in anesthesiologic pharmacology. An obvious exception is the acetylcholinesterase system, nicely put forth by Dr. Foldes.

In summary, a needed addition, soporific reading, but worthwhile for the inquiring anesthesiologist.

BURNELL R. BROWN, JR., M.D. PH.D.
Professor and Head, Anesthesiology
University of Arizona College of Medicine
Tucson, Arizona 85724

General Surgical Operations. EDITED BY R. M. KIRK. Illustrated. New York, Churchill Livingstone, 1978. Pages: 412. Price: $37.50.

"This book is written primarily as a practical manual for the general surgeon about to carry out an operation," as stated in Professor Kirk's preface. Nineteen British surgeons, most of them from London, have contributed their expertise. Although written for the general surgeon, all the surgical specialties are represented, with at least one chapter devoted to each. Nine of the 27 chapters are devoted to abdominal surgery, three to orthopedic surgery, and one each to other specialties, including a chapter on oral and dental surgery.

In keeping with the stated goal to produce a practical manual, each section addresses a specific surgical problem, *e.g.*, cholecystectomy. Only operative aspects are considered, pre- and postoperative diagnosis and treatment being specifically excluded. Each author has described that approach which he has found simplest and best. The type of incision, intraoperative assessment of surgical pathology, operative diagnostic techniques such as cholangiography, and a concise, detailed step-by-step description of the preferred operative technique are provided. Many sections additionally address choice of anesthesia, difficulties that may be encountered, use and choice of drains, extent of resection, and management of items such as when to open the colostomy.

This work admirably fulfills its intended purpose. For the well-trained general surgeon who has occasion to review a procedure he does not commonly perform, but with which he has had prior experience, the text permits a rapid review of the salient features and provides a safe, acceptable means of dealing with the problem. It is perhaps most valuable in urgent or emergent situations.

The book is printed on high-quality paper with excellent line drawings appropriately interspersed, showing the essential surgical anatomy and technical details. Written by British surgeons, some technical terms, especially the eponyms, may be unfamiliar to American users. References to key articles or books follow each chapter. A comprehensive index is included.

The work can be recommended to well-trained general surgeons for quick review of procedures not commonly performed. Surgical house officers and students may find it useful as a means of focusing on specific operative problems posed by a given patient. Books such as this are commonly put in inaccessible places such as surgical libraries. This text would be most useful if placed in the surgeons' lounge.

THOMAS L. MARCHIORO, M.D.
Department of Surgery RF-25
BB-430 University Hospital
Seattle, Washington 98195

Respiratory Therapy Pharmacology. BY J. L. RAU, JR. Chicago, Yearbook Medical Publishers Inc., 1978. Pages: 149. Price: $11.95.

The title of this book is somewhat misleading since, at the beginning of the first chapter, the author defines pharmacology as including not only matters relating to drug actions and interactions but also the various topics usually considered separately under the heading "Pharmacy." The objective is to provide ". . . useful information for all levels of personnel engaged in respiratory care" and, in general, the objective is achieved. However, the format will be more acceptable to respiratory therapists than to physicians in search of a specialized extension of their pre-existing basic information.

Among the interesting and somewhat unique features of the book are two introductory chapters covering such items as legislation affecting drugs, dosage forms and routes of administration, and the prescription, and a series of sections on calculating drug dosages. Few assumptions regarding prior experience are made and, for example, there are sections on calculating dosages from prepared-strength liquids, tablets, and capsules and on calculating dosages from percentage-strength solutions. Sample problems are given.

Those chapters that deal with specific drugs and their actions include the various bronchodilators, mucolytics, surface-active agents, corticosteroids, cromolyn sodium, antibiotics, skeletal muscle relaxants, and prostaglandins. Each chapter is well laid out, with the basic information necessary to understand the activity of each group of drugs and then specific sections on each type of medication. Typically, this includes information under the headings: Identification, Strength, Dosage, Mode of Action, Hazards, Special Notes. The information provided is appropriate and, although there are no references in the text, each chapter concludes with a bibliography.

This small text does provide information highly relevant to the activities of the respiratory therapist and critical care nurse and the material is, to my knowledge, not available in any other single location. It should be a very useful addition to respiratory therapy libraries, and it should probably be available among the books provided for critical care nurses. It is inevitable that, in writing a small specialized text, some very difficult decisions must be made regarding what to include and exclude. This is particularly the case with respect to discussions of general principles. The author has elected to include comments on Receptor Theory of Drug Action, the Dose–Response Curve, and Some of the Principles of Drug Absorption and Transport. Notable exclusions are the problems of volume of distribution and the general principles influencing kinetics. In a book largely devoted to the administration of aerosols, it was disappointing not to find a more specific discussion of the balance between local and systemic effects. Unfortunately, from my perspective, the author has elected to handle this subject in relation to specific drugs such as corticosteroids and antibiotics, rather than to devote a section to this topic of unique concern to respiratory therapists.

Of the information about non-bronchodilator drugs the author has elected to include, that describing muscle relaxants is probably appropriate. However, it is less clear that a section on prostaglandins is appropriate for such a limited text, and I would have preferred to see a chapter summarizing central nervous system depressants. I would also not have included pharmacologic agents no longer on the market. For example, a page on pancreatic dornase begins with the statement that it is "no longer available."

The only factual misinterpretation or omission I detected relates to the mechanism by which some bronchodilators may decrease arterial oxygen tension. This section would have been greatly improved by a brief description of hypoxic pulmonary vasoconstriction as an autoregulatory mechanism, followed by a summary of the effects of the various bronchodilators on this mechanism.

