons to each dwelling. The elevation ranged from 4 to 120 feet above mean sea level.

## VITAL STATISTICS.

**SANITARY DISTRICT A.**—Bounded by Baltimore street, the city limits, Patapsco, Lancaster, and Burns streets, Essex, Collington, and Eastern avenues, and Ann, Gough, Durham, Pratt, and Castle streets.

Area, 529 acres; population, 20,333, of which 19,913 were white and 420 were colored. The average population density was 38.44 persons to the acre. The ground rose rapidly toward the north, the lowest point being 6 and the highest 120 feet above mean sea level.

This district contained mostly residences of laborers and mechanics, many of whom owned their homes. There were large iron works and two large parks in the district.

The death rate for the 6 years was greater than the average among the whites and somewhat less among the colored, but the comparatively small number of the latter class may account for this.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District A.....	24.09	28.13	89.02	139.64	70.73	112.13	313.10	39.68	277.74

From this statement it will be seen that malarial fever, diphtheria and croup, and diarrheal diseases caused more than the average number of deaths per 100,000 of population and that typhoid fever and consumption caused less than the average number.

**SANITARY DISTRICT B.**—Bounded by Canton and Essex avenues, Burns, Lancaster, and Patapsco streets, the Northwest branch of the Patapsco river, and Chester street.

Area, 66 acres; population 1,829, of which 1,824 were white and 5 were colored. The average density was 27.71 persons to the acre. The elevation varied from 4 to 20 feet above mean sea level.

This was low land lying along the harbor, with canneries, warehouses, coal yards, and wharves of railroads and deep sea vessels at the lower extremity. The population was largely composed of longshoremen and employés of the canneries.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District B.....	23.33	.....	61.87	.....	28.72	105.30	325.48	38.29	181.89

The death rate for the 6 years was greater than the average for the total whites and less for the whites under 5 years of age. The colored element was so extremely small that the rates for this class have no value.

In the causes of death specified diphtheria and croup and diarrheal diseases caused more and malarial fever, typhoid fever, and consumption caused less than the average number of deaths per 100,000 of population.

## WARD 2.

This ward was situated west of ward 1 and south of ward 3, its southern boundary being the upper part of the northwest harbor and Jones falls forming its western limit. Total area, 250 acres; total population, 16,843; white, 16,530; colored 313; total number of dwellings, 2,388. There were 67.37 persons and 9.55 dwellings to the acre, with 7.05 persons to each dwelling. The elevation varied from 4 to 20 feet above sea level.

**SANITARY DISTRICT A.**—Bounded by Bank street, Broadway, Gough and Ann streets, Eastern, Collington, and Canton avenues, Chester, Alice Anna, Wolff, Lancaster, and Bond streets, and Central avenue.

Area, 129 acres; population, 10,853, of which 10,551 were white and 302 colored, giving an average of 84.13 persons to the acre. The variations in level were slight, the lowest point being 10 feet and the highest 20 feet above sea level.

The population was mostly laboring in canning establishments, and was largely composed of Polish Jews, Swedes, Norwegians, and Hungarians. There were many old houses along the southern part of the district.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District A .....	25.38	.....	101.19	.....	79.19	130.90	450.89	35.56	205.04

The colored element in this district was so small that the rates for it are omitted. For the whites the death rates were considerably greater than the average for the city during the 6 years. The death rate among white children was particularly large.

Consumption and typhoid fever caused less than the average number of deaths, but the death rates due to malarial fever, diphtheria and croup, and diarrheal diseases were very high. The death rate due to measles (71.11) was also much above the average rate due to this cause.

**SANITARY DISTRICT B.**—Bounded by Canton and Central avenues, Alice Anna, Bond, Lancaster, Wolff, and Chester streets, the Northwest branch of the Patapsco river, and Jones falls.

The area of the district was 96 acres and the population 3,506, 3,503 being white and 3 colored, making an average of 36.52 persons to the acre. The variations in level were slight, there being about 6 feet between the highest and lowest points. The drainage was faulty and the general sanitary condition bad.

Much of this district was occupied by wharves, large warehouses, and canning establishments. The city dock occupied quite a large portion of the district into which Jones falls emptied its filth, the dock being surrounded with tenements. The dwellings were old and generally crowded, many of them being in bad condition. The population consisted mostly of the laboring class, engaged in canning establishments, and was composed largely of Polish Jews, Swedes, Norwegians, and Hungarians, with the addition of quite a large floating population of sailors. It would be well to remember that during the berry and fruit picking season, from May to July, a large proportion of the people of this district go to the country.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District B .....	47.48	.....	182.47	.....	179.96	264.95	904.82	54.99	259.95

There was practically no colored population in this district. For the whites the proportion of children under 5 years of age was quite large, but the death rate among them was nearly three times the average. The rate for the total whites was also very high, due in part to the excessive mortality among the children.

Consumption alone caused less than the average number of deaths, the rates for the other causes specified being excessively high, as was also the rate for measles, which was 184.96, while the average rate for the city due to this cause was but 32.17 per 100,000 of population.

**SANITARY DISTRICT C.**—Bounded by Stiles, Albemarle, Pratt, and Exeter streets, Eastern, Central, and Canton avenues, and Jones falls.

Area, 25 acres; population, 2,484, of which only 8 were colored, the average number of persons to the acre being 99.36. The variations of level did not exceed 16 feet between the highest and lowest points.

The population comprised many Italians and Polish Jews crowded into dilapidated rookeries hanging over the falls, which was here an open cesspool. The sanitary condition was bad.

## VITAL STATISTICS

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District C .....	10.91	.....	39.08	.....	.....	84.78	84.78	28.26	98.91

As in the preceding district, the colored element in the population was almost nothing, but in contrast to the same district the death rates of the whites were only about half as great as the average.

There were no deaths from malarial fever, and the number due to diarrheal diseases, typhoid fever, and consumption were very much below the average. Diphtheria and croup combined was the only cause in which the average rate was exceeded, and in this but slightly.

## WARD 3.

There were no special features in this ward that required subdivision. Total area of the ward, 154 acres; total population, 15,762, of which 13,737 were white and 2,025 colored. The total number of dwellings was 2,605, there being an average of 102.35 persons and 16.92 dwellings to the acre, and 6.05 persons to each dwelling. The surface of the land rose toward the north, with a difference of 80 feet between the highest and lowest points.

The inhabitants were mostly of the middle class, living in from fair to good houses. A good many Bohemians of the better class were in the southern part of the ward.

The death rates in this ward as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
Ward 3 .....	23.67	40.88	90.27	172.10	41.22	108.05	232.81	34.53	374.28

The proportion of colored population in this ward was quite small, being about 13 per cent of the whole, and the population density was nearly 5 times as great as the average for the city.

The average annual death rate per 1,000 of mean population was somewhat higher than the average for both white and colored. Of the causes specified the rate due to malarial fever was about the same as the average per 100,000 of population, and those for diphtheria and consumption were above, while those from diarrheal diseases and typhoid fever were below the average.

## WARD 4.

This ward had Jones falls for its western boundary, and lies south of ward 5, west of ward 3, and north of ward 2. It had a total area of 154 acres and a total population of 15,777, 13,563 being white and 2,214 colored. The total number of dwellings was 2,410, and the average density 102.45 persons and 15.65 dwellings to each acre of area, with 6.55 persons to each dwelling.

SANITARY DISTRICT A.—Bounded by Hillen, Exeter, Gay, Colvin, Low, East, Douglas, and Holland streets, Central avenue, May, Spring, Mullikin, Dallas, Fayette, Caroline, Baltimore, Pratt, Eden, and Gough streets, Eastern avenue, and North and South High streets.

Area, 118 acres; population, 12,312; white, 10,299; colored, 2,013; number of persons to the acre, 104.34. The variations of level ranged from 20 to 75 feet, the upward slope being eastward.

The district contained many residences, with small stores. The inhabitants were mostly of the middle class, with some colored and a few Bohemians scattered here and there.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.80	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District A .....	20.53	30.05	65.59	152.93	28.52	67.03	219.62	34.23	322.30

The total death rate for both white and colored was slightly above the average, while the rate under 5 years of age was somewhat below the average per 1,000 of population for each race.

The death rate due to consumption per 100,000 of population was about the same as the average, and the rates for malarial fever, typhoid fever, diphtheria and croup, and diarrheal diseases were all well below the average.

**SANITARY DISTRICT B.**—Bounded by Hillen, North and South High, Pratt, Albemarle, and Stiles streets, and Jones falls.

Area, 36 acres, with a population of 3,465, of which 3,264 were white and 201 colored, giving an average of 96.25 persons to the acre. The variations in level were slight, and the district received the wash of most of the streets in the fifth ward.

This district was between Jones falls and district A, and did not go back from the falls, which was here an open, foul ditch for more than 2 squares. Most of the buildings along the falls were used as tenements, with here and there a manufacturing establishment sandwiched. The people were mostly Polish Jews, with some Bohemians of the lower class.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District B .....	27.79	74.56	101.73	416.67	45.58	65.84	379.82	35.45	389.95

This was a small district, and the proportion of colored population was so slight as to render the rates for this class of no value.

For the whites, both the total rate and the rate for those under 5 years of age were considerably above the average.

