

phisticated medical research, as well as reduce the probabilities of costly abortive efforts and duplications in research effort. Those who take the trouble now to understand the capabilities and limitations of such tools may be well rewarded.

An excellent bibliography of 522 references is used as an example of the value of coding techniques for cross reference of information.

LUCIEN E. MORRIS, M.D.

Hypnosis Throughout the World. EDITED BY F. L. MARCUSE, PH.D., Professor, Department of Psychology, Washington State University, Pullman, Wash. Foreword by Bernard B. Raginsky, M.D. Cloth. \$11.00. Pp. 312. Charles C Thomas, Publisher, Springfield, Ill., 1964.

This book has 17 chapters, each of which contains a detailed review of the status of the practice of hypnosis in a different country. These countries are Brazil, Canada, Czechoslovakia, Denmark, Finland, Germany, Great Britain, Hungary, India, Israel, Italy, Japan, The Netherlands, Norway, Sweden, the Union of Soviet Socialist Republics, and the United States. Each chapter is written by a leading doctor (M.D. or Ph.D.) or psychologist of the respective country who has profound interest and experience in hypnosis. Topics discussed include history, attitudes of the medical, dental, legal, psychological, clerical professions and the public, teaching and research, misconceptions, laws, etc. There is also a short chapter on international communication and organizations in hypnosis.

Wide variation exists in the manner of application of hypnosis, as well as medical and legal attitudes towards its use. Some use hypnosis almost entirely for therapy, others almost entirely for analysis. This readable book is far more than a valuable statistical reference. It helps to clarify much existing confusion in terminology. Almost every country has made some unique contribution to hypnosis. Explanations of several practices which have been surrounded with an aura of mysticism such as Yoga and Tantra in India, and Miko and Shyugenkyo in Japan, are included. Hypnosis has been used in some countries by dentists, rarely as adjuncts to general anesthesia. There were almost no references to its use as total anesthesia.

The book would be of great interest and help to the serious student of hypnosis, especially in the fields of psychiatry and psychology. Although of no practical value to the anesthesiologist, he would find it interesting for leisure reading.

RUTH M. ANDERSON, M.D.

Nitrous Oxide. EDITED BY D. W. EASTWOOD, M.D., with 10 Contributors. Cloth. \$7.50. Pp. 156, with illustrations. F. A. Davis Company, Philadelphia, 1964.

This is the first volume 1964 in the Clinical Anesthesia series. The editor and contributors are well known for their work with nitrous oxide. Although each chapter is written by a different author, there is remarkably little overlap.

A tabular as well as narrative history of nitrous oxides gives some little known facts, and is brought up-to-date with the fail-safe system of administration. The pharmacology and toxicity of the drugs are presented in some detail. The more recent information on uptake and distribution is summarized. The rationale of adjuvants is presented; nitrous oxide used in maximum concentration compatible with oxygenation and various types of drugs that are used to supplement it. A chapter devoted to nitrous oxide with relaxants include prolonged curarization, the apneic threshold, and the patient's ability to remember. There is an interesting chapter on industrial use, particularly in the preparation of aerosols in the food industry, in refrigeration, leak testing and packaging. Because of its similarity to nitrous oxide, a brief review of ethylene is presented.

The chapter in which nitrous oxide is re-evaluated as an analgesic in labor is particularly valuable. The importance of technique in eliciting different pharmacologic effects is explained. Methods of obtaining optimum results are described.

Each chapter is followed by an extensive list of references. This book is recommended for anesthesiologists, and is essential reading for those in training.

JAY JACOBY, M.D.

Artificial Respiration—Theory and Application.

JAMES L. WHITTENBERGER, EDITOR. \$10. Pp. 276, with illustrations. Hoeber Medical Division, Harper & Row, Publishers, New York City, 1962.

This book presents current concepts of common methods of artificial respiration along with the practical and physiologic considerations on which these are based. Most of the contributors have been associated in their research efforts and through conferences.

An introduction by D. B. Dill, formerly medical director Army Chemical Center Medical Laboratories, outlines briefly the research projects set up to determine the method or methods of manual artificial respiration best adapted for military use, including the preferred type of device. This is a very interesting historical account.

