

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.

Clinical Anesthesia. Vol. 3, 1964—Anesthesia and the Circulation. EDITED BY LEONARD W. FABIAN, M.D., with many contributors. Cloth. \$7.50. Pp. 153, with illustrations. F. A. Davis Co., Philadelphia, 1964.

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 anesthetics 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.

Acta de L'Institut D'Anesthésiologie, Cours Supérieur d'Anesthésie, Volume XII.—Edited by Professor J. Baumann. Paper. 36 Francs. Pp. 282. Librairie Arnette, Paris, France, 1963.

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 post-operative 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 anesthesia 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.

Leberfunktion und operativer Eingriff (Liver Function and Operative Intervention). EDITED BY PROF. DR. O. H. JUST, Chief of Anesthesiology, University of Heidelberg, Germany. Paper DM 15.60 (about \$4.00). Pp. 106, with 26 figures. George Thieme Verlag, Stuttgart, Germany, 1964.

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

of liver biopsies before, during and after surgery is discussed. The pathologist stresses the influence of malnutrition or mere preoperative fasting on liver glycogen and protein content. The role of hypoxia in production of hepatic damage is discussed by several contributors, most poignantly in a chapter on "Anesthesia with Halothane in Air." There is a chapter on hepatitis associated with infusion and transfusion therapy, prefaced by the statement that it is virtually impossible for both clinician and pathologist to differentiate between serum homologous hepatitis and toxic (halothane) liver damage.

It is gratifying to read discussions of the role of the sympathetic nervous system and/or vasopressor drugs in the production of liver damage by halogenated hydrocarbons. There is a short chapter on preoperative examination, preparation, and choice of anesthesia for patients with disturbed liver function.

The monograph ends with ten pages of lively discussion, apparently transcribed verbatim. The book is valuable enough to have merited an index. This readable review is excellently printed and illustrated and is as complete as the available space allows.

W. H. MANNHEIMER, M.D.

Blood Program in World War II. By BRIGADIER GENERAL DOUGLAS B. KENDRICK, M.C., U.S.A. Office of the Surgeon General, Department of the Army, Washington, D.C. Cloth. \$8. Pp. 922, with 195 illustrations. For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington, D.C. 20402. Library of Congress Number 64-60006. Published by the Office of the Surgeon General, Department of the Army, Washington, D.C. 1964.

The Medical Department of the United States Army is publishing a succession of volumes that cover the history of medical activities during World War II. This recent book deals with the professional effort between 1940 and 1945 in reference to blood banking. General Douglas B. Kendrick, M.C., then head of the Department of Surgical Physiology at the Army Medical School and Special Representative on Blood and Plasma Transfusions to the Office of the Surgeon General, was responsible for the blood and plasma programs for this period. He is therefore an author eminently qualified to discuss the problems that were encountered and the methods that were developed to solve them.

In disclosing in an extended and factual manner the experiences of the Overseas Theaters of Operations this book emphasizes the homely truth that injuries causing loss of blood, with or without consequent infection, are the principal cause of shock and must be treated by replacement of blood. In World War I this fact was established and almost simultaneously O. H. Robertson conceived and operated the first blood bank that separated citrated whole blood into its plasma and red cell components. Between the wars this was forgotten but later was relearned and put into action on a large scale after an intensive but hasty effort in research.

It was found that to procure, store and distribute whole blood properly the military services must separate blood banking from all other military and medical activities and entrust it to experienced people who have no other responsibilities. Any deviation from this principle resulted in failure to deliver blood of proper quality and in sufficient quantity to military hospitals in dire need. Anesthesiologists and the newly-appearing breed of blood bank or blood transfusion particularists may well remember these two lessons in establishing and operating blood banking services in civilian or military hospitals today or in planning for the future.

RONALD S. BECKETT, M.D.

RALPH M. TOVELL, M.D.

Ergebnisse der Bluttransfusionsforschung, VIII. Paper. \$11.80. Pp. 318, with illustrations. S. Karger, Basel (Schweiz) and New York. American Representative Albert J. Phiesig, White Plains, New York, 1965.

This paperback supplement of the *Acta Haematologica* reports a series of papers by many authors presented at a blood transfusion conference in Bad Neuheim in April, 1964. Most of the papers originated in Germany. Included are sections on blood transfusion reactions, indications for blood transfusions, therapy with blood fractions and blood substitutes, hemorrhagic disease of the newborn, and techniques concerning blood transfusion and cross matching. Included are literature review, original articles, and the recording of panel discussions.

Those anesthesiologists conversant with German may find this a useful reference source, since there is detailed discussion of all aspects of transfusion therapy.

D. W. EASTWOOD, M.D.