Malarial fever caused about the average number of deaths; diphtheria and croup and typhoid fever less than the average number, while the number due to diarrheal diseases and consumption was considerably above the average.

WARD 5.

This ward was very irregular in shape and bordered on the third, fourth, sixth, seventh, eighth, and ninth wards. Total area, 141 acres; total population, 15,809; white, 12,551; colored, 3,258; total number of dwellings, 2,791; density, 112.12 persons and 19.79 dwellings to the acre, and 5.66 persons to each dwelling. The land rose rather abruptly from 10 feet, the lowest point at Jones falls, to 110 feet, the highest point in the extreme eastern part of the ward.

**SANITARY DISTRICT A.**—Bounded by Monument, Aisquith, and Jefferson streets, Central avenue, Holland, Douglas, East, Low, Colvin, Gay, Exeter, and Hillen streets, Jones falls, and Foundry, Front, and Forrest streets.

Area, 64 acres; population, 6,865, 5,258 white and 1,607 colored, there being an average of 107.27 persons to the acre. The variations in level were 35 feet, the land rising toward the northward with abrupt changes.

Only a small portion of this district, about one square, touched Jones falls, here a little clear. The inhabitants were mostly railroad men, railroad employes, and mechanics. A railroad depot with its freight yards, fine parish schools, several asylums, and one large market occupied considerable space.

## VITAL STATISTICS.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.00	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District A .....	21.92	43.20	74.23	238.89	40.93	69.07	314.00	25.58	483.50

The death rates among the whites were about the same as the average for the city, but those for the colored were considerably above the average for this class.

Malarial fever caused about the average number of deaths, diphtheria and croup and typhoid fever less, while the number due to diarrheal diseases and consumption was considerably above the average, the rate from consumption being particularly high.

**SANITARY DISTRICT B.**—Bounded by Eager, Somerset, Madison, Wolff, and Monument streets, Broadway, and McElderry, Eden, Jefferson, Aisquith, and Ensor streets.

Area, 77 acres; population, 8,944, of which 7,293 were white and 1,651 were colored; density, 116.16 persons to the acre. The altitude ranged from 25 to 110 feet above mean sea level, with many deep ravines that have been filled to grade.

The district was occupied by residences of the middle class, many of modern construction. A large amount of building had been going on in the district and much of it was made land that had not only not had time to settle but was largely mixed with ashes and garbage. Some of these fills were over 20 feet in depth.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.00	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District B .....	19.79	31.12	70.93	129.74	23.57	60.88	178.70	43.20	312.24

According to these figures the total death rate for both white and colored, and also the rate for those under 5 years of age, was less than the average, and the number of deaths due to all of the causes specified was well below the average except in case of typhoid fever, which caused just about the same number.

## WARD 6.

This was one of the largest wards in the city, and before annexation was the extreme northern ward. Its eastern edge was the city limits, with the twenty-second ward on the north, the first and third on the south, and the third, fifth, and seventh on the west. Total area, 1,024 acres; total population, 26,322, of which 22,717 were white and 3,605 were colored; total number of dwellings, 4,631. This gave an average density of 25.71 persons and 4.52 dwellings to each acre, and 5.68 persons to each dwelling. The variations in altitude were from 40 to 140 feet above sea level, the original topography including many deep ravines running from the east branch of Harford run that traversed the center of the ward from north to south. Much of the land was vacant and there were many brickyards and pipe works in the northern part.

**SANITARY DISTRICT A.**—Bounded by North avenue, the eastern city limits, and Monument, Wolff, Preston, and Washington streets.

Area, 680 acres; population, 6,933; white, 6,456; colored, 477; average number of persons to each acre of area, 10.20. The variations in level ranged from 60 to 140 feet.

This district contained much vacant land, two large cemeteries, the German Schuetzen park, several large brickyards and terra cotta works, and the old potter's field of Baltimore. The authorities seem to have adopted the plan of raising the grade of potter's field by filling rather than going to the expense of first removing the bodies buried there. The inhabitants were mostly of the laboring class, dependent on the several large works. Surface of the ground broken.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District A .....	18.14	.....	60.54	.....	35.40	85.98	230.11	42.99	166.89

The proportion of colored population was insignificant and the rates for the class valueless. Among the whites the death rates both total and for those under 5 years of age were less than they were for the city.

Malarial fever, diarrheal diseases, and consumption all caused less than the average number of deaths, the rate for the last named being very low. For the other causes specified the rates were about the average.

**SANITARY DISTRICT B.**—Bounded by Monument street, the eastern city limits, and Baltimore and Chester streets.

Area, 231 acres, with a population of 5,846, there being 5,056 white and 790 colored. The average density was 25.31 persons to the acre. The variations in level, which were quite abrupt, ranged from 20 to 120 feet above sea level.

This district had much vacant land, some streets were not yet fully opened, and one cemetery was in the eastern portion. The western branch of the Harford run traversed the center of the district, while its eastern branch cut through the southeastern corner.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District B .....	17.57	36.49	63.22	140.67	32.90	71.98	269.93	29.90	212.94

The death rates for the whites in this district were below the average; the rate for the colored under 5 years of age was also below the average, while the rate for the total colored was somewhat above, but the proportion of colored population was small.

The average rates due to all of the causes specified were well under the average excepting that for diarrheal diseases, which was above the average.

**SANITARY DISTRICT C.**—Bounded by McElderry, Broadway, Monument, Chester, Baltimore, Wolff, Fayette Mullikin, and Bethel streets.

Area, 86 acres; population, 9,822; white, 8,591, and colored, 1,231; average density, 114.21 persons to the acre. The ground was high, the lowest point being 80 and the highest 120 feet above mean sea level.

This district was largely resident, with quite a large colored settlement in the western end, most of the houses being good. The location of the Johns Hopkins hospital in the district has given an impetus to the building of a better grade of residences toward the east. The vacant land was being rapidly improved, but most of this new building was on made land that not only had not had time to settle but was largely mixed with garbage and ashes.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District C .....	20.10	38.56	61.79	153.00	39.29	116.08	230.37	46.43	314.30

The death rate for the 6 years was below the average for the whites and for the colored under 5 years of age, but the rate for the total colored was somewhat above the average.

## VITAL STATISTICS.

Malarial fever, diarrheal diseases, and consumption caused less and diphtheria and croup and typhoid fever caused more than the average number of deaths.

SANITARY DISTRICT D.—Bounded by Jefferson, Eden, McElderry, Bethel, Mullikin, Spring, and May streets, and Central avenue.

Area, 27 acres, with a population of 3,721, of which 2,614 were white and 1,107 were colored; the average density, 137.81 persons to the acre. The ground was high, with abrupt changes of level, the variations being 65 feet between the highest and lowest points.

This district was mostly resident, houses medium, some small stores, and a large negro population, mostly in alleys.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.00	73.94	163.41	41.51	80.13	206.38	40.17	317.35
District D.....	20.81	31.46	64.61	187.35	37.75	51.91	212.34	47.19	363.34

In this district the death rates per 1,000 of population were all below the average, the rate for white children under 5 years of age being but 64.61 per thousand, although the proportion of such children was nearly twice as great as the average.

For malarial fever, diphtheria and croup, and diarrheal diseases the rates were well below the average, while typhoid fever and consumption caused more than the usual number of deaths.

## WARD 7.

This ward was located in the northeastern part of the city, north of the fifth ward, south of the twenty-second, west of the sixth, and east of the eighth, and covered an area of 326 acres. Total population of the ward, 25,083; white, 23,825; colored, 1,258; total number of dwellings, 4,386; average density, 76.94 persons and 13.45 dwellings to the acre, with 5.72 persons to each dwelling. The ground was high, the lowest point being 60 and the highest 100 feet above mean sea level, with changes between the extremes often occurring within a distance of 3 blocks.

SANITARY DISTRICT A.—Bounded by North avenue, Washington, Preston, Wolff, Eager, Bond, Madison, Somerset, Ensor, Chase, Valley, Hoffman, and Eden streets, and Harford avenue.

Area, 296 acres, or 91 per cent of the total area of the ward; population, 20,737, of which 19,986 were white and 751 colored, giving an average density of 70.06 persons to the acre. The extremes in level were 40 feet.

This district contained some vacant land, which was being rapidly improved with very fair houses. As much of the land in the district was below street grades, the new buildings were in many cases placed on the filled land, which not only had not had time to settle but was largely mixed with ashes and garbage. Residents were mostly of the middle class, living in small houses. Laborers lived north of the railroad track.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.00	73.94	163.41	41.51	80.13	206.38	40.17	317.35
District A.....	18.46	.....	57.31	.....	29.62	59.23	185.32	39.77	218.32

This was a large district, but the proportion of colored population was small, and the rates for this class were not significant.

For the whites the average annual rates were considerably below the general rate.

All of the causes of death specified were considerably below the average in the number of deaths due to such causes, diarrheal diseases and consumption being particularly so.

SANITARY DISTRICT B.—Bounded by Eager, Wolff, Madison, and Bond streets.

Area, 30 acres; population, 4,346; white, 3,839; colored, 507; average density, 144.87 persons to the acre. The variations in level did not exceed 20 feet.

