

VITAL STATISTICS:

*A Memorial Volume of Selections
from the Reports and Writings of*
WILLIAM FARR

With an Introduction by
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and
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mortality deduced from the ages at death alone, that 74,210 of 343,847 children die in their first year. Nothing can be more erroneous: the deaths occurred out of a number certainly not less, and probably more, than 512,000; for though all the births have not been registered, the births of 512,158 children were registered in the year 1841, and 502,303 in 1840. The error is as striking when the deaths under 5 years of age are compared with the total deaths, instead of the births, in the preceding years.

If the reasoning upon "the mean age at death" be employed to determine the relative salubrity of towns and professions as well as of different classes of the community, the nature of the results may be readily divined. The mean age at death is 29 years in England, 29 years in the Metropolis, 34 years in Surrey; the true mean durations of life being nearly 41, 37, and 45 years, so that the errors by this method amount to 12 years, 8 years, and 11 years! The rate of increase, the duration of the increase of population, the emigration, the relative numbers of children and adults, the mean age of the living—upon all of which the "mean age at death" depends—differ in town and in country, in agricultural and manufacturing districts, to an extent which renders any application of the method to the construction of local life tables, or to the calculation of the relative duration of life, difficult and doubtful, if the proper corrections be made; absurd and misleading, if the "mean age at death" be taken to represent the expectation of life.

The numbers following different professions fluctuate more than the general population; the relative proportion of young and aged persons varies from year to year; certain professions, stations, and ranks are only attained by persons advanced in years; and some occupations are only followed in youth; hence it requires no great amount of sagacity to perceive that "the mean age at death," or the age at which the greatest number of deaths occurs, cannot be depended upon in investigating the influence of occupation, rank, and profession upon health and longevity. If it were found, upon an inquiry into the health of the officers of the army on full pay, that "the mean age at death" of "Cornets, Ensigns, and Second Lieutenants" was 22 years; of "Lieutenant-Colonels" 48 years; of general Officers, ages still further advanced—and that the ages of Curates, Rectors, and Bishops; of Barristers of seven years' standing, leading Counsel and venerable Judges—differed to an equal or greater extent, a strong case may no doubt be made out on behalf of those young, but early-dying Cornets, Curates, and Juvenile Barristers, whose "mean age at death" was under 30! It would be almost necessary to make them Generals, Bishops, and Judges—for the sake of their health. The Assurance Societies are happily so considerate and liberal that they do not attach the slightest importance to the mean age at death, but assure the lives of young men of all the professions at the age of 24 upon the assumption that they will live 38 or at the least 31 years, and pay 38 or 31 annual premiums on an average before they die; while they make the Bishops, Judges, and Generals who go to insure their lives at 60 pay as if they would live but 13 or 14 years.

It has been somewhere stated that the "mean age at death" of dress-makers is exceedingly low, and this has been adduced as a proof of the destructive effects of their employment. If the inquiries had been extended to boarding schools, or to the boys at Christ's Hospital, the "mean age at death" would have been found still lower. Mr. Grainger states, in his interesting Report, that the majority of dress-makers are between the ages of 16 and 26; and it is understood that if they die

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after they marry they are not often designated by that title in the register. This source of error and the increase of population will be found to affect the estimate of the influence of other occupations. That the lives of dress-makers are very much shortened by the severe hardships and ignorant mistreatment to which they are exposed cannot be doubted; but false arguments injure instead of aiding their cause.

In a thriving commercial country like England there is a general movement, such as has been noticed in the army and the liberal professions—from the lower into the higher ranks of society. The servant becomes a master; shop-boys grow into merchants or aldermen; the tradesman retires and is classed either as "independent," "in easy circumstances," or a "gentleman," at the Census, and in the mortuary registers. But these promotions as a general rule are slow; and those only attain the higher positions who live long. If the mean age, at which masters and servants, the wealthy and indigent die, were noted and made the basis of any reasoning respecting the relative health and longevity of the lower and upper classes, the differences would evidently be exaggerated. The exaggeration is increased in another way; many poor people are reduced to seek an asylum at advanced ages in the workhouses, and are not often designated by the occupations which they followed in manhood, but by the general name "paupers": the ages of those who die in the ranks of their respective trades and professions are thus reduced to the same extent as the ages of the paupers who die in workhouses are raised above the average. In 1841 the mean age of 45,507 persons who died in London was 29 years; the mortality was 1 in 40; in the same year 4282 persons died in the London workhouses at the advanced age of 49 years, which they must have nearly attained before they entered those establishments, inasmuch as the mortality there appears to have been about 22 per cent., or 1 in 5 annually.* Contrast 49, the "mean age at death," of paupers in the workhouses, with other statements, which make the "mean age at death" of the same or a superior class of persons 16 or 20 years.

One in 116 of the boys in Christ's Hospital died annually, in the 12 years 1831-42; the mean age of the boys who died was 11 years. The "mean age at death" and the mortality were both low. This illustration, taken from an extreme instance, shows why, while the mortality is lower, the mean age at death is less in England than in some other countries. The English population contains more young persons, more of the age of the Christ's Hospital boys, than the foreign populations.

The life table affords the most satisfactory measure of the relative duration of life, either of classes or of different communities. The mortality obtained by dividing the deaths by the living at each age, is also an unimpeachable test; it is the preliminary to the construction of a true life table. The ratio of the total deaths to the total population affords the next best test that can be employed; if the populations compared be of the same age, their relative mortality will be correctly given by this method; if the ages and the rate of increase differ, the "mean duration of life will be less than the number out of which one dies annually, but the difference will be small in the increasing population." The "mean age at death," or pretended life tables constructed from the deaths, without reference to the ages of the living, or the ages of the living without the ages of the dying, are, as I have already stated, only calculated to mislead in inquiries of this kind, unless great care and discrimination be employed in their application. It happens, nevertheless, in some cases that they afford the only resource; the total

* The pauper population of the London Workhouses was 19,412 at the time the Census was taken in June; it would probably be greater in Winter.