

may reasonably expect returns in place of death by a rapid illness, such as the one with which we are dealing.

SOURCE OF DATA.

The mortality statistics are based on reports received through the courtesy of Dr. C. L. Wilbur, Chief of the Division of Vital Statistics of the United States Census Bureau and also through the courtesy of the various Boards of Health of the different cities.

The population statistics and age-distribution for 1910 were obtained through the courtesy of Director E. Dana Durand, of the United States Census Bureau.

The smoke data we obtained through the courtesy of the Chief of the United States Weather Bureau.

Since the Census Bureau report for the year 1900 was as of the population on June 1 while the Census Bureau report for 1910 was as of population on April 15, we utilized the method used by the Census Bureau in estimating the population figures for intercensal years, and after determining the rate of increase, we reduced the estimates of populations to a uniform mid-year basis, *i. e.*, we have them to relate to July 1, with the exception of San Francisco, in which our mortality figures were for the fiscal year. For this city we took the population as of January 1.*

It was necessary to plot population curves to provide a comparison between the population statistics which are furnished on the basis of ten-year periods, starting with five as its unit digit after 35. The mortality statistics, on the other hand, are furnished on the basis of ten-year periods with zero as the unit digit above 30 years of age.

After the population statistics were plotted on this basis, computation was made from these curves for the age periods corresponding to the mortality statistics. The mortality rate per 10,000 was then computed and used in the building up of the curves of the other charts.

* Bulletin 108, p. 9, and Bulletin 109, p. 9, United States Bureau of Census, Department of Commerce.