

This book, it is hoped, gives an accurate account of the basic discoveries in parasitology at a level which is comprehensible to the non-professional parasitologist."

Chapter 1 traces parasitology from ancient times until the middle of the 19th century. This precedes chapters about certain particular parasites chosen "because their histories illustrate distinct steps in the history of parasitology as a whole." These chapters, are "The Cestodes," "Fasciola Hepatica," "The Schistosomata," "Trichinella Spiralis," "Hookworms," "Wuchereria Bancrofti," "Dracunculus Medinensis," "The Parasitic Protozoa," "The Trypanosomes," "Entamoeba Histolytica," "Babesia Bigemina" [his spelling], "The Plasmodia," and the concluding chapter, "Parasitology Established." There is a bibliography and an index of personal names.

The book, except for the story of *Babesia bigemina*, is an outline history of medical parasitology. In such a brief survey, restriction and selection of material are unavoidable, and the author explains this. The book is interesting, well written, and adequately produced. It probably serves the purpose for which it is intended. However, it is not without errors, some of which may lead to misunderstanding. A professional parasitologist might object to lack of depth in treatment of some of the topics selected.

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Handbook of Physiology

The **Handbook of Physiology**, section 2, vol. 3, *Circulation* (published for the American Physiological Society by Williams and Wilkins, Baltimore, 1965. 985 pp., \$32), edited by W. F. Hamilton and Philip Dow, completes the series on circulation. Volume 1 (1962) dealt chiefly with the blood, with hemodynamics, and with the heart; volume 2 dealt with the blood vessels.

Admirably, the present volume starts out to put these pieces together, in a chapter entitled "Integrated aspects of cardiovascular regulation" (Folkow, Heymans, and Neil). Circulatory control is also analyzed, using analog computer techniques (Homer Warner) and is further discussed in a chapter entitled "Postural changes in the cir-

culation" (O. H. Gauer and H. L. Thron), in one on adaptive changes in the heart to heavy work loads (F. Grande and H. L. Taylor), and in one on effects of conditioned reflexes on the circulation (S. Figar).

Control of the circulation by autonomic drugs is covered by R. P. Ahlquist; the circulatory effects of "psychopharmacological drugs," both ancient (cocaine) and modern (tranquilizers), are described by J. H. Burn, and those of anesthetics by E. M. Greisheimer. Two chapters on the circulatory effects of heat and cold, and of artificial hypothermia (Rudolf Thauer) precede an account of the intriguing sequence of events that occur during the hibernation of hamsters and squirrels (Charles Lyman).

Three chapters, on the interface between circulation and respiration, are on effects of high pressures from diving or from other causes, in whales and men (Karl Schaefer); on effects of respiratory acts, including the Valsalva maneuver (E. P. Sharpey-Schafer); and on hyperventilation and hypoventilation (Dickinson Richards).

Comparative physiology of the circulation in invertebrates and vertebrates is discussed by A. W. Martin and K. Johansen.

The embryology of the heart is treated by J. D. Boyd, and another paper on structure, "Ultrastructure of the vascular membrane" (of the capillaries), is by G. Majno, who traces changes in interpretation of electron micrographs in recent years. The history and present status of pump-oxygenation systems are described by P. M. Galletti and G. A. Brecher.

The treatment of pathophysiology comprises the remainder of the volume, including a discussion of sludged blood (M. H. Knisely), a clear account of the many events occurring in blood clotting (M. Mason Guest), and an outline of the effects of anaphylactic shock on blood vessels (Hiram Essex) and of the causes of clubbing of the fingers (Jean Ginsberg).

Men who have toiled long in the vineyards cover topics of perennial controversy, including shock (Jacob Fine), cardiac failure (James O. Davis), and hypertension (Irvine Page and J. W. McCubbin).

So diverse a group of topics in one volume was not the original plan of the editors, but differing times of arrival of the many manuscripts necessitated changes. The wonder is that

the three volumes were published in a period of only 3 years, and, above all, that the quality of most of the chapters is so outstandingly high. It should be added that, throughout the volume, the illustrations are also of high quality. Of enormous value is the comprehensive author and subject index prepared by Williamina Himwich, which makes instantly available the material in all three volumes, for these volumes represent the greatest compendium of knowledge of the physiology of the circulatory system existing today. As such, this section of the handbook represents a magnificent accomplishment by the editors, the late, beloved William F. Hamilton, and his colleague Philip Dow, and by the contributors themselves.

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New Books

General

Acquisitions Récentes en Biologie. Aubier-Montaigne, Paris, 1965. 305 pp. Illus. Paper. Contributors are Jean André, Ernest Bösigier, Gérard Bouhot, François Bourlière, Albert Claude, Alfred Fessard, Manfred Gabe, Pierre P. Grassé, Roger Martoja, Alexis Moyse, Jean Nitsch, Jean Rostand, André Tétry, Jean Valérien, and Étienne Wolff.

Alcoholism. Neil Kessel and Henry Walton. Penguin Books, Baltimore, 1965. 192 pp. Paper, 95¢.

American Ultraminiature Component Parts Data, 1965-66. G. W. A. Dummer and J. Mackenzie Robertson. Pergamon, New York, 1965. 498 pp. Illus. \$21.50.

The Amateur Archaeologist's Handbook. Maurice Robbins and Mary B. Irving. Crowell, New York, 1966. 287 pp. Illus. \$6.95.

An Annotated Bibliography of Tree Growth and Growth Rings, 1950-1962. Sharlene R. Agerter and Waldo S. Glock. Univ. of Arizona Press, Tucson, 1965. 188 pp. \$15. The sections are Tree growth; Growth factors; Taxonomy and distribution; Tree rings; Bibliographies; Semipopular; and Tree rings and archeology.

Astronautics Year. An international astronomical and military space/missile review of 1964. Compiled by David Howard. Pergamon, New York, 1965. 229 pp. Illus. \$6.

The Atmosphere in Action. I. J. W. Potthecary. Macmillan, London; St. Martin's Press, New York, 1965. 111 pp. Illus. \$3.95.

Audubon in the West. Compiled and edited by John Francis McDermott. Univ. of Oklahoma Press, Norman, 1966. 143 pp. Illus. \$4.95.

The Australian Sky. W. J. Newell. Jaca-

(Continued on page 1292)