sacrifice of detailed bibliography, an omission of discussions of differences of action of compounds on species other than man and individual discussions of every drug used clinically. The author aims at a text essentially for the medical students and practitioner.

The sections and chapters conform to the usual arrangement. Section III, psychopharmacology, is of especial current interest. There are chapters on: Amine Metabolism and the Nervous System; Tranquilizing Drugs; and Psychomotor Stimulants and Psychotomimetic Drugs. Section V, Anesthesia, contains some rather simplified definitions. The divisions of degrees of depression during anesthesia often would be difficult to determine clinically and appear over-simplified. The inclusion of atropine as an incomplete anesthetic drug, as well as the muscle relaxants, which have no actual anesthetic properties, are points of note. The latter fit the author's pharmacological objective of muscular relaxation, but this without depression of the sensorium or of pain *is not* anesthesia! The chart of phases of anesthesia (fig. 28) is realistic in its inclusion of factors in the preanesthetic and postanesthetic periods.

The text, for a first edition is remarkably free of typographical and factual errors. A few fundamental and important errors do occur: the meta-hydroxy group is omitted on the formula of phenylephrine (page 77) after a basic discussion of the structure activity relationship of the catechol amines. An appendix, New Approaches to Therapy, discusses the pharmacological approach to atherosclerosis.

The basic presentation of the mechanism of pharmacological action of each family of drugs, followed by only the important clinical differences of various drugs in each family, keeps this text to a minimum size for maximum usefulness. It should be welcomed by anesthesiologists for quick reference and an understanding of the basic mechanism of action of each family of drugs.

O. Sidney Orth, M.D.

Histopathologic Effects of Local Anesthetic Drugs and Related Substances. By Philip Pizzolato, M.D., Assistant Chief, Laboratory Service, Veterans Administration Hospital, Clinical Associate Professor of Pathology, Louisiana State University, School of Medicine, New Orleans, Louisiana, and Walter Mannheimer, M.D., Chief of Anesthesiology, Veterans Association Hospital, Associate Professor of Anesthesiology, Baylor University College of Medicine, Houston, Texas. Cloth. $5.50. Pp. 100, with 42 figures and 1 table. Charles C Thomas, Publisher, Springfield, Illinois, 1961.

The authors give a summary of previous efforts in this field including their own recent critical work. This provides a stimulating concept of what conditions one may expect to produce in tissues by the injection of local anesthetic drugs, both short-acting, such as the presently commonly used agents, and long-acting, such as quinine, antihistaminic agents, ethanol and phenol. Short descriptions are given of six methods of evaluating conditions of tissues following injections. Results are depicted in 41 excellent full-page, enlarged black and white photographs of tissue sections.

This small volume is bound with hard covers, has substantial paper and easily legibile print. The bibliography of 97 references affords a good introduction to this field. The authors present their material concisely and effectively. The information will be of interest to all those concerned with the histopathology of tissues injected with local anesthetic agents.

Robert W. Virtue, M.D.

Cerebral Anoxia and the Electroencephalogram. Edited by Henri Castaut, M.D., Professor and Director, Laboratories of Neurobiology, Faculté de Medicine, Institut National d'Hygiéne, Marseilles, France, and John Stirling Meyer, B.S., M.Sc., M.D., C.M., Professor and Chairman, Department of Neurology, Wayne State University College of Medicine, Detroit, Michigan. Cloth. $24.50. Pp. 617, with numerous plates, charts and tables. Charles C Thomas, Publisher, Springfield, Illinois 1961.

Most anesthesiologists would designate anoxia as the major hazard in our practice. This book is a record of the Colloquim held in Marseilles by the Réunion Européene d'Information Electroencéphalographlique in 1959. The meeting was concerned with clinical neurophysiolgical, neuropathological and electroencephalographic studies of acute cerebral

anoxia and hypoxia. The roster of 56 contributors represents many countries and every discipline interested in the subject.

The first three sections consist of 28 papers offering much information to the anesthesiologist. These deal with physiological studies of hypoxia and anoxia in animals, with electroencephalographic studies of transient hypoxia in man, and with utilization of EEG signs of cerebral hypoxia during open heart surgery. The remainder of the monograph contains 28 papers concerned with EEG manifestations provoked by various methods, and with their diagnostic value.

This book is a handsome volume printed in clear type on excellent paper. The illustrative EEG records are beautifully reproduced.

Much of the material presented is fully intelligible only to a student accomplished in electroencephalography. However, the anesthesiologist finds here a great deal that is enlightening and helpful, making one well repaid for the real effort necessary to study this monograph.

JULIA G. ARROWOOD, M.D

Handbook on Clinical Electromyography. BY ROBERT B. PEARSON, M.D., Associate Professor of Physiology, Loma Linda University School of Medicine. Paper Cover. Pp. 72 with 29 illustrations. The Meditron Co., El Monte, California. 1961.

This brief manual on electromyography for beginners in the field starts with an explanation of the development and uses of the procedure and continues with definitions of the specialized terminology related to muscles and nerve. These are followed by a simple and clear exposition of the anatomy and function of muscles and nerves, and the various types of electrical changes which accompany their activity.

A chapter discusses and illustrates the types of instruments needed in myography. Specific illustrations are given for the attachment of the equipment to the patient, and the technique of the examination. Analysis and interpretation of the results of myography in the last chapter help to distinguish among diseases which originate in the muscles, nerves, neuromuscular junction or central nervous system, and those which are psychogenic.

The manual is designed for elementary instruction, and is sufficiently concise and clear to fulfill this purpose. Twenty-nine illustrations are valuable adjuncts. A modest bibliography is included. The author is a physiologist, active both in research and clinical applications of electromyography.

This book is of value only to those anesthesiologists interested in reviewing the subject. For those interested in research, the manual provides a good introduction, but must be supplemented by more detailed reading.

JAY JACOBY, M.D.

Local Anesthesia and Pain Control in Dental Practice. SECOND EDITION. BY LEONARD M. MONHEIM, B.S., M.S., D.D.S., Professor and Head of Department of Anesthesia, University of Pittsburgh School of Dentistry; Asst. Prof. Department of Surgery (Anesthesia), University of Pittsburgh School of Medicine. Cloth. $8.75. Pp. 319, with 148 illustrations. The C. V. Mosby Co., St. Louis, Mo., 1961.

This second edition of a textbook is intended as a complete guide for dentists in the control of pain. The subjects include: discussion of neurophysiology and psychophysiology of pain, anatomy of appropriate areas emphasizing neuroanatomy, principles and techniques of regional anesthesia, chemistry and pharmacology of anesthetics, anesthetic solutions and vasoconstrictors, preanesthetic evaluation and medication, anesthetic complications and emergencies, postoperative management of pain, and medicolegal aspects of regional anesthesia.

The author writes from his own experiences and those of fellow contributors to the book. Specific bibliography is found only in the chapter on medicolegal aspects, although literature references appear at the conclusion. Illustrations are line drawings, sketches and photographs. Some of the latter are not clear and are inadequately labeled. The book is written in great detail, especially in the discussion of nerve block techniques which are thoroughly illustrated.

Emphasis is placed on pain as a complex phenomenon composed of perception and re-