The district was quite well built up, the negro population being in alley houses. There had been some deep fills here, old dumps for ashes and garbage, on which houses had been built before the new ground had time to settle.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District B.....	24.89	.....	90.14	.....	44.39	92.82	286.52	32.28	318.81

The death rates for the whites were greater than the average for the city, this district being, with one exception, the most densely populated of all. The proportion of colored population was too small to render the rates for this class of any value.

Typhoid fever caused slightly less than the average number of deaths, while the rates due to malarial fever, diphtheria and croup, diarrheal diseases, and consumption were all slightly above the average.

The average annual rate due to scarlet fever (32.28) was exceptionally high in this district, but the actual number of deaths from this cause was not large.

WARD 8.

This ward occupied the north central portion of the city and was divided nearly in half by Jones falls, which was here fairly clear. The total area of the ward was 480 acres, with a total population of 24,688, of which 20,752 were white and 3,936 were colored. The total number of dwellings was 3,911, and the average density of the ward 51.43 persons and 8.15 dwellings to the acre, with an average of 6.31 persons to each dwelling. The variations in level were abrupt, covering from 20 to 140 feet above mean sea level.

SANITARY DISTRICT A.—Bounded by North and Harford avenues, and Eden, Hoffman, Lanvale, Hunter, and Cathedral streets.

Area, 211 acres; population, 7,177, there being 6,479 white and 698 colored; average density, 34.01 persons to the acre. The variations in level were extreme, the lowest point being 20 and the highest 140 feet above mean sea level.

This was mainly a residential district, with a fine class of buildings in the western part and some vacant ground in the eastern. Greenmount cemetery, one of the oldest and largest in the city, was entirely within this district. Jones falls touched the western edge.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District A .....	15.92	.....	55.97	.....	24.45	58.60	180.95	36.68	163.83

The colored population of this district was small and the rates for it are of no value. For the whites the rates were much below the average. This was also true of all the causes of deaths specified. The rate due to consumption was about half of the average rate for the city, and for diarrheal diseases it was about two-thirds of the usual rate.

SANITARY DISTRICT B.—Bounded by Hoffman, Valley, and Chase streets, Harford avenue, Ensor and Monument streets, Greenmount avenue, and Eager and Hunter streets.

Area, 103 acres; population, 8,608; white, 8,017; colored, 591; average number of persons to the acre, 83.57. The elevation varied from 20 to 100 feet above mean sea level, with abrupt changes as one receded from the falls.

## VITAL STATISTICS.

The eastern part of this district was mainly occupied by people of moderate means. There was much vacant ground in the northern part and along Jones falls, which runs through the western part of the district, with here and there washouts and deep ravines.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.00	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District B.....	19.94	29.52	66.75	122.45	34.66	69.33	195.74	34.66	342.55

The death rates for the 6 years, both white and colored, per 1,000 of population were all below the average.

All of the diseases specified caused less than the average number of deaths, excepting consumption, for which the death rate was slightly greater than usual.

**SANITARY DISTRICT C.**—Bounded by Hoffman, Hunter, Eager, Cathedral, and Richmond streets, Linden avenue, and Preston street.

Area, 79 acres, with a population of 4,800, of which 3,057 were white and 1,743 were colored, giving an average density of 60.76 persons to the acre. The extremes of altitude ranged from 40 to 100 feet above sea level, the ground attaining its highest point at Biddle street, from whence it sloped rapidly to the falls on the north.

South of Hoffman street, west of Hunter street, north of the eleventh ward boundaries, and east of the twelfth ward lines this was mainly a residential district, with some of the finest dwellings in the city. There was much made ground, some of the fills being over 30 feet; there was also quite a colored population in alleys in the western part.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.00	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District C.....	13.85	14.56	42.88	94.09	21.99	25.65	113.00	25.65	186.90

The death rates for the 6 years per 1,000 of population, both white and colored, were all very much below the average rates for the city. The proportion of children under 5 years of age was exceptionally small and the mortality of children of both races was particularly low.

The number of deaths due to each of the causes specified was much below the average.

**SANITARY DISTRICT D.**—Bounded by Lanvale, Hunter, Hoffman, and Cathedral streets.

Area, 46 acres; population, 475; white, 377; colored, 98; average number of persons to the acre, 10.33. The variations in altitude ranged from 40 to 100 feet above sea level.

This district was mainly occupied by the Union depot and the tracks entering and leaving it. Jones falls flowed through the center of the district, the land rising rapidly from the falls, the grade being about the same on both sides.

The population of this district was too small to permit reliable deductions to be made from the death rates, and they are therefore omitted.

**SANITARY DISTRICT E.**—Bounded by Eager street, Greenmount avenue, Monument, Forrest, Front, and Foundry streets, and Jones falls.

The area of the district was 41 acres, and it contained a population of 3,628, of which 2,822 were white and 806 were colored, there being an average of 88.49 persons to the acre. The elevation varied from 20 to 75 feet above sea level, the surface rising rapidly from the falls.

This district comprised the southern extremity of the ward, and was mainly occupied by the penitentiary and jail, with their grounds, and the network of railroad tracks along Jones falls. Outside of the inmates of the penal institutions the inhabitants were mostly of the laboring class.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District E .....	21.84	.....	93.18	.....	21.07	58.14	164.73	4.84	329.46

For the whites the death rates were above the average, the rate under 5 years of age being particularly so, but the proportion of white children under 5 years of age was less than usual.

The colored population was small, and the rates for this class are omitted.

The number of deaths due to the causes specified were much below the average, excepting consumption, in which the number was very close to the usual rate for this cause. The rate due to typhoid fever was remarkably low in this district.

WARD 9.

The total area of this ward was 330 acres; the total population 12,360, of which 9,753 were white and 2,607 were colored; the total number of dwellings, 1,663. There was an average density of 37.45 persons and 5.04 dwellings to the acre, with 7.43 persons to each dwelling. The variations in altitude were from tide water to 100 feet above, the surface rising toward the northeast corner, both from the basin on the south and Jones falls on the east.

This was practically the center ward of the city and included all phases of social conditions.

SANITARY DISTRICT A.—Bounded by Center, North, Franklin, Davis, Saratoga, Gay, Frederick, Pratt, Eutaw, and Fayette streets, and Park avenue.

The area of this district was 219 acres, and it contained a population of 7,628, of which 5,758 were white and 1,870 were colored, there being an average of 34.83 persons to the acre. The variations in level ranged from 10 to 100 feet above tide water, the ground rising from Pratt street to Pleasant and then dipping to Center street, with an eastern dip toward Jones falls nearly the whole length of Charles street.

This district comprised the principal business part of Baltimore, the city and government buildings being located therein. There was a fair class of trading houses in the northwestern part.

The death rates for this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District A .....	26.61	39.83	95.98	288.56	20.97	94.53	269.75	36.89	391.94

In this district all the rates per 1,000 of population, both white and colored, were high. The number of children under 5 years of age was only about half the usual proportion for each race, and considering which the rates for this class were very high.

Diphtheria and croup, diarrheal diseases, and consumption caused more than the average number of deaths, malarial fever considerably, and typhoid fever slightly less than the average number from these causes.

SANITARY DISTRICT B.—Bounded by Pratt street, Jones falls, and the Basin.

Area, 46 acres, with a population of 160, of which 155 were white and 5 were colored. The population density was 3.48 persons to the acre.

This district was flat and low, and was composed mainly of docks and wharves, with small warehouses. The fish and market vessels landed here, and their refuse, combined with the street wash from the larger part of the ninth and fifteenth wards, in addition to the sewage contained in Jones falls, resulted in a condition of filth upon which the tide seemed to have no effect, and left a deposit that increased so rapidly that constant dredging was necessary.

## VITAL STATISTICS.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District B .....	91.84	700.00	222.22	.....	.....	.....	210.30	.....	877.19

The population of this district was very small and the rates are of no value. Of themselves they are misleading, and have only been stated for indication and explanation of the necessity for proper consideration of the relative numbers of the living population and the dead, as well as the peculiarities of the conditions existing.

As stated above, the number of people in the district on June 1, 1890, was very small. The mean population (June 1, 1887) was 152, the number of whites being 147 and the number of colored 5. Only 9 of the total population were under 5 years of age, all of them being white.

The aggregate number of deaths during the 6 years was 106, giving an average annual death rate of 116.23 per 1,000 of population. It is probable that the number of persons in the district June 1, 1890, was less than usual, although at no time large.

The large number of deaths indicates some unusual cause, and the location of the district raises the presumption that a considerable portion of these may have been due to drowning. A special analysis shows this to be correct, the number of deaths from drowning during the 6 years being 48, or an average annual rate of 526.32 per 100,000 of population. There were no deaths from malarial fever, diphtheria and croup, or typhoid fever, and but 8 deaths in 6 years from consumption, although the death rate from the last mentioned cause (877.19) would appear to be excessive.

During the 6 years there were 2 deaths from each of the following named causes: scarlet fever, diarrheal diseases, measles, childbirth and puerperal diseases, and old age, each of which would therefore have an average annual death rate of 219.30 per 100,000 of population, which would be excessively high for some of the causes mentioned if the small number both of deaths and of population were not taken into consideration.

SANITARY DISTRICT C.—Bounded by Gay street, Jones falls, and Pratt and Frederick streets.

Area, 23 acres; population, 2,045; white, 1,974; colored, 71; average density, 88.91 persons to the acre. The land was low, drainage bad, and the district submerged each time Jones falls overflowed its banks.

