tion. Clear type and semigloss paper make for fine readability. Exposition of each topic is from the historical point, and is done with care and an easy flow of prose. There is a fine bibliography and appendix presenting various celluloid and histochemical staining methods.

This monograph is recommended to anesthesiologists as delightful and informative reading.

VINCENT J. COLLINS, M.D.

The Human Lung. By HEINRICH VON HAYEK, M.D., Ph.D., Professor and Head of the Institute of Anatomy, University of Vienna. Translated by Vernon E. Krahl, Ph.D., Professor of Anatomy, School of Medicine, University of Maryland, Baltimore. Cloth. $13.50. Pp. 372, with 276 illustrations. Hafner Publishing Company, Inc., New York, 1960.

Since respiratory physiology is the basis of our specialty, this book should be required reading for all anesthesiologists. It is a truly fascinating book giving detailed information on the lung by using a functional approach to an understanding of pulmonary structure and thus clearly showing their mutual relationship. Knowing the structures which determine quantity and direction of flow of gases and studying the existing arterio-venous anastomosis, one then can explain how all parts of the lung are not uniformly aerated and how blood can be inadequately oxygenated in spite of ventilatory adequacy. With ever increasing numbers of geriatric patients coming to operation, pulmonary problems presented by this age group demand understanding of structural components of the lung involved and physiologic changes manifested, so a rational approach to management may be formulated.

This book describes in detail gross and microscopic anatomy of the thorax, pleura and lungs, mechanics of breathing and tension-pressure relationship developing from alteration in the form of both thorax and diaphragm. Bronchopulmonary segments as seen through the bronchoscope are vividly described and classified in both German and American nomenclature. The section on general arrangement of pulmonary arteries and the spincter-like mechanism present, is of particular importance in the understanding of variations of pulmonary blood flow encountered in the diseased lung.

The two most interesting sections are the one on the afferent and efferent nerves to the pulmonary area, and the last section describing recent findings with the electronic microscope. Although these settle many old arguments, they leave some points still unclarified and suggest areas for further investigation by both anatomists and physiologists.

The binding and print are of excellent quality with the whole text profusely illustrated and many plates showing lung structure as seen under the electronic microscope. The bibliography is quite complete and up-to-date. At present, I know of no other American publication about the structure of the lung and its influence on respiratory dynamics that is more informative or readable.

D. C. GROSSKREUTZ, M.D.

Effects of Anesthetics on the Circulation. EDITED BY HENRY L. PRICE, M.D., Professor of Anesthesiology, Schools of Medicine, University of Pennsylvania, Philadelphia, AND PETER J. COHEN, M.D., Instructor in Anesthesiology, Schools of Medicine, University of Pennsylvania, Philadelphia. Cloth. $10.50. Pp. 293, with illustrations. Charles C Thomas, Publisher. Springfield, Illinois, 1964.

This book contains the proceedings of a May 1963 conference, sponsored by the Division of Medical Sciences, National Academy of Sciences—National Research Council and the New York Academy of Medicine, concerning effects of anesthetics on the circulation. Participants were a distinguished group of investigators from many fields of interest. This publication contains their individual presentations and some discussions. The subjects covered are grouped as (1) Circulatory Regulation by the Central Nervous System, (2) Cardiac Rhythm, Contractility and Output, and (3) Regional Blood Flow and Vascular Reactivity. The first group includes much neurophysiology, which is well discussed and concluded by a panel discussion on the effects of anesthetics on neuroregulatory mecahnisms. The second group presents information a bit more familiar to clinical anesthetists. The subject is well covered with the possible exception of the chapter on regulation of venous return, which is essentially devoid of reference to effects of anesthetics or anesthesia, except for a brief mention of spinal anesthesia. This chapter also fails to discuss the possible role of the venous system *per se* in altering venous return. The third group contains an excellent summary of current information, including important emphasis upon regional blood flow.

The material presented at this conference covered an extremely wide area in considerable detail. The book, however, has been exceptionally well edited and presents this often confusing material in a concise and understandable form. It is pleasant and informative reading and includes current and appropriate bibliography. Clarity of presentation is aided by the inclusion of illustrations. In spite of its relative brevity, the book encompasses interests of both clinicians and investigators, and includes methods of investigation and emphasis on the unknown. This publication would seem to be of great value to all who are concerned with the effects of anesthetics upon the circulation.

WILLIAM K. HAMILTON, M.D.