The great number of references at the end of each chapter invites the interested reader to more detailed pursuit of the subject. This text will be greatly welcomed by German-reading physicians who are interested in anesthesia.

PAUL R. DUMKE, M.D.
DR. NIELS R. WAEHNELDT

Modern Trends in Anaesthesia. Aspects of Hydrogen Ion Regulation and Biochemistry in Anaesthesia. EDITED BY: FRANKIS T. EVANS, M.B., B.S., F.R.C.S., F.F.A.R.C.S., Senior Consultant Anaesthetist, St. Bartholomew's Hospital, St. Mark's Hospital for Diseases of the Rectum, and Royal Masonic Hospital, London; AND T. CECIL GRAY, M.D., F.F.A.R.C.S., Hon. F.F.A.R.A.C.S. Prof. of Anaesthesia, University of Liverpool. Cloth. $11.50. Pp. 219, with 35 figures and 15 tables. Butterworth Inc., Washington, D. C., 1962.

The editors of this volume are two of the best-known anaesthetists in England. Each volume of *Modern Trends* covers a single type of material pertaining to current thoughts in anesthesia. The present volume consists of eight chapters, written by specialists in biochemistry concerned with modern anesthesia.

The first chapter, by J. F. Nunn, is perhaps the one which will be of greatest general interest. It brings to date the theoretical considerations and practical methods of measuring respiratory and metabolic acid-base levels. The concept of alkali reserve is given a proper burial. Present methods of determination of *p*H and P_{CO_2} are discussed with adequate elaboration by Woolmer in chapter 2. Physiological and biochemical effects of excess carbon dioxide and of hyperventilation are considered in the next two chapters, including thorough evaluations. Chapters 5 and 6 deal with acid-base effects of hypothermia and of cardiac bypass, including world-wide results generally obtained up to 1962. Geddes presents fundamental information on adrenocortical mechanisms in chapter 7. A short discussion of intravenous alimentation is followed by comments on biochemistry of massive blood loss—and replacement. Facts concerning true and pseudo cholinesterases are presented in the last chapter. Mention is made of theories of action, but the reading is straight forward without inundating one with unproven possibilities.

All the styles of writing are easy to read. There is no repetition such as frequently accompanies books consisting of chapters by numerous authors. Any anesthesiologist who professes to have a thorough knowledge of his field of endeavor must be acquainted with the concept offered in this volume.

ROBERT W. VIRTUE, M.D.

Hypothermia in Surgical Practice. BY KEITH COOPER, M.SC., M.B., B.S., Radcliffe Infirmary, Oxford, AND D. N. ROSS, B.SC., M.B., CH.B., F.R.C.S., Consultant Thoracic Surgeon, Guy's Hospital, London. Cloth. $4.50. Pp. 116, with 40 figures. F. A. Davis Co., Philadelphia, 1960.

This book, published in 1960, gives a rather complete picture of the use of hypothermia at that time. As stated in their preface, "Our knowledge of the basic physiological consequences of body cooling is far from complete, and there is still some divergence of view on the practical details of techniques used to achieve hypothermia. In the following chapters an attempt has been made to summarize the various aspects of the basic physiology of hypothermia, . . . and then to outline the various techniques used to cool the body." The authors have done just that, accurately and with clear delineation.

In 1960 Drew's method for cooling to deep hypothermic temperatures was new. It is mentioned several times. Experience has lessened early enthusiasm in favor of other methods.

The basic physiology and pharmacology are the same now as when the book was published. The fundamentals of hypothermia are well outlined in this volume. One entering the field must obviously learn elsewhere of technical developments since 1960.

ROBERT W. VIRTUE, M.D.