This was probably the worst district in the city in all respects. Center market occupied a large portion of the district, while the foul water in the falls reached its eastern edge and the equally foul water of the basin touched its southern limit. The inhabitants were mostly of the lowest class of Italians and Polish Jews, with the refuse of the sailor element from the small trading vessels, crowded into old rookeries overhanging the falls or small dilapidated houses.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District C .....	27.38	.....	99.72	.....	42.91	68.66	429.11	42.91	317.54

From this it appears that the death rates of the whites both for the total and those under 5 years of age was above the average. The colored population was insignificant, and the rates for this class are omitted.

Of the causes specified the rate due to diarrheal diseases was exceptionally high; that for diphtheria and croup was less than the average, and the rest caused about the average number of deaths.

SANITARY DISTRICT D.—Bounded by Center street, Jones falls, and Gay, Saratoga, Davis, Franklin, and North streets.

Area, 19 acres; population, 658; white, 381; colored, 277; average density, 34.63 persons to the acre. The land was low and the variations in altitude but slight.

This district was mainly occupied by houses of prostitution, lowering in grade from North street toward the falls. The population was too small to base reliable conclusions from the death rates per 1,000 of population, which were all high, particularly that for the white children under 5 years of age. Of this class the proportion of children living June 1, 1890, was only about one-third of the usual number, which practically explains the excessive rate.

Malarial fever caused nearly four times the average number of deaths. The rate due to consumption was excessively high. Diarrheal diseases and typhoid fever each caused a higher rate than the average from these causes, and the death rates due to pneumonia, heart disease and dropsy, childbirth and puerperal diseases, stillbirths, and diseases of the nervous system were also excessive.

SANITARY DISTRICT E.—Bounded by Pratt, Sharp, Camden, Hanover, Barre, and Howard streets.

Area, 23 acres; population, 1,869, of which 1,485 were white and 384 were colored; average density, 81.26 persons to the acre. The ground was low and variations in level did not exceed 15 feet between the highest and lowest points.

The inhabitants of this district were mostly Polish Jews and Italians, living in old and small brick and wooden houses.

The death rates of this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.00	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District E.....	18.91	.....	79.80	.....	37.58	65.76	216.08	18.79	310.01

The death rates per 1,000 of total population were all below the average, particularly for the colored, but the number of this class was small and the rates are omitted. The proportion of children under 5 years of age was considerably less than usual, and the death rate for the whites of this class was somewhat above the average.

The number of deaths due to all the specified causes was well below the average; the death rate for typhoid fever was exceptionally low, being less in but two other districts.

WARD 10.

There were no special features in this ward necessitating subdivision. It is treated as a sanitary district. The total area was 109 acres, with a total population of 15,760, there being 11,529 white and 4,231 colored. Total number of dwellings, 2,592; average density, 144.59 persons and 23.78 dwellings to each acre, with 6.08 persons to a dwelling. The changes in level were abrupt, there being a difference of 60 feet between the highest and lowest points; the rise of the land was toward the northwest.

This was a central ward, principally residential, the population being mainly people of medium means living in fair houses, with here and there small colonies of negroes living in alleys, and occasionally an isolated house of bad repute.

The death rates in this ward as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.00	73.94	163.41	41.51	80.13	266.38	40.17	317.35
Ward 10.....	20.24	33.08	77.09	160.17	27.87	52.40	228.55	33.45	357.88

As this district covers the entire ward and includes quite a large population, the death rates per 1,000 of population very nearly approximate the average rates. The proportion of children under 5 years of age was less than usual, this being most marked among the whites.

The death rates due to all of the causes specified above were lower than the average, excepting that for consumption, which was somewhat above the average.

## VITAL STATISTICS.

## WARD 11.

The total area of this ward was 211 acres; total population, 15,700; white, 8,939; colored, 6,761; total number of dwellings, 2,451. There were 74.41 persons and 11.62 dwellings to the acre, with 6.41 persons to a dwelling. The greater part of this ward was high ground, though the variations of level were abrupt in some parts, the difference between the highest and lowest points being 80 feet. This was also one of the central wards and largely residential in character.

**SANITARY DISTRICT A.**—Bounded by Union street, Druid Hill avenue, Preston street, Linden avenue, Garden street, John alley, Franklin, Pine, and Mulberry streets, Myrtle avenue, George street, and Pennsylvania avenue.

Area, 79 acres; population, 9,350; white, 4,409; colored, 4,941; average number of persons to the acre, 118.35. The variations in altitude were abrupt, there being 40 feet between the highest and lowest points.

The dwellings in this district were largely of medium grade, with boarding houses and some small stores. There was a large negro population, mostly in alleys.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District A .....	19.92	32.00	77.85	157.87	28.22	33.86	246.43	41.38	408.20

This district was somewhat above the average size in point of population, which was about equally divided between white and colored, with a small excess in the number of the latter class. The proportion of children under 5 years of age was less than usual, the deficiency being greatest among the whites.

The death rates per 1,000 of mean population were about the same as the average for each race. The death rate due to diphtheria and croup was particularly low, being but little over one-third of the average rate, while the number of deaths due to consumption per 100,000 of mean population was high. On the other hand, the number due to pneumonia was considerably below the average.

**SANITARY DISTRICT B.**—Bounded by Eager street, Jones falls, and Center, Davis, and Hunter streets.

Area, 15 acres, with a population of 243, of which 214 were white and 29 colored, the average number of persons to the acre being 16.20. This was mostly low ground and the variations in elevation did not exceed 10 feet.

This district was occupied by car tracks, and the few houses were used by the laboring classes. The mean population of this district was very small, and the rates are of no value.

**SANITARY DISTRICT C.**—Bounded by Richmond, Cathedral, Eager, Hunter, Davis, and Center streets, Park avenue, Mulberry, Howard, Saratoga, Eutaw, and Franklin streets, John alley, Garden street, and Linden avenue.

This district embraced an area of 117 acres, and contained a population of 6,107, of which 4,316 were white and 1,791 were colored, this giving an average of 52.20 persons to the acre. The variations in level were 80 feet, the highest point being about in the center of the district, the ground receding rapidly toward the east and south, mostly high ground.

This district was occupied by fine residences, good boarding houses, churches, hotels, places of amusement, and a few stores scattered here and there.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District C .....	19.55	20.86	70.92	111.59	11.52	31.68	175.68	20.16	233.28

The death rates per 1,000 of total population were all below the average, that for the colored being particularly low. The rates among the children under 5 years of age were also below the average, the greatest decrease again being among the colored children, although the number of colored children was only about half and the number of white children about one-third of the usual proportion.

The death rate in this district due to malarial fever was the lowest in the city, and the rates for the other causes specified were all much below the average.

WARD 12.

The total area of this ward was 416 acres; total population, 28,341; white, 20,397; colored, 7,944; total number of dwellings, 4,564. There was an average of 68.13 persons and 10.97 dwellings to the acre, with 6.21 persons to a dwelling. The variations in altitude ranged from 20 to 115 feet above mean sea level, the main portion of the ward being on high ground. This was mainly a residential ward, occupying the northwestern section of the city.

SANITARY DISTRICT A.—Bounded by North avenue, Wilson, John, Dolphin, Brevard, and Preston streets, Druid Hill avenue, Union street, Pennsylvania avenue, and Robert street.

The area covered by this district was 257 acres, and it contained a population of 21,535, of which 15,238 were white and 6,297 were colored, there being an average of 83.79 persons to each acre of area. The variations in altitude did not exceed 20 feet.

This district was mainly residential in character, with houses from fine to good. There was a large negro population in the alleys. Fine buildings had been erected upon a large area of made land in the center of the district. A sewer laid here some years ago had to be put down 30 feet before the original level was reached; it was designed for storm water only, and had a wooden bottom, so its present condition can only be a matter of conjecture. A cave-in took place a few years ago directly over this sewer at the corner of Linden avenue, nearly engulfing a street car with the horses and passengers.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District A.....	17.30	18.51	61.73	104.36	26.12	35.91	170.57	28.56	241.57

The general death rates per 1,000 of population, both white and colored, were all considerably below the average, the greatest difference being in the rates for the colored.

All of the causes specified caused less than the average number of deaths, the rates due to diphtheria and croup and diarrheal diseases showing the most marked decrease.

SANITARY DISTRICT B.—Bounded by North avenue, Robert street, Pennsylvania avenue, and Preston and Carey streets.

Area, 113 acres; population, 5,964; white, 4,492; colored, 1,472; average density, 52.78 persons to the acre. All of this district was high, especially that portion which touched the old city limits.

This district was mainly residential in the southern part, with some vacant land and large car stables in the northwestern section.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District B.....	12.74	12.43	51.34	53.46	14.72	20.61	167.84	14.72	200.24

The general death rate (12.66) in this district was next to the lowest in the city. For the whites under 5 years of age it was also the lowest of any district having any considerable population of this class, and the same may be said of the colored under 5, the rate for this class being less than one-third of the average.

Of the causes specified the rates were all very much below the average, being about uniformly so.

SANITARY DISTRICT C.—Bounded by North avenue, and Cathedral, Preston, Brevard, Dolphin, John, and Wilson streets.

