

motionlessness. Its weed is in small patches, and, while sometimes reinforced from the shallow reefs, ordinarily propagates vegetatively. The depths of the sea should shortly be better known by sonic sounding, which has already given us 35,400 ft. (6.7 miles) near the Philippines. It also suggests that the gentleness of relief of the sea bottom has been very greatly overestimated. The yearly, monthly, and daily variation in sea-level is brought out and clearly requires careful study. The tides are treated well, but we miss the familiar world chart, which serves to explain their origin and curious effects found in the North Atlantic.

We should have welcomed a discussion of the tidal currents in relation to depth and obstructions. A fuller account of 'the waters of the depths' and of their circulatory movements would excite the imagination of the reader. The genesis of the Gulf Stream, the earth's magnetism, and the characters of enclosed seas and their opening straits occur to us as 'larger features' than 'Legendary Isles' and accounts of polar explorations. A chapter on the U.S. Coast and Geodetic Survey would also be of interest as it would necessarily contain the history of the modern exploration of coastal waters.

*Physiology and Biochemistry in Modern Medicine.*

By Prof. J. J. R. Macleod, assisted by Roy G. Pearce, A. C. Redfield, N. B. Taylor, and J. M. D. Olmsted, and by others. Sixth edition. Pp. xxxii + 1074 + 9 plates. (London: Henry Kimpton, 1930.) 42s. net.

PROF. MACLEOD'S text-book is now well established in the literature, in fact, it has reached its sixth edition in the course of twice as many years. It blends under one cover general and special physiology and biochemistry and applied or clinical physiology: it is larger than works devoted to clinical physiology, but makes no attempt to deal in any detailed manner with many of the problems of specialised physiology. In fact, this science has now so many branches, general, biochemical, and histological, that it has become impossible for one volume to deal adequately with all. Prof. Macleod has performed the useful service of selecting from the mass of literature material suitable for welding into a whole as human physiology, which is almost the same as clinical medicine, when healthy, and not diseased, individuals are the subject of study.

This edition has been thoroughly revised and in places rewritten: but in comparison with the total bulk of our knowledge, certain recent discoveries, which have loomed large in the public eye, assume their more correct proportions. The general plan of the work is well known: it is divided into ten parts devoted to the physico-chemical basis of physiological processes, the blood and lymph, the neuromuscular system, the special senses, circulation, respiration, digestion, excretion, metabolism, and the endocrine organs. It should be in the hands of all medical students and teachers of physiology and can be read with profit by all interested in the scientific basis of modern medicine.

*Engineering Electricity.* By Prof. Ralph G. Hudson. Second edition. Pp. viii + 214. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1928.) 12s. 6d. net.

THIS book is intended primarily for the junior and senior engineering students of the Massachusetts Institute of Technology who are not specialising in electrical engineering. It contains an outline of lectures previously given by the author. These lectures are now discontinued, and in their place nine pages of the text are assigned each week for home study. The class-room exercises consist of three 'recitations' and one problem section per week. An independent laboratory course covers the same ground and follows the class exercises. The keynote of the work we are told in the preface is brevity, and since the students are nearing the end of their college studies the statements are made as rigorous as possible. Chap. xvii. is devoted exclusively to illustrations illustrating all kinds of electrical apparatus.

Apparently 'weatherproof' insulation and 'slow-burning' insulation are distinguished by the intensity of the shading. In Chap. xviii. a hundred practical problems are given. As a class-book we think this book will be useful. But considering its size we think that 12s. 6d. is far too much to charge for it.

*Disease and the Man.* By Prof. George Draper. (The Anglo-French Library of Medical and Biological Science.) Pp. xix + 270 + 19 plates. (London: Kegan Paul and Co., Ltd., 1929.) 12s. 6d. net.

DR. DRAPER provides us with a very interesting sidelight on the relation between disease and the type, physical and mental, of the patient. This book forms a useful extension to disease of the work of Kretschmer on the relation of bodily type to character. Anthropometric data are all too little used in connexion with disease. The author presents series of cases of gastric ulcer, gall-bladder disease, pernicious anæmia, tuberculosis and nephritis, and points out the varying physical characteristics which are common to these disease groups. The relation between psychological characters and physical disease is also considered.

*The Planktonic Diatoms of Northern Seas.* By Dr. Marie V. Lebour. (The Ray Society Volume 116 for the Year 1929.) Pp. x + 244 + 4 plates. (London: Dulau and Co., Ltd., 1920.) 12s. 6d.

THIS book is indispensable to all biologists interested in the life of the ocean. The families, genera, and species are clearly defined and well illustrated, their distribution properly recorded. There is a good bibliography. An introductory chapter gives a brief account of the general morphology, reproduction, and nutrition. We learn that all diatoms without chromatophores are saprophytic. Some have fungi and other algæ as parasites, while a dinoflagellate is found on *Chaetoceros*. There are several symbionts, especially flagellates, while some diatoms have special associations with infusorians.