be considered a sign of hypovolemia and either fluid or blood should bring the volume back to normal.

The second section which deals with The Airways and Larynx has at least gotten together material usually found in various textbooks on anesthesiology, respiratory physiology and anatomy. There are eight authors, all from Temple University. This section appears above criticism. The prospective Board candidate might tremble at the formulas he would need to learn for calculating the dead space.

Since these basic reviews of two important subjects are compiled by numerous authors, the presentations vary considerably in format, but are all clear and reliable and contain well-documented and extensive references.

**Alice McNeal, M.D.**


This latest volume in the Clinical Anesthesia series differs from its predecessors in that it is designed to serve as a reference text for the student and the practicing anesthesiologist alike. Its twelve contributors, noted for their interest in instrumentation, set out to lead us through the maze of available monitoring instruments so that we may understand their usefulness and their limitations, and so that we may understand what takes place inside the “black box” interposed between the patient and the gauges, screens and graphs we employ to tell us about his condition. They succeed admirably.

Of the book’s eleven chapters, seven contain the “meat,” while the remaining four are philosophical in nature. Deals with in the didactic chapters are manometry, respiratory carbon dioxide and gas flow measurements, electroencephalography, thermometry, blood volume techniques and instrumentation, and applications of gas chromatography in anesthesia. Coverage of these subjects is excellent and well written with liberal use of photographs and line drawings to illustrate the text. A glossary is also provided. Available equipment with its application, limitations, maintenance problems, and in some cases, prices are discussed. Bibliographies accompany each of these chapters.

No less interesting are the chapters which wax philosophic. Characteristics of simple and complex monitors are discussed with a plea for reason and consideration of the patient’s safety in their use. A description of a hospital-engineered central monitoring system with its attendant economies should please administrators as well as anesthesiologists. Finally, a glimpse into the future of
computers, data phones and telemetering devices captures our fancy. Even as we read of them, some of these monitors of the future are coming into use.

“Instrumentation and Anesthesia” fills very well the need for a compact, updated volume on monitoring devices.

RICHARD H. NORTON, M.D.


Fifteen contributors have combined to present eight topics related to anesthesia and the circulation. The opening chapter concerns physiologic factors in the regulation of cardiac output and venous return. This is clearly written and very worthwhile but suffers from mediocre illustrations and legends. The next two chapters on uptake of inhalational anesthetics and myocardial contractility are thorough, fundamental, well illustrated and important; however, they may come as a shock to the reader anticipating a clinically oriented discussion. A chapter on tissue perfusion is based principally on microcirculatory investigations in animals. The remaining chapters on circulatory effects of neuromuscular blocking agents, respiratory acidosis and respiratory alkalosis do concern man and are clinically oriented. One of these chapters could be more up-to-date.

This is the second book on anesthesiology and the circulation to appear within the year. There is practically no overlap in authorship between the two books. The attempt in the first book was coverage in depth whereas in this book the scope is broad, although not complete for the field. There is little duplication between the chapters and for the most part the bibliographies at the end of each chapter are good.

This is an excellent book for students, residents, teachers and those who want to understand fundamental facts.

JAMES E. ECKENHOFF, M.D.


This is the twelfth yearly edition of a collection of reviews by different anesthesiologists from the French Institute of Anesthesiology. In all, 13 topics are covered. These are concerned mainly with the most recent “talked about” advances and procedures which have occurred during the past year. Some of the subject matter is not new, but it is a good collection of recent literature. Excellent reviews on acid-base balance and postoperative respiratory insufficiency, both in thoracic surgery and in the newborn, are provided.

Among the most recent advances, excellent chapters are written on the mechanism of sleep, neurolept analgesia, and the activity of the adrenals during anesthetization and operation. There is even a chapter devoted to the pathophysiology of scuba diving.

An adequate bibliography appears at the end of each chapter. It is taken from both the recent European and American literature. Clear illustrations and graphs are printed where indicated. For those of us interested in European literature in general, and French literature, in particular, this volume could qualify as a French “Yearbook of Anesthesia.”

G. L. HOULE, M.D. and P. R. DUMKE, M.D.


Dr. Just, in the introduction of this monograph states: “Our knowledge concerning liver function during and after surgical intervention is still incomplete. . . . the only definite conclusion being that the liver bears the main brunt of ‘aggression.’” Factors implicated in producing various morphological or clinical degrees of damage are insults of mechanical, thermic, anoxic, circulatory, chemical, autotoxic and bacterial nature as well as reactions of hypersensitivity and disturbances of hydration and electrolyte balance.

In twelve chapters, ten German, two Swiss and two British authors present this subject matter according to various etiological viewpoints. This is done in a clear, concise and readable manner. The unity of style is gratifying and probably the result of good editing. The presentations are based on papers presented at a Heidelberg meeting in May 1964. The papers have been elaborated and converted into a most useful review by addition of more than 300 literature references including the more relevant American publications to May 1964. The work of the National Research Council—Subcommittee on the National Halothane Study is cited; and apparently it evoked extraordinary attention throughout Western Europe.

There is little overlap though many chapters deal with the “halothane problem.” The matter is discussed from an experimental, pharmacological, clinical, statistical and, interestingly enough, from a geographical-epidemiological point of view. In a chapter on liver function tests it is pointed out that the older tests are too insensitive and the newer enzyme tests too unspecific. The value