This district covered an area of 46 acres, containing a population of 842, of which 667 were white and 175 were colored, there being an average of 18.30 persons to the acre. The elevation ranged from 20 to 100 feet above mean sea level.

This district occupied the eastern part of the ward, just touching Jones falls. There was considerable vacant ground, also large car stables, and some good residences. The population was quite small, and the rates are of no value

## VITAL STATISTICS.

## WARD 13.

This ward covered an area of 173 acres, containing a total population of 14,601, of which 12,353 were white and 2,248 were colored. The total number of dwellings was 2,346 and the average density 84.40 persons and 13.56 dwellings to each acre, with 6.22 persons to each dwelling. The variations in altitude ranged from 40 to 80 feet, the land rising toward the northwest.

This was mainly a residential ward, with some stores, warehouses, and one or two large hotels.

**SANITARY DISTRICT A.**—Bounded by Saratoga, Poppleton, and Lexington streets, Fremont avenue, Waesche street, Myrtle avenue, and Pine, Baltimore, Paca, Pratt, Schroeder, and Raborg streets.

Area, 130 acres; population, 11,656; white, 9,805; colored, 1,851; average density, 89.66 persons to the acre. The variations in level were abrupt, the difference between the highest and lowest points being 40 feet.

The district was mainly residential, the houses being occupied by people of the middle class, with some stores and a graveyard in the southern part.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District A .....	19.46	36.26	66.63	203.13	15.07	99.47	227.57	39.18	308.95

The aggregate death rate in this district was slightly below the average, the excess being among the colored. The death rate due to malarial fever was much below the average. Diarrheal diseases, typhoid fever, and consumption each caused less than the average number of deaths per 100,000 of population, and diphtheria and croup caused more than the average number.

**SANITARY DISTRICT B.**—Bounded by Fayette, Paca, Baltimore, and Pine streets.

Area, 12 acres; population, 906; white, 655; colored, 251; average number of persons to the acre, 75.50. The ground was high.

This district had quite a large negro population, with some white prostitutes scattered here and there. The mean population was too small to entitle the death rates to much consideration. The mortality among the whites was about the same as the average. For the colored it was considerably above the average, but this may be due to the small number both of population and deaths.

**SANITARY DISTRICT C.**—Bounded by Fayette, Entaw, Pratt, and Paca streets.

Area, 13 acres; population, 629; white, 495; colored, 134; average density, 48.38 persons to the acre. The variations in altitude were about 40 feet.

This district was composed almost entirely of stores and warehouses, with one hotel. The mean population was also too small to base reliable deductions upon the death rates in relation to population.

The comparative mortality of the white and the colored races was about the same as in the preceding district.

**SANITARY DISTRICT D.**—Bounded by Pratt, Scott, Ramsey, and Amity streets.

This district covered an area of 18 acres and contained a population of 1,410, of which 1,398 were white and 12 colored, there being an average density of 78.33 persons to the acre. The surface of the ground was fairly regular, the difference in the elevation not exceeding 20 feet.

This district contained many warehouses, with quite a number of small dwellings and tenements, the latter occupied by people connected with the railroad shops.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District D .....	20.86	.....	111.78	.....	37.34	385.86	336.07	24.89	311.18

There was practically no colored population in this district and the white population was not large. The number of white children under 5 years of age reached about the average proportion, and the death rate per 1,000 of population of this class was considerably above the average.

Diphtheria and croup caused 31 deaths in the 6 years out of a mean population of 1,339, and the average annual death rate per 100,000 of population from this cause (385.86) would appear to be excessively high but for the relatively small numbers involved.

WARD 14.

Total area, 166 acres; total population, 17,485; white, 15,118; colored, 2,367; total number of dwellings, 3,018; average density, 105.33 persons and 18.18 dwellings to the acre, with 5.79 persons to each dwelling. The variations in altitude were about 40 feet, the changes in some places being quite abrupt.

This ward was situated west of the center of the city and was mainly residential in character.

SANITARY DISTRICT A.—Bounded by Lanvale street, Fremont avenue, George street, Edmondson avenue, Schroeder, Raborg, Poppleton, Baltimore, and Pratt streets, and Carrollton avenue.

Area, 100 acres; population, 9,832; white, 7,755; colored, 2,077; average number of persons to the acre, 98.32. The variations in level were in some places quite abrupt and covered a range of 40 feet.

This district was mostly residential in character, being built up with medium sized houses.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District A .....	21.14	33.05	73.44	167.45	21.43	55.37	202.57	44.65	353.66

This district had quite a large population, and the death rates per 1,000 of population very nearly approached the average rates, being slightly higher throughout.

Malarial fever, diphtheria and croup, and diarrheal diseases each caused less than the average number of deaths per 100,000 of population, while typhoid fever and consumption caused more than the average number.

SANITARY DISTRICT B.—Bounded by Hollins street, Carrollton avenue, Pratt, Callhoun, McHenry, and Stricker streets, Ohio avenue, and Gilmore and Monroe streets.

Area, 66 acres, with a population of 7,653, of which 7,363 were white and 290 were colored, giving an average density of 115.95 persons to the acre. The ground was high and the variations in level did not exceed 20 feet.

This district was mainly residential, with some small stores in the southern part and vacant land along the railroad and western extremity.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District B .....	20.74	.....	88.39	.....	20.81	142.16	220.11	48.15	298.07

The colored population of this district was small, and the rates for this class are omitted. For the whites the total death rate was about the same as the average, but the rate under 5 years was high.

The death rate due to diphtheria and croup was very much above the average rate for this cause, and that due to typhoid fever was slightly so. The other causes specified caused less than the average number of deaths. The rate due to scarlet fever was also very high.

## VITAL STATISTICS.

## WARD 15.

This ward covered a total area of 173 acres and contained a total population of 14,791, of which 11,270 were white and 3,521 were colored. The total number of dwellings was 2,346, and the average density 85.50 persons and 13.56 dwellings to the acre, with 6.30 persons to each dwelling. The variations in altitude ranged from tide water to 80 feet above. It was one of the southern wards of the city lying west of the harbor and east of the sixteenth ward.

**SANITARY DISTRICT A.**—Bounded by Pratt street, the Basin, and Cross, Covington, Hughes, York, William, Lee, Hanover, Camden, and Sharp streets.

This district covered an area of 65 acres and contained a population of 1,439, there being 1,218 white and 221 colored, making an average density of 22.14 persons to the acre. The variations in altitude did not exceed 40 feet.

This district had a water front of 6 squares on the foul smelling basin, and was mainly occupied by large warehouses and wholesale stores, with many manufacturing establishments. The residents were of a poor class, mostly living in tenement houses.

The death rates in this district were all very high, but the relative numbers of population and deaths were too small to give them any peculiar significance.

**SANITARY DISTRICT B.**—Bounded by Lee, William, York, Johnson, Hughes, Covington, Cross, Hamburg, Light, and Hanover streets.

Area, 82 acres; population, 8,891; white, 7,933; colored, 958; average number of persons to the acre, 108.43.

Federal Hill park, attaining an altitude of 80 feet above sea level, was in this district. This district contained a negro population, living in small houses, and a number of white laborers.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.60	73.94	103.41	41.51	80.13	266.38	40.17	317.35
District B.....	22.63	59.47	81.50	208.42	53.30	90.82	351.42	47.38	434.34

The colored death rate in this district was nearly twice the average rate for this race and all of the rates per 1,000 of population were above the average.

The death rates due to the causes specified were all above the average, being specially so for diarrheal diseases and consumption.

**SANITARY DISTRICT C.**—Bounded by Barre, Hanover, Henrietta, and Howard streets.

This district contained an area of 26 acres and a population of 4,461, of which 2,119 were white and 2,342 were colored, there being an average density of 171.58 persons to the acre.

This district contained a dense population, mostly poor Jews and Italians and negroes, living in dilapidated houses. The ground was low, the drainage bad, and the sanitary condition worse.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.60	73.94	103.41	41.51	80.13	266.38	40.17	317.35
District C.....	23.11	45.39	91.67	192.25	86.68	27.58	425.53	78.80	677.70

The death rates per 1,000 of population were all above the average, the greatest increase being among the colored. The death rates due to malarial fever, diarrheal diseases, typhoid fever, and consumption were all excessively high, while that due to diphtheria and croup was much under the average, being very low.

DISTRICT OF COLUMBIA AND BALTIMORE.

WARD 16.

Total area, 134 acres; total population, 14,250; white, 10,209; colored, 4,041; total number of dwellings, 2,392; average density, 106.34 persons and 17.85 dwellings to the acre, with 5.96 persons to a dwelling. The ground was nearly level.

This ward was south and west of the center of the city, and contained the main passenger station and freight yards of the Baltimore and Ohio railroad.

SANITARY DISTRICT A.—Bounded by Pratt, Eutaw, Montgomery, and Warner streets, Fremont avenue, Ridgely street, Hamburg avenue, Sterrett alley, and Barre, St. Peters, McHenry, and Scott streets.

Area, 87 acres; population, 10,451; white, 8,344; colored, 2,107; average number of persons to the acre, 120.13.