Part One of the book is concerned with Physiology of Respiration. A chapter on *Respiratory*

Gas Exchange by Julius H. Comroe brings together the basic principles and techniques that a physician should know in order to recognize ventilatory insufficiency, identify the fundamental causes, and evaluate the effectiveness of treatment. Unfortunately there is only one reference to the literature. There is not even a reference to the author's famous book on *The Lung* to direct the uninitiated reader to obtain further information. A chapter on *Respiratory Mechanics in Resuscitation* by John Clements briefly reviews mechanical properties of the respiratory system. However, since a substantial part of the recent great expansion of knowledge of respiration concerns mechanical properties, this chapter is too brief. A very interesting feature is a section on a mechanical analogue with an equation of motion for the respiratory apparatus. Calculations follow in which the author manipulates the equation, changing the forces of compliance and resistance. Here too the reader avid for further information in the direction of this promising frontier is cut off with insufficient details and no references. Nevertheless, this brief chapter is sufficient to indicate what further interesting information may be forthcoming from this author. A brief chapter by Whittenberger summarizes the important interrelationship of respiration with pulmonary and systemic circulation.

Part Two deals with *Techniques of Artificial Respiration*. David Greene writes on *General Considerations*. There are sections on methods for evaluating resuscitation such as the spirometer, pneumotachograph, pneumograph and respiratory gas analysis, and sections on signs of respiratory arrest, diseases leading to acute pulmonary insufficiency, use of oxygen and hypothermia, pulmonary aspiration, gastric dilation and airway obstruction. Peter Karpovich discusses in a colorful style the various methods and importance of manual artificial respiration. Elam and Greene summarize in a scholarly and well documented chapter *expired air methods without accessory apparatus*. Useful tables, diagrams, graphs and line drawings are included. In an important chapter containing a wealth of information not hitherto published, Elam describes equipment used for expired air methods based upon his wide experience in equipment design and development. Excellent diagrams and photographs are included. Principles involved in mechanical respirators are covered in a chapter by E. P. Radford and J. L. Whittenberger. David Graff presents a final complete and helpful chapter on the application of artificial respiration methods in myasthenia gravis and anticholinesterase poisoning.

This well-indexed book contains information representing the forefront of knowledge on the subject and should very definitely be a great help to all anesthesiologists.

RICHARD FOREGGER, M.D.

Drugs of Choice, 1964-1965. By WALTER MODELL, M.D., Associate Professor of Pharmacology, Cornell University Medical College, New York City; Chairman, Advisory Committee on New Drugs to the Food and Drug Administration. Cloth. \$16.75. Pp. 1018. The C. V. Mosby Co., St. Louis, 1964.

In his role as a clinical pharmacologist, the anesthesiologist will find this book very useful. It is a compilation designed to aid the practicing physician in choice of drug, selection of dosage, and review of indications and toxicities. Drugs applicable in a specific field of practice are presented by an outstanding expert in that field.

Chapters especially useful to the anesthesiologist, whether he be in training or practice, include those on medullary stimulants, analgesics, anesthetics, tranquilizers, hypnotics, antiemetics, anti-hypertensives, and vasopressors. The first chapter by Dr. Modell reviews the principles of clinical pharmacology including collection and interpretation of experimental data on drug action. Physical and chemical characteristics of drugs influencing the choice is discussed in one chapter as are drug reactions and drug choices for children. Organization of the material presented under clinical chapter headings rather than by chemical or pharmacologic grouping permits the physician ready access to desired information. Authors for these sections include Vandam, Bonica, Artusio, Friend, Lasagna, Bellville, and others. Dr. Modell demonstrates his wide and continuing acquaintance in this field by his excellent choice of chapter authors. No other similar work is available.

The Drug Index section which correlates trade names with pharmacologic names may not be as useful as the excellent index. It is recommended as a reference book for all anesthesiologists.

D. W. EASTWOOD, M.D.

Pharmacology and Therapeutics. FIFTH EDITION. By ARTHUR GROLLMAN, Ph.D., M.D., F.A.C.P., Professor and Chairman, Department of Experimental Medicine, The Southwestern Medical School, the University of Texas, Dallas, Texas. Cloth. \$12.50. Pp. 1131, with 236 illustrations. Lea & Febiger, Philadelphia, 1962.

From the introduction, "with the rapid growth of Pharmacology and the introduction of new drugs at a spectacular rate, any text on the subject must soon become obsolete. To burden the student by the acquisition of an encyclopedic volume seems unwise. The present edition has, therefore, been maintained at a reasonable size despite the addition of the newer advances and the consideration of all the official and important drugs. This has been made possible by the inclusion only of such chemical, physiological, biochemical and clinical details