

simplify a complicated subject. The basic physiology and the application to clinical conditions are clearly explained, and there are many detailed examples of clinical management.

This book is recommended for all physicians as well as anesthesiologists. It is easy to read, with large, clear type on glossy paper. Subheadings and outlining make the thought easy to follow.

JAY JACOBY, M.D.

Respiration—Physiologic Principles and Their Clinical Applications. BY P. H. ROSSIER, A. A. BÜHLMAN, K. WIESINGER (German Edition); EDITED AND TRANSLATED BY PETER C. LUCHSINGER, M.D. and KENNETH M. MOSER, M.D. Cloth. \$15.75. Pp. 505 with 95 illustrations. C. V. Mosby Co., St. Louis, 1960.

The first English edition of *Physiologie und Pathophysiologie der Atmung*, by Doctors Rossier, Buhlman, and Wiesinger (Springer-Verlag, 1955 and 1958), will be enthusiastically received by clinicians, physiologists, and others concerned with respiration. Doctors Luchsinger and Moser, highly qualified in the fields of pulmonary function and chest disease, not only have translated into lucid English a book which represents the experience in respiration of Doctor Rossier and his colleagues since 1928, but they have extensively edited and revised the 1958 German edition. The resulting handsome volume is thoroughly interesting and readable; and the illustrations, all with English legends, are excellent, as are the 66 tables.

Of particular interest to anesthesiologists are the sections in Part I (Normal Physiology of Respiration) on respiratory mechanics, clarified by copies of tracings of pressures and flows in lung models or in human subjects, which serve to illustrate, for example, the influence of unilateral stenosis of a bronchus on distribution of gas to the two lungs and in the production of "Pendelluft." Seldom has the concept of respiratory dead space been better discussed than here, which is not surprising in view of Rossier's many contributions to this topic, including the invaluable "alveolar ventilation equation." Also discussed in Part

I are blood as carrier of gases, pulmonary diffusion, and regulation of respiration. Among the topics discussed in Part II (Investigative Methods in Pulmonary Function) are general principles of spirometry, techniques for studying respiratory mechanics, examination of the blood gases, and specific tests, such as the now widely used high oxygen breathing test devised by Rossier to distinguish between right-left shunts and diffusion difficulty, and exercise tests to evoke signs of pulmonary insufficiency. In Part III (Pathophysiology of Respiration), Doctors Luchsinger and Moser have brought together the different terms used in Germany, Zurich, and America for classifying pulmonary insufficiency and pulmonary vascular disorders. It is to be hoped that this useful step might lead even to further simplification of existing classifications, possibly by way of an international committee similar to the one which in 1950 standardized the symbols for respiratory physiology. Part IV discusses the application of pulmonary function tests to clinical practice. Specific information is provided relating both to diagnosis and treatment. Of particular interest here to anesthesiologists are records showing changes in ventilation and respiratory gases during anesthesia, records showing pressures and flows in various types of artificial respiration, and a brief discussion of the effects of anesthetic agents and other drugs on respiration. Finally, the 80 pages of classified bibliography will be most useful to all interested in respiration.

A complete discussion of the now widely used nitrogen washout curve for detecting unevenness of distribution of inspired gas was sought in vain by this reviewer, the omission representing the one small fault he could find in this otherwise excellent book.

By making available and adding to, in this beautifully presented English edition, the many contributions of Doctor Rossier and his "Zurich School," Doctors Luchsinger and Moser have done a great service.

JOHN F. PERKINS, JR., M.D.

The Pathology of Cerebral Palsy. BY ABRAHAM TOWBIN, M.D., Pathologist, Community Memorial General Hospital, La Grange, Illinois. Formerly, Associate Professor of