This district was mainly residential in character, with small retail stores. The dwellings were of an inferior class, the ground being flat and the drainage bad.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.60	73.94	163.41	41.51	89.13	266.38	40.17	317.35
District A.....	23.62	39.26	84.99	214.62	50.40	119.89	299.06	42.00	349.46

The death rates per 1,000 of population in this district were above the average, being more so for the colored than for the whites. The relative number of colored children under 5 years of age was small. The number of deaths due to the causes specified was about uniformly above the average in each case, except that for typhoid fever, which was only slightly above the average number from this cause.

SANITARY DISTRICT B.—Bounded by Pratt, Howard, Henrietta, Hanover, Hamburg, Eutaw, West, Warner, and Montgomery streets.

Area, 47 acres; population, 3,799; white, 1,865; colored, 1,934; average number of persons to the acre, 80.83.

That portion of this district which was not occupied by the railroad station and yards was covered with old tenements and small houses, into which were crowded Polish Jews, Italians, and negroes. The drainage was very bad, as was also the general sanitary condition.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.60	73.94	163.41	41.51	89.13	266.38	40.17	317.35
District B.....	19.19	31.95	63.17	157.03	60.14	27.76	323.80	69.39	416.32

All of the death rates per 1,000 of population were below the average. The average annual death rates per 100,000 of population due to malarial fever, diarrheal diseases, typhoid fever, and consumption were considerably above the average of these causes, while that due to diphtheria and croup was only about one-third of the usual rate due to this cause.

WARD 17.

The total area of this ward was 1,224 acres, and it contained a total population of 25,209, of which 24,432 were white and 777 were colored. The total number of dwellings was 4,222, and the average density 20.60 persons and 3.45 dwellings to the acre, with 5.97 persons to a dwelling. The elevations ranged from tide water to 60 feet above.

This was the most southern ward in the city, and had water on 3 sides, there being considerable vacant marshy land. This ward was occupied through the center by railroad tracks terminating at large warehouses along the river front. The residents were mostly a good class of laborers, many owning their homes.

## VITAL STATISTICS.

The death rates in this ward as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.60	73.94	103.41	41.51	80.13	266.38	40.17	317.35
Ward 17.....	20.68	.....	75.67	.....	66.78	74.44	350.61	36.87	242.79

The colored population of this ward was relatively very small and the rates for this class are omitted. For the whites the death rates per 1,000 of population were about the same as the average.

Malarial fever and diarrheal diseases each caused more than the average annual number of deaths per 100,000 of population, and diphtheria and croup, typhoid fever, and consumption caused less than the average number due to these causes.

## WARD 18.

This ward covered a total area of 1,120 acres and contained a total population of 26,452, of which 23,263 were white and 3,189 were colored. The total number of dwellings was 4,783, and the average density 23.62 persons and 4.27 dwellings to the acre, with 5.53 persons to a dwelling. The variations in altitude were from tide water to 120 feet above. It occupied the southwestern part of the city, with the Patapsco river washing the eastern edge and Gwynns falls on the south. Much of the ward was rural.

SANITARY DISTRICT A.—Bounded by Baltimore, Mount, Hollins, Monroe, McHenry, Gilmor, Bush, James, Stockholm, and Ostend streets, the Middle branch of the Patapsco river, and the old city limits (twenty-second ward).

Area, 886 acres; population, 9,787; white, 8,889; colored, 898; average number of persons to the acre, 11.05. The variations in level ranged from tide water to 120 feet above, the high ground being in the northwestern part of the district.

This district contained much vacant land in many parts and much marshy ground along Gwynns falls and the Patapsco river. There were many oil works and gas works in this district, also several brickyards and brick works in the western portion. The Baltimore and Ohio railroad tracks and yards occupied considerable of the area of this district. The dwellings, which were almost all in the northwestern part, were of the medium grade.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.60	73.94	103.41	41.51	80.13	266.38	40.17	317.35
District A.....	21.22	27.03	66.67	122.42	50.16	118.24	318.89	30.41	259.77

The average annual death rate of the total whites per 1,000 of population of this race was a little above the average, while the rate for the whites under 5 years of age was below the average. For the colored both the total and the rate for those under 5 years of age were lower than usual. The rates due to malarial fever, diphtheria and croup, and diarrheal diseases were above the average rates from these causes, and those for typhoid fever and consumption were below the average.

SANITARY DISTRICT B.—Bounded by Ohio avenue, Stricker, McHenry, Calhoun, Pratt, Amity, Ramsey, and Scott streets, Fremont avenue, St. Peters and Barre streets, Sterrett alley, and Sassafras, Stockholm, James, and Bush streets.

There were 134 acres in this district and it contained a population of 9,208, of which 8,815 were white and 393 were colored, the average number of persons to the acre being 68.72. The variations in level did not exceed 40 feet.

This district was mostly occupied by small dwellings, retail stores, and a few warehouses. The population was mostly of the laboring class, working in the railroad shops.

DISTRICT OF COLUMBIA AND BALTIMORE.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.60	73.94	163.41	41.51	80.13	266.36	40.17	317.35
District B.....	16.33	.....	63.94	.....	38.69	131.41	235.07	26.66	161.89

The colored population in this district was small and the rates for this race are omitted. The death rates for the whites, both the total and for those under 5 years of age, were well under the average.

Of the causes specified the death rate due to diphtheria and croup was high, being much above the average. For the other causes the rates were all low, being particularly low for consumption.

SANITARY DISTRICT C.—Bounded by Sassafras, Hamburg, and Ridgely streets, Fremont avenue, and Warner, West, Eutaw, Hanover, Cross, Sharp, Ostend, and Stockholm streets.

Area, 100 acres; population, 7,457; white, 5,559; colored, 1,898; average number of persons to the acre, 74.57.

The population of this district was mostly composed of Jews and Italians, with negroes along the railroad tracks. The houses were mostly small, with here and there a tenement, the streets somewhat narrow, and the drainage faulty, due in a measure to the railroad embankment at the southern limit.

The death rates in this district as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
District C.....	18.80	28.01	64.44	119.77	70.61	70.61	277.74	40.01	303.63

The death rates per 1,000 of population, both white and colored, were all considerably below the average. The annual number of deaths due to diarrheal diseases and typhoid fever was about the same as the average in each case. Diphtheria and croup and consumption caused less than the average number of deaths annually, and malarial fever caused much more than the average number of deaths due to this cause.

WARD 19.

Total area of this ward, 480 acres; total population, 24,484; white, 19,445; colored, 5,039; total number of dwellings, 4,156; average density, 51.01 persons and 8.66 houses to the acre, with 5.89 persons to a dwelling. The variations in altitude ranged from 80 to 200 feet above mean sea level, some of the changes being very abrupt.

This was one of the residential wards, verging toward rural in the western extremity. There was much vacant land, but this was rapidly being improved by good houses, while the extension of street car lines was rapidly bringing men of moderate means into this ward.

The death rates in this ward as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
Ward 19.....	16.40	34.07	54.82	179.28	32.28	63.85	209.47	45.19	288.23

The death rate among the whites was low as compared with the average, being most noticeably so in the case of those under 5 years of age, when the fact is taken into consideration that the proportion of population of this class was considerably less than usual. For the colored the total rate and also the rate for those under 5 years of age were both somewhat above the average.

## VITAL STATISTICS.

All of the causes specified caused less than the average number of deaths per 100,000 of population, excepting typhoid fever, in which case the rate was slightly above the average.

## WARD 20.

The total area of this ward was 330 acres, and the total population 23,168, of which 18,507 were white and 4,661 were colored. The total number of dwellings was 4,042 and the average density 70.21 persons and 12.25 dwellings to the acre, with 5.73 persons to a dwelling. The land was high, the difference in level 100 feet.

This was a residential ward in the northwestern section of the city, the inhabitants mostly living in good dwellings. There was some vacant land in the extreme northwestern section.

The death rates in this ward as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.00	73.94	163.41	41.51	80.13	266.38	40.17	317.35
Ward 20.....	16.47	33.30	56.76	170.40	30.32	68.22	227.41	31.84	310.79

For the whites the death rates per 1,000 of population were considerably below and for the colored slightly above the average.

All of the causes specified above produced considerably and about uniformly less than the average number of deaths due to each.

## WARD 21.

This ward is erroneously designated on the series of maps as ward 22, the numbers being reversed. It was not subdivided and it constitutes a sanitary district in itself.

Area, 6,973 acres; total population, 16,054; white, 15,148; colored, 906; average density, 2.30 persons and 0.39 dwellings to the acre, and 5.86 persons to a dwelling. The variations in level were extreme, ranging from tide water to the highest point in the city, 420 feet above.

This was a suburban ward and occupied all of the new territory lately acquired to the west of Jones falls. The northern part was occupied by Druid Hill park, with handsome dwellings surrounding it. The western part of this ward was traversed by Gwynns falls and was mainly vacant land, with several market gardens, 5 large cemeteries, and a house of refuge.

The death rates in this ward as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average.....	20.41	32.00	73.94	163.41	41.51	80.13	266.38	40.17	317.35
Ward 21.....	18.00	25.28	71.39	129.87	9.51	114.06	278.82	66.54	247.13

The death rates per 1,000 of population, both white and colored, were all about uniformly under the average rate for each. The number of deaths due to malarial fever was exceedingly low, the death rate per 100,000 of population being only about one-fourth the usual rate from this cause and considerably lower than in any other district. Of the other causes the number of deaths due to diphtheria and croup and typhoid fever was much above the average number from these causes. Diarrheal diseases caused slightly more and consumption considerably less than the average number of deaths.