I imagine that this little book will prove popular, and am con-

fident that the few criticisms voiced above will be readily correctable in the second edition.

H. Barrie Fairley, M.B., B.S.
Department of Anesthesia
University of California, San Francisco
San Francisco, California 94110

The Liver and Anaesthesia: Major Problems in Anesthesia III. By L. Strunin. Philadelphia, W. B. Saunders, 1977. Pages: 194. Price: $20.

This one-author work by an anesthesiologist of considerable experience weaves together widely separated strands concerning anesthesia and anesthetic agents and the liver in sickness and in health. Professor Strunin's evaluation of halothane hepatitis provides the reader with a well-tempered summary of the current state of knowledge in this area.

The book is divided into two parts. Part one, basic principles, deals with the anatomy and physiology of the liver and hepatic blood flow, the biochemical basis of liver function tests, and the pharmacologic aspects of liver function concerned with drug metabolism and drug reactions. This ambitious undertaking in such a short space tends at times to be somewhat superficial. In consolation, the reader is afforded numerous well-selected references for further study.

The second half of the book, practical considerations, deals with matters of more immediate importance to the anesthesiologist. These include viral hepatitis, evaluation and anesthesia of the jaundiced patient, the patient with hepatocellular disease, and the patient with acute hepatic failure, and an analysis of the problems and causes of postoperative hepatic dysfunction, including those that may be caused by anesthetic agents. Throughout, this section maintains a pleasant balance of well-referenced basic information, interpretation and clinical application.

This short, readable and informative book should be useful to all levels from the neophyte to the experienced anesthesiologist. Beginning students of anesthetic agents and the liver may find the early section appealing, while for those with more sophisticated requirements, the later section would be of greater value.

Edward S. Reynolds, M.D.
Department of Pathology
The University of Texas Medical Branch
Galveston, Texas 77550

Studies in Acute Heart Failure. By R. D. Bradley. Philadelphia, J. B. Lippincott, 1978. Pages: 78. Price: $6.95.

R. D. Bradley's book in general is well written, succinct, and causes the reader to think in physiologic terms regarding patients with sick cardiopulmonary circulations.

His three chapters are, in a sense, unique, and indeed consider both the left and the right atrial filling pressures, which few people do in an intensive care situation. His comments on those people with left ventricular failure, both from low output and from pulmonary congestion, are entirely appropriate. The major omission that I see is the lack of comment on the effects of high pulmonary capillary pressures on pulmonary compliance and oxygen transport. A small section linking these phenomena would be most helpful. This is particularly true for patients still under the effect of anesthesia who are having myriad blood-gas determinations and many changes in ventilation, while few efforts are being made to reduce left atrial filling pressure or capillary wedge pressure.

This book will be useful to those who are involved in intensive care. It should also be worthwhile to nephrologists, who frequently deal with the overexpanded volume but have little awareness that the right and left atrial filling pressures are not equal.

J. R. Blackmon, M.D.
Division of Cardiology RG-20
AA 502 University Hospital
Seattle, Washington 98195

Medical Gases: Their Properties and Uses. By W. J. Grant. Chicago, Year Book Medical Publishers, 1978. Pages: 199.

This British paperback was written in order to bring together a body of technical information about medical gases that previously had been dispersed in a voluminous literature and was consequently not readily available. In this aim, it succeeds reasonably well. The physical principles applicable to gases, their properties, technical specifications, modes of manufacture and storage and handling of medical gases are all covered. Overall, the text is quite readable, concise, and informative, and most of the line drawings are helpful. In some sections, however, this is not the case. The descriptions of some apparatus, *e.g.*, gas regulators, are rather confusing and are not helped by poor diagrams, while the photographs of apparatus are useless. This, however, is carping, as information about these matters is easily available in anesthesia textbooks.

As the book is written primarily for the British market, most of the specifications and technical publications quoted are British, but in all the areas of importance, European and United States specifications are also quoted. The amount and depth of information given are somewhat more than needed by anesthesiologists, but the book is quite useful reading for both residents and staff, and particularly for candidates for the British Primary F.F.A.

F. Peter Buckley, F.F.A.R.C.S.
Department of Anesthesiology
Harborview Medical Center GN-4
Seattle, Washington 98104

Monitoring in Anesthesia. Edited by L. J. Saidman and N. T. Smith. Somerset, New Jersey, John Wiley & Sons, 1978. Pages: 356. Price: $25.00.

The appearance of a new book on monitoring for the anesthesiologist is particularly appropriate at this time. Since the publication of Dornette's monograph, we have seen several major innovations pass from the research laboratory into routine clinical use. Among these are thermodilution measurement of cardiac output, fetal monitoring, doppler detection of air embolism, and some applications of microcomputers. Until now, no single source book has dealt with these and other advances from the point of view of the clinician. The present volume admirably fills this need.

The first ten chapters of the book focus on clinical areas of particular concern. Included are depth of anesthesia, body chemistry during anesthesia, respiratory function, the cardiovascular system, neuromuscular blockade, obstetric anesthesia, neurosurgical anesthesia, occupational exposure to inhalational anesthetics, recovery room care, and surgical intensive care. The remaining four chapters consider electrical safety, desired specifications for equipment, computers, and finally, an identification of factors that will impede or enhance the progress of future monitoring in anesthesia.

The book was written primarily for the clinician, so that physiology and practical applications are stressed more than the internal workings of the various devices. The discussion of physical and electronic principles is deliberately oversimplified for readability, and except for a few minor factual errors, it is technically sound. Coverage of the more common monitoring techniques is comprehensive, and includes such things as historical development, indi-