

Health Year-Book for 1928. This is the fourth volume of this publication, and it contains information concerning twenty-nine countries: Australia, Austria, Belgium, Canada, Czechoslovakia, Denmark, Dominican Republic, Egypt, Estonia, Finland, France, Germany, Hungary, Irish Free State, Italy, Japan, Latvia, the Netherlands, Norway, New Zealand, Panama, Poland, Roumania, Spain, Spanish possessions in the Gulf of Guinea, Sweden, Turkey, Union of Socialist Soviet Republics, United Kingdom (England, Wales, Scotland, Northern Ireland, Keny, British Somaliland, Tanganyika).

The object of the Year-Book is to give a survey of the progress made by the various countries in the domain of public health. It indicates new developments in the working of the various health services, gives the most recent data as regards vital and health statistics and reviews the work of the principal international organizations dealing with public health, such as the League of Red Cross Societies, the Rockefeller Foundation and the League Health Organization.

The information contained in the Year-Book is furnished by the heads of national health services or persons deputed by them for this purpose. (In our opinion the statement given relative to the number of drug stores in the United States at about 80,000 is excessive; about 60,000 is, probably, nearer the number of stores.)

The twenty-eight standard tables are designed to present the minimum of vital statistics necessary to allow the reader to "interpret correctly the information relating to health conditions in the country under consideration, and to compare the health conditions of the various countries."

The twenty-eight tables fall into the seven following groups: General Demography, Birth Rates, General Death Rate, Causes of Deaths, Infant Mortality, Public Health Statistics, Data on Curative Medicine.

The book will be found a valuable addition to libraries because of the data reported.

Botany. By WILLIAM J. ROLLINS AND HAROLD W. RICKETT. D. Van Nostrand Co., New York, 1929. 535 pages, 382 illustrations, 101 book references. Price \$3.75.

In 27 chapters we find an interesting discussion of cells and tissues, their contents, growth and function, of origin and meaning of life, relations, energy of representative groups of

lower and higher plant life, their vegetative and sexual life cycle, inheritance, evolution and distribution.

"In spite of the many excellent textbooks available on botany and allied subjects," as the authors admit, they have prepared the elaborated course of lectures, given at the University of Missouri, in an attempt "to present the fundamental biological principles rather than to lay the foundation for professional botany, and to give a correct idea of the true nature of the aim of science, its methods of work, and the value and limitations of its results."

To illustrate the author's treatment we quote from the chapters of reactions of plants. "Teleology is a very human point of view and we do many things with purpose; and we assume that the things which a plant or animal does are also caused by purposes. . . . It must be emphasized that science cannot deny the possibility that plants have wills and purposes, and that they govern its life, or that there is some all-knowing Power directing their activities. Teleology may represent, for all we know, the truth; but it is unscientific nevertheless, because it assumes things for which there is as yet no evidence in the sense of observable or demonstratable facts. Therefore we must avoid it in biology—the scientific consideration of life. We must give as reasons for structures and functions only known causes; and we must be prepared, when we cannot find the cause, frankly to admit our ignorance—and to go on looking for one."

Curiously we find no reference to lignin, so characteristic of all woody tissue, of hemicellulose, mucilage and the callose of sieve tubes. We also feel, with regret, that biochemistry and biophysics have not been given more place as they form such an integral part of modern biological science.

Appended is a questionnaire of over 500 questions for review and discussion which will prove helpful to the student who all too frequently is at a loss to formulate his own questions and to determine the extent of his understanding and knowledge.

The book will prove suggestive to the teacher of botany or biology—and be welcomed by students of plant life.—ARNO VIEHOEVER.

BOOKS RECEIVED.

Notice of books received is given in this department and such acknowledgment if not otherwise made is to be regarded as a sufficient