WARD 22.

This ward is erroneously designated on the series of maps as ward 21, the numbers being reversed. It was not subdivided and it forms a sanitary district in itself.

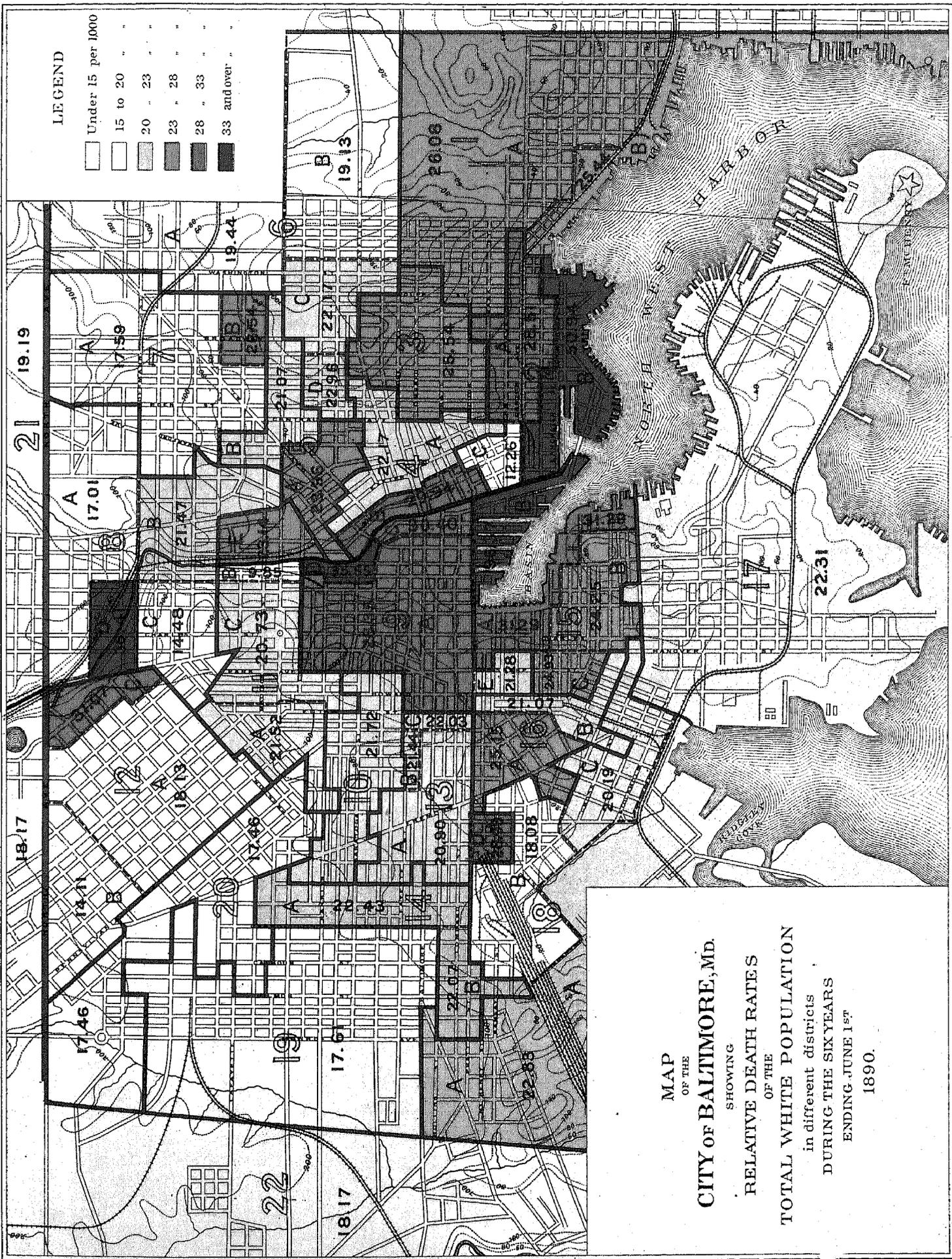
Area, 3,904 acres; total population, 23,338; white, 21,142; colored, 2,196; average density, 5.98 persons and 1.04 dwellings to the acre, and 5.73 persons to each dwelling. The land was high, the variations in level ranging from 80 to 320 feet above mean sea level.

This ward had also been recently added to the city and was strictly suburban, with many fine villa residences, a large park, two lakes, and in the eastern part several cemeteries.

The death rates in this ward as compared with the average for the city, exclusive of stillbirths, were as follows:

LOCALITIES.	IN 1,000 OF POPULATION.				IN 100,000 OF POPULATION.				
	Total.		Under 5 years.		Malarial fever.	Diphtheria and croup.	Diarrheal diseases.	Typhoid fever.	Consumption.
	White.	Colored.	White.	Colored.					
Average .....	20.41	32.60	73.94	163.41	41.51	80.13	266.38	40.17	317.35
Ward 22 .....	17.18	20.41	66.93	132.43	13.08	56.67	211.43	100.27	226.69

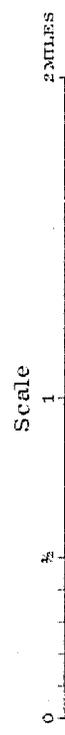
All of the rates per 1,000 of population were well below the average, and the rates due to malarial fever, diphtheria and croup, diarrheal diseases, and consumption per 100,000 of population were also much below the average rates from these causes. Typhoid fever alone caused more than the average number of deaths, and the rate for this cause was exceedingly high, being practically the highest of any district in the city containing any considerable population.

