

# THE ANESTHESIOLOGIST'S BOOKSHELF

HUBERTA M. LIVINGSTONE, M.D., *Editor*

## **Electroencephalography in Anesthesiology.**

By ALBERT FAULCONER, JR., M.D., M.S., Head, Section of Anesthesiology, Mayo Clinic; Associate Professor of Anesthesiology and Physiology, Mayo Foundation Graduate School, University of Minnesota, and REGINALD G. BICKFORD, M.D., CH.B., M.R.C.P., Consultant, Section of Physiology, Mayo Clinic; Professor of Physiology, Mayo Foundation Graduate School, University of Minnesota. Publication No. 395 American Lecture Series. A monograph in American Lectures in Anesthesiology. First Edition. EDITED BY JOHN ADRIANI, M.D., Director, Department of Anesthesia, Charity Hospital of Louisiana, New Orleans, Louisiana. Cloth. \$4.75. Pp. 90, with 35 illustrations. Charles C Thomas, Publisher, Springfield, Illinois; Blackwell Scientific Publications, Ltd., Oxford, England; The Ryerson Press, Toronto, Canada, 1960.

The authors Faulconer and Bickford are well qualified after a decade of study, to present the subject of "Electroencephalography in Anesthesiology." They have brought together in one book their own and other investigators' interpretations and understanding the electroencephalogram taken during anesthesia. The book is divided into eight chapters. The first chapter expresses the authors' viewpoint on the value of electroencephalography in laboratory and clinical work. The second chapter describes the nature and characteristics of brain waves. The third chapter describes the equipment employed for encephalography.

Chapters 4, 5, and 6 illustrate the effects of various depths of cyclopropane, barbiturates, chloroform, ethylene, Fluomar, trichloroethylene, and halothane anesthesia on encephalographic tracings. Also recorded are the electroencephalogram effects of hypocapnia and hypercapnia, anoxia, hypoglycemia, hypotension, and hypothermia.

The final chapter suggests how the electroencephalogram could be used as a guide for

an automatic control of anesthesia; namely servo-anesthesia. This book is clearly and concisely written and should be read and studied by all students and anesthesiologists who wish to employ continuous monitoring of the patient's condition during anesthesia. This is more efficient than the intermittent recording of blood pressure and pulse rate.

M. DIGBY LEIGH, M.D.

## **Hypothermia for the Neurosurgical Patient.**

By ANTONIO BOBA, M.D., Associate Professor of Anesthesiology, The Albany Medical College of Union University, Albany, New York. First Edition. Cloth. \$6.00. Pp. 124 with 53 illustrations. Charles C Thomas, Publisher, Springfield, Illinois, 1960.

The author has published several reports of his own observations on the matter covered in this book. This is essentially a manual for the use of hypothermia in neurosurgical cases. Doctor Boba presents the subject in order to describe his reasons for, and the procedures he employs for cooling patients in the operating room. Part I gives the physiological background for the effects of cooling on the cardiovascular, respiratory and central nervous systems. The second section describes the changes which occur in these parameters during cooling and warming, and includes discussions of acid-base and fluid balances during hypothermia. The third part of the book describes Doctor Boba's technique in some detail. The book is well made, with large, easy-to-read type. There are a few typographical errors but these are inconsequential. There are 4 tables and 49 figures. The figures illustrate the author's points quite clearly. In Table III, an error in concentration of blood oxygen when the patient is breathing 100 per cent oxygen renders the value of this illustration minimal. The author's style is effective and makes the material easily read and absorbing.

There are a few situations in which other

anesthesiologists might take issue with Doctor Boba. He does not give his patients premedication; he does not use artificial respiration; he uses as large a dose of thiopental as possible for induction; he does not keep the limbs out of water during cooling; he replaces polyethylene tubing at the end of the operation with metal needles; he treats respiratory acidosis with an increased flow of gas from the machine; he controls rather than prevents coughing and bucking. These are perhaps moot points. Many excellent practical points are presented by the author, and any anesthesiologist or neurosurgeon doing this type of work will find this book of interest.

ROBERT W. VIRTUE, M.D.

**Year Book of General Surgery 1960-1961**

**Series.** EDITED BY MICHAEL E. DEBAKEY, B.S., M.D., Professor of Surgery and Chairman, Cora and Webb Mading Department of Surgery, Baylor University College of Medicine; Surgeon-in-Chief, Jefferson Davis Hospital, Houston, Texas; Senior Attending Surgeon, Methodist Hospital, Houston, Texas; Chief Consultant in Surgery, Veterans Administration Hospital, Houston, Texas. WITH A SECTION OF ANESTHESIA EDITED BY STUART C. CULLEN, M.D., Professor and Chairman, Department of Anesthesia, University of California Medical Center, San Francisco. Cloth. \$8.00. Pp. 616, with 184 illustrations. The Year Book Publishers, Inc., 200 East Illinois St., Chicago, 1960.

This compact book is one of fifteen such volumes published annually in the Practical Medicine Series. The editors have chosen from recent literature those articles which they consider to be the most significant. It serves its purpose well. The articles are arranged by subject matter and the name of the classification is carried at the top of each page. The title of the article is in heavy type, and the reference to the original article is in a footnote, providing for easy reference. Each article is abstracted and many have editorial comment emphasizing points made by the author, disagreeing with him or giving references for further study of the topic. These

editorial comments contribute considerably to the value of the book.

Each year, the new edition of this book should be included in the library of every anesthesiologist. Almost one fifth of the pages are devoted entirely to anesthesiology in a separate section edited by Doctor Cullen. Some articles primarily present the results of research on animals, some the results of clinical research, and some are included because they present thought-provoking reviews of ever-present problems. In the latter category there are several abstracts of fine papers on neuromuscular blocking agents.

In the section on General Surgery, edited by Doctor DeBakey, there are many subjects of direct interest to the anesthesiologist. There are over 130 pages devoted to surgery of the heart and the great blood vessels, 20 pages on shock, fluids and electrolytes, and other articles involving the use of respirators, operating room deaths, postoperative staphylococcus infections, endocrine response during surgery, and hypnosis. Even the articles which deal with strictly surgical subjects should be of interest and concern to anesthesiologists, since knowledge of the pathology and its preoperative diagnostic problems and treatment profoundly influence the choice and management of anesthesia.

RUTH M. ANDERSON, M.D.

**Fundamentals of General Surgery.** By JOHN ARMES GIUS, M.D., D.Sc. (MED), F.A.C.S., Professor of Surgery, College of Medicine, State University of Iowa, Iowa City, Iowa. Cloth. \$12.50. Pp. 720, with 154 illustrations and figures and 23 tables. The Year Book Publishers, Inc., 200 East Illinois Street, Chicago, 1957.

The avowed purpose of this book is to provide a textbook for the medical school undergraduate that will "set forth in simple terms the considerations that are believed to be fundamental to the study of general surgery, including aspects of physiology and pathology encountered in the patient." In this objective the book succeeds quite admirably; certainly it is better that the texts on general surgery that were available to this reviewer during his own undergraduate days.