

Greece and Rome that the destruction was not rendered complete.

The remaining chapters deal with the foundation of the modern period of medicine in the fifteenth and sixteenth centuries; its progress in the seventeenth century, as illustrated by the birth of modern physiology, the foundation of the Royal Society and the work of Sanctorius and Harvey, the introduction of chemistry and mathematics into medicine by Paracelsus, van Helmont, and Borelli, the microscope and the discovery of germs, the clinical supremacy of Sydenham; the progress of medicine in the eighteenth century, which is described as an era of hygiene in which a lull took place in microscopic research; and the epoch of modern medicine.

The text is liberally interspersed with reproductions of contemporary illustrations, and a short bibliography of readily accessible English works supplementary to those mentioned in the text is appended. The volume may be warmly recommended to those in need of a well-written and lively introduction to the study of medical history.

#### History of Demography.

*Theories of Population from Raleigh to Arthur Young: Lectures delivered in the Galtonian Laboratory, University of London, under the Newmarch Foundation, February 11 to March 18, 1929, with two additional Lectures and with References to Authorities.* By Dr. J. Bonar. Pp. 253. (London: George Allen and Unwin, Ltd., 1931.) 10s. 6d. net.

**D**EMOGRAPHY, or the study of births, marriages, and deaths, is the science at the base of politics and economics, and its prime necessity is an accurate census, repeated at regular intervals. The author traces its rise by a series of examples from the seventeenth and eighteenth centuries, and it adds to our pleasure that he selects these from our own countrymen, for we know the economic conditions they were experiencing, and the constant question between the growth of population in city and country conditions. Raleigh, Hobbes, Bacon, and More were all great, and the incarceration in the Tower of the former gave us the "History of the World". Therein is praise of the dissimilitude of Nature, and the very practical consideration of an Ark, 600 ft. by 100 ft. by 60 ft. deep, leads Raleigh to conclude that Noah probably selected his animals, so that they by breeding gave us all the present species.

Harrington was a visionary, but Graunt, one of the original fellows of the Royal Society, elected

in 1663 for his book on "Natural and Political Observations on the Bills of Mortality", was of a different order. It is based on his collected figures, and these were extended also to the country, so that the population of England is estimated at about 6½ millions, with about a fourteenth of the whole in London. He and all are shy in asking for a census, as it was deemed to be against the law of God.

Petty was a greater man, and his consideration of social conditions is almost such as we might hear to-day; his great remedy is migration, Nature's own method for excess of population. Halley, the astronomer, used Graunt's tables to consider life insurance, adding the tables of mortality of Breslau. Derham quotes the providence of God in reducing the longevity of man at first to 120 years and then to 70 years, so that "the peopled world is kept at a convenient stay". Süßmilch used all tables and applied them to the world, calculating percentages of all ages, and he even considered epidemics. Hume was more economist than demographer—and indeed the whole was then mainly an economic question. Price supported a sinking fund, and his remedy for the National Debt was an increase in the population, but Howlet contested most of his basal work.

Arthur Young, lastly, discusses population and agriculture. His life-work was to improve agricultural methods, and he never seems to have quite understood that manufacture and agriculture go hand-in-hand. He corresponded with Malthus, who later had the benefit of the first accurate census.

The subject is an interesting study, especially when as here illuminated by the mind of an author widely read in world history and the problems of economics. We imagine his view to be that population and world conditions present similar curves, the former lagging a little behind the latter, but that the number of censuses behind us is too few to allow the drawing of such at present.

#### Animal Aggregations.

*Animal Aggregations: a Study in General Sociology.*

By W. C. Allee. Pp. ix + 431. (Chicago: University of Chicago Press; London: Cambridge University Press, 1931.) 22s. 6d. net.

**D**EEGENER'S great work "Die Formen der Vergesellschaftung im Tierreiche", 1918, was completely spoilt for us by its cumbrous classification of animal aggregations and the impossibility of assigning many cases to any single group. He saw that many animals normally live in communities consisting of a single or a few species, and