

which are germane to the subject and excluding such aspects of these subjects which are of primary interest to the professional pharmacologist only."

"The author in the present volume has emphasized the basic mechanisms of drug action while orienting the subject towards its ultimate goal of practical therapeutics. An attempt has been made to explain the phenomena elicited in the therapeutic use of drugs in terms of normal body functions and to correlate these with the deviations from normal function encountered in disease."

The fifth edition coming but two years after the previous revision of this text conforms with the Sixteenth Revision of the United States Pharmacopeia (1960), and with the Eleventh Edition of the National Formulary (1960) and their supplements, and New and Nonofficial Drugs (1961). Thus there are covered briefly practically all new drugs and therapeutic methods to the present time.

In the area of anesthesiology historically inaccurate or quite naive statements which have been adequately refuted by substantial research are to be found. In each of the nine parts of the text which are divided into forty-four chapters, brief discussion and action of all presently available specific therapeutic agents are given with good references to the literature. This should prove to be a good reference for the anesthesiologist outside his specific field of specialization.

O. SIDNEY ORTH, M.D.

Sleep and Wakefulness. By NATHANIEL KLEITMAN, Santa Monica, California. Cloth. \$12.50. Pp. 552, with illustrations and 4,337 references. The University of Chicago Press, Chicago, 1963.

This is an exhaustive treatise on sleep and wakefulness. It is the second edition, appearing 24 years after its predecessor, and has been thoroughly revised and updated. Bibliographic references are to within a year of publication. The source of the material is world wide, from both men and animals, integrated and interpolated by Dr. Kleitman, a retired professor of physiology.

This book is divided into eight parts. The first on the functional difference between sleep and wakefulness enumerates the published data on the recorded differences in the circulation, respiration, digestion and the like in the awake and sleeping subject. The second describes the course of events during sleep. These include motility, dreaming, depth and duration. The periodicity of bodily changes between the sleeping and waking state is considered. These concern temperature, activity and performance, visceral activity and meteorological and seasonal cycles. There are chapters on sleep deprivation, the pharmacological means of influencing sleep or wakefulness and on the theories of sleep. Finally, two sections deal with spontaneous changes in normal sleep rhythm and in states resembling sleep, such as hibernation and hypnosis. The changes in sleep rhythm include discussions of narcolepsy, catalepsy, epilepsy, encephalitis lethargica, and insomnia.

This book is intended primarily as a reference book and as such it contains a host of material of value to an anesthesiologist. It should be on the shelves of all anesthesia libraries. However, it is much easier to read than the average reference book and a few hours' *skimming* can be very rewarding to the reader.

JAMES E. ECKENHOFF, M.D.

Boerhaave-Cursussen voor Specialisten—Anaesthesiologie—1963. VOLUMES I AND II—FOURTH COURSE IN ANAESTHESIOLOGY—*Neuroanaesthesia*. L. A. Boéré and Contributors. Paper. Pp. 196. Boerhaave Kwartier, Leiden, Netherlands.

The publication covers the recent course in anesthesiology presented by the Department of Anaesthetics of the University Hospital Leiden, which was devoted to anesthesia for neurosurgery. Included are 15 lectures presented by leading Swedish, German, Belgium, French and Dutch medical educators and investigators, which deal with anatomy and physiology of the brain in relation to clinical neuro-anesthesia. Particular emphasis is placed on respiratory, cardiovascular and neurophysiology. All but three of the lectures appear in English, the remainder in German. Illustrations are adequate. A valuable addition is the inclusion of all discussions.

These two volumes contain timely and enlightening reading for all anesthesiologists, as well as for physicians concerned with neuro-anatomy and physiology, pharmacology, neurology and neurosurgery.

H. M. LIVINGSTONE, M.D.

Annotated Bibliography on Shock 1950–1962. By BENJAMIN W. ZWEIFACH. Cloth. \$4.00. Pp. 206. Publication 1182. National Academy of Sciences, National Research Council, Washington, D. C., 1963.

This book represents a compilation of the important papers, reviews, and books on shock which have been published during the last 12 years. Each article is abstracted, and the salient features are described in a short paragraph. The 944 articles included are ingeniously indexed. The tables of contents list the articles according to types of shock, types of experimental animals, and clinical papers. In the text, articles are presented by alphabetical order of the authors' names.

The author is known for his work on shock, and is a member of the Committee on Shock of the National Research Council. This book was prepared at their request, and is of particular value to those interested in research work in the field. For clinicians, it is of interest to see the scope and variety of the work done in an effort to shed light on a most important problem in medicine.

J. J. JACOBY, M.D.