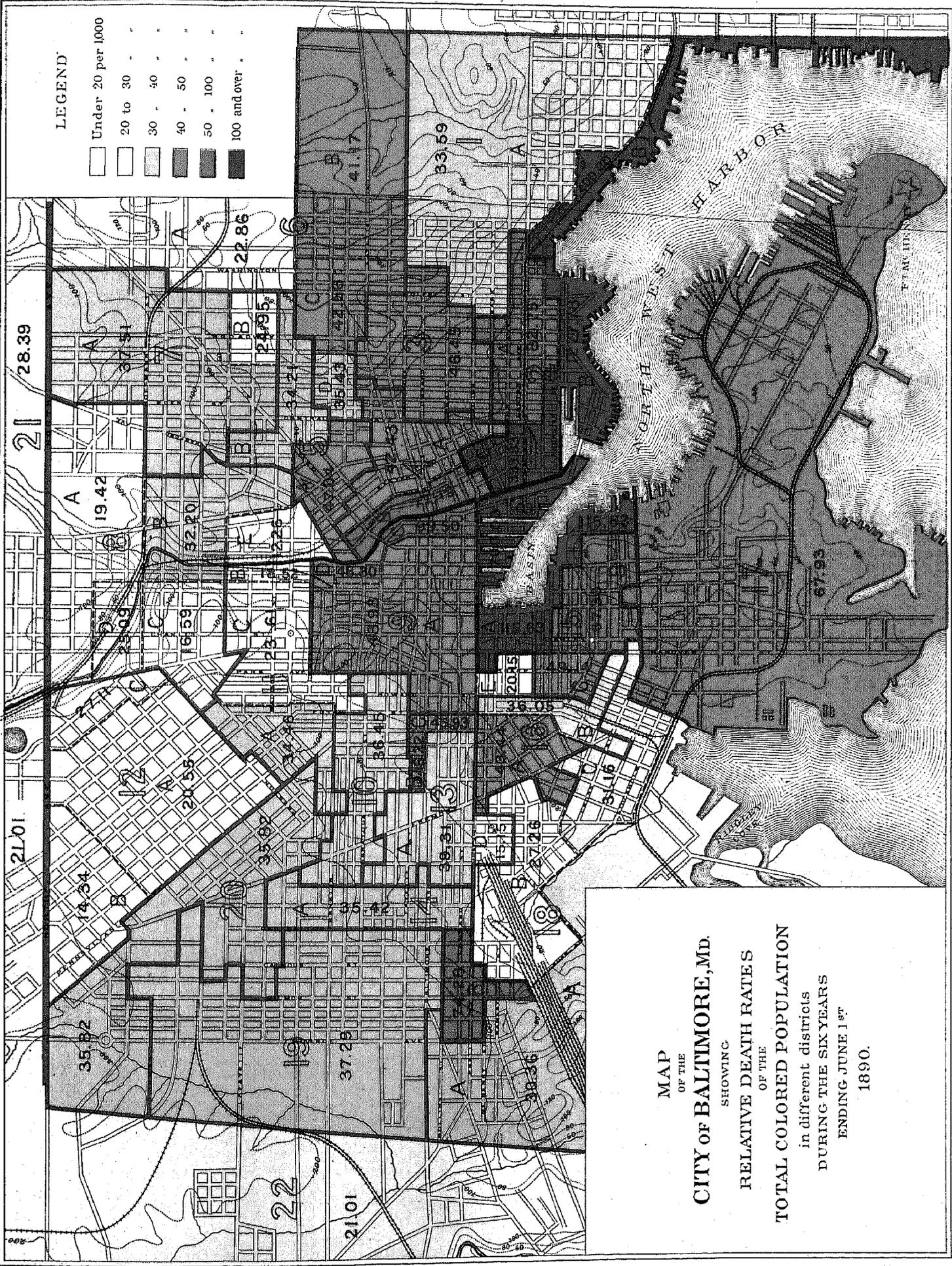


**LEGEND**

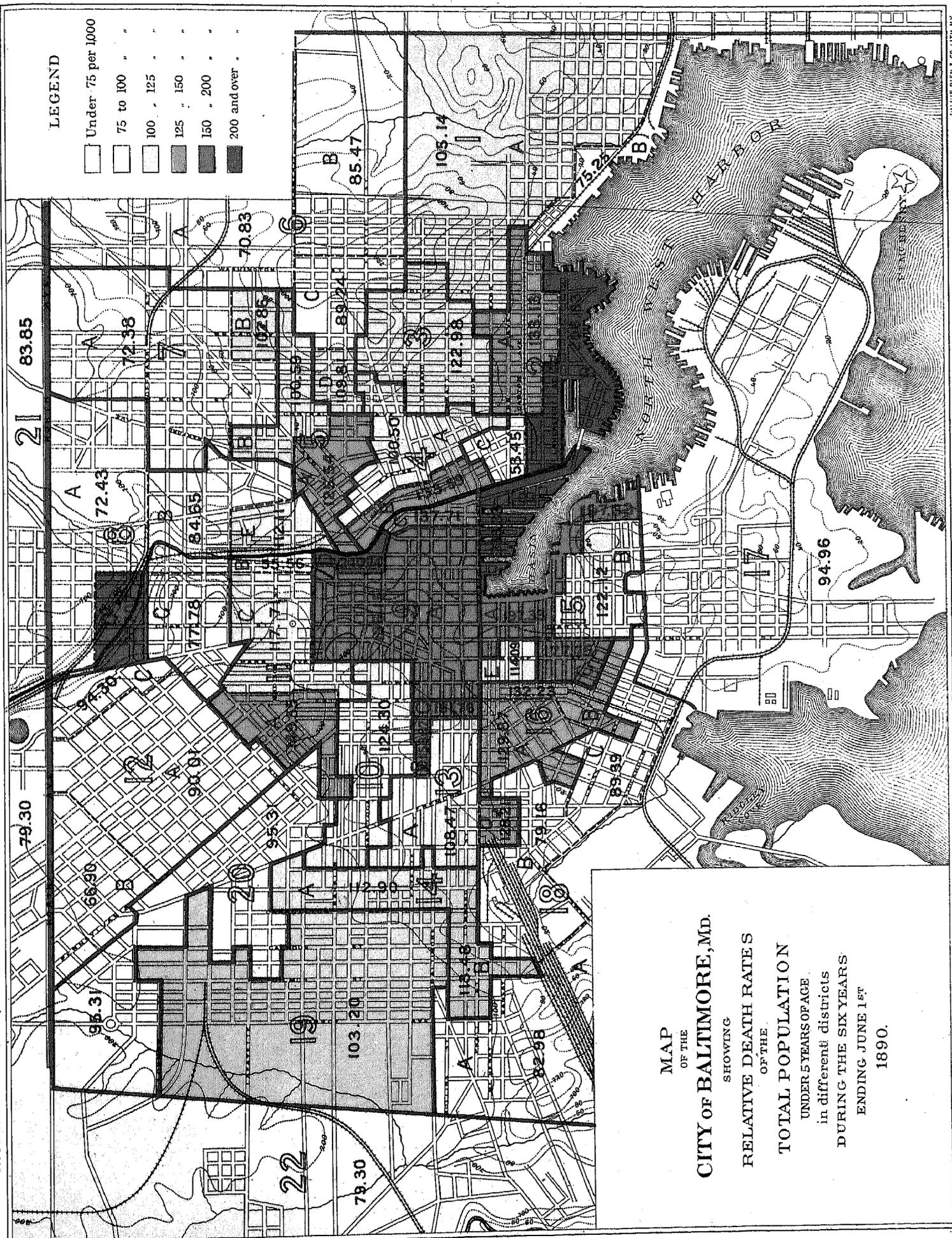
Under 15 per 1000
15 to 20
20 to 23
23 to 28
28 to 33
33 and over

MAP  
 OF THE  
**CITY OF BALTIMORE, MD.**  
 SHOWING  
**RELATIVE DEATH RATES**  
 OF THE  
**TOTAL WHITE POPULATION**  
 in different districts  
 DURING THE SIX YEARS  
 ENDING JUNE 1<sup>st</sup>  
 1890.

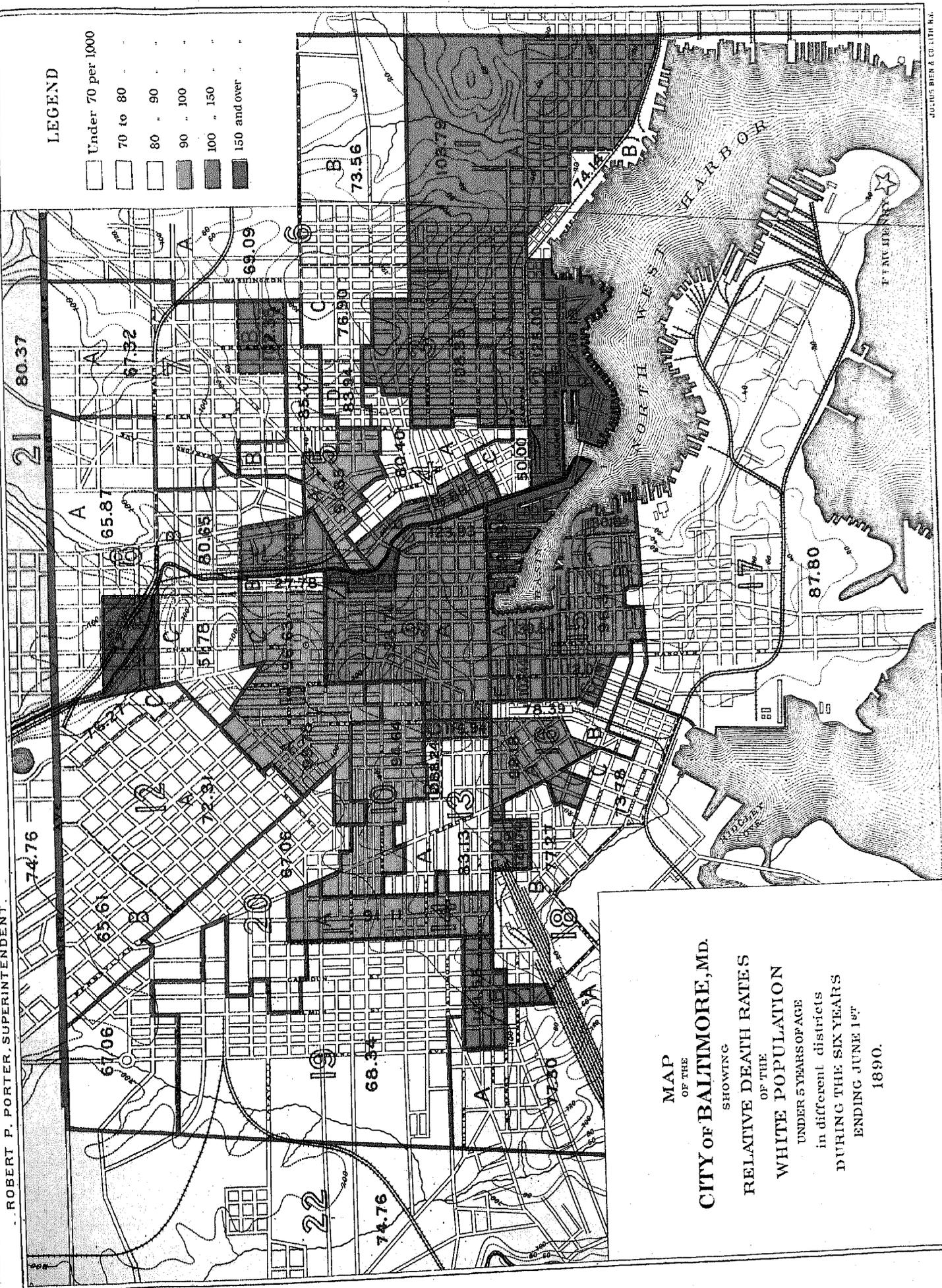
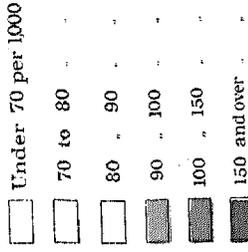




MAP  
OF THE  
**CITY OF BALTIMORE, MD.**  
SHOWING  
**RELATIVE DEATH RATES**  
OF THE  
**TOTAL COLORED POPULATION**  
in different districts  
DURING THE SIX YEARS  
ENDING JUNE 1<sup>ST</sup>  
1890.



LEGEND



MAP  
OF THE  
**CITY OF BALTIMORE, MD.**  
SHOWING  
RELATIVE DEATH RATES  
OF THE  
WHITE POPULATION  
UNDER 5 YEARS OF AGE  
in different districts  
DURING THE SIX YEARS  
ENDING JUNE 1<sup>ST</sup>  
1890.

Scale 1 2 MILES

JULIUS BIEN & CO. LITH. N.Y.



