the effects of exotoxins on the circulation and (3) studies of septic shock, including effects of whole (dead or living) bacteria and bacterial infection. The authors considered pertinent information on viral infections to be too limited to be included. The section on endotoxins is the largest since endotoxin is available commercially and therefore more studies have been made with it. There is a concise summary at the end stating what is unequivocal in the laboratory animal as to mechanism of hypotension. Suggestions are listed as to the value of certain adjuncts to therapy in the experimental animal. The suggestion is made that the toxic effects of Gram-positive organisms may be more organism-specific than Gram-negative organisms, so that adjunctive therapy may have to be more specific.

This monograph would be of great help to anyone doing clinical or experimental investigation in the field of septic shock. However, the clinical anesthesiologist should be aware of this book. In the few pages devoted to treatment in human patients, four of the six methods reporting some success are close to areas in which the anesthesiologist is an expert—transfusion, vasopressor agents, adrenocortical hormones and hypothermia. A great deal of the experimental work also deals with these adjuncts to therapy.

RUTH M. ANDERSON, M.D.

L'Arrêt Circulatoire. By R. Courbier, Associate Professor, Faculty of Medicine, and J. Torresani, Chief of Cardiology Clinic, Faculty of Medicine, Marseille, France, and collaborators. Paper. 35 F. Pp. 224, with 71 figures, Masson & Cie, Éditeurs, Libraires de L'Académie de Médecine, Paris, 1964.

This book is written in French and represents a synthesis of a good part of the work done by scientists of all nations on the subject of cardiac arrest. The authors define three types of cardiac arrest: arrest in systole which is of very rare occurrence and has never been reproduced in experimental animals, and the other two well-known forms: standstill and ventricular fibrillation. the first chapter they elaborate on causes and consequences of circulatory arrest, including hemodynamic and metabolic aspects and cellular changes with emphasis on particular effects on vital organs. In the second chapter they discuss etiology and clinical aspects of arrest, as well as complications involving the brain and kidneys. The third chapter reviews treatment, including maintenance of ventilation and oxygenation; methods of assuring adequate circulation first by external massage, defibrillation if necessary and the use of cardiotonic, vasomotor and metabolic drugs. Step by step methods of treatment are presented, and the review concludes with treatment of complications following cardiac arrest. The bibliography is quite up-to-date.

This manual of resuscitation compares favorably with other manuals on the same subject. However, certain aspects of the text are lengthy, as the French way of writing is often more elaborate and literary than the English way, but it is also less concise. This is a useful book, as it gives the reader a detailed presentation of the modern way of thinking on this subject, and also modern methods of treatment.

JACQUES R. BOUCHER, M.D.

Small Animal Anaesthesia. EDITED BY OLIVER GRAHAM-JONES, F.R.C.V.S. Cloth. \$12.00. Pp. 260, with illustrations. A Pergamon Press Book, The Macmillan Company, New York, 1964.

This book contains the proceedings of a symposium conducted by The British Small Animal Veterinary Association and The Universities Federation for Animal Welfare in London, July 1963. A total of 151 authors contributed to the program which was interdisciplinary in its approach to animal anesthesia. Authors include veterinarians, anesthesiologists, physiologists and dentists from the United Kingdom, Germany, France, and the United States. Many are outstanding in their respective fields.

Six sessions were conducted, divided into the following categories: Primates; Reptiles, Amphibia and Aquatic Animals; Rodents and Lagomorphs; Aves; Ungulates; and Carnivores.

A wide variety of anesthetic techniques are described as well as considerable amount of equipment. Some of the latter are quite ingenious in design and enables anesthesia of unusual species.

The book is well edited and has good style and continuity. A considerable amount of the information presented is not available elsewhere in book form. The illustrations are of good quality and appropriate to the subject matter.

This book reflects the growing interest in animal anesthesiology and the need for authoritative information on this subject. It is of particular value to those working in animal anesthesiology, whether they be research anesthesiologists, veterinarians, or zoologists. It should be in every research laboratory and medical library.

WILLIAM V. LUMB, D.V.M., PH.D.

Animal Anesthesia—Local Anesthesia. By Mel-CHOIR WESTHUES, Professor and Director of the Department of Veterinary Surgery, University of Munich and Rudolf Fritsch, Director of Veterinary Medicine, Anaesthetist at the Department of Veterinary Surgery, University of Munich. Translated by A. David Weaver. Published in German in 1960 by Paul Parey, Berlin, Germany. Cloth. Pp. 223, with 95 illustrations. Price \$9.00. English editions by Oliver and Boyd Ltd., Great Britain, and J. B. Lippincott Co., Philadelphia, 1964.

This book will serve principally as a procedure manual for performing local and regional nerve blocks in horses, cattle and dogs. It consists of two parts, the first of which deals with principles of local anesthesia. Types of nerve block, indications and contraindications, mechanisms of action (including an account of pain perception), physical and chemical properties, potency and toxicity of a variety of drugs, and a description of the instruments, needles and syringes, are presented. The English-speaking student of anesthesia will not derive much benefit from this section because the material is not up-to-date, and the explanations of mechanisms of action are superficial and confused. One wonders whether something was lost in the translation.

The second part is devoted to the techniques of local anesthesia for three species in particular, horses, cattle and dogs. Other animals and their parts are presented where appropriate, e.g., the horn of the goat, spinal anesthesia, and anesthesia for castration of the pig. This section is well done. The descriptions of landmarks and techniques are complete and well illustrated. Anesthesia of the head, limbs and organs of procreation are thoroughly covered, as are paravertebral, epidural, subdural and sympathetic blocking techniques. An appendix includes legislation pertinent to veterinary and experimental surgical practices and lists of the many names, both English and German, assigned to the more commonly used local anesthetics.

DUNCAN HOLADAY, M.D.

International Anesthesiology Clinics. Vol. 2, No. 3, May 1964. Peridural Anesthesia, EDITED BY P. G. Lund, M.D., F.A.C.A., Director Department of Anesthesiology, Conemaugh Valley Memorial Hospital, Johnstown, Pa.; and The Airway and Larynx, EDITED BY LEROY W. KRUMPERMAN, M.D., Professor and Chairman, Department of Anesthesiology, Temple University School of Medicine and Hospital, Philadelphia. Cloth. \$22.00 per year. Pp. 729, with illustrations. Little, Brown & Co., Boston, 1964.

The section on Peridural Anesthesia was compiled by seven authors from six different countries, all authorities in this field. Except that this subject was excellently covered by Dogliotti many years ago, little else can be compared to this new and extensive coverage of the field, which is dealt with in a quite basic fashion. Two criticisms might be made of the chapter by J. Alfred Lee. If no vein can be entered, no procedure should be done and in the present status of the "cut down" there should be no such situation. Also he makes the comment that the blood pressure should be maintained at least at 60 mm. Hg systolic. Hanley states that any pressure below 80 mm. should

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 Airway 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.

Clinical Anesthesia. Vol. 2, 1964—Instrumentation and Anesthesia. EDITED BY WILLIAM H. L. DORNETTE, M.D., Professor and Chairman, Department of Anesthesiology, University of Tennessee College of Medicine, Memphis, Tennessee. Cloth. \$7.50. Pp. 198, with illustrations. F. A. Davis Co., Philadelphia, 1964.

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. Dealt 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