simplify a complicated subject. The basic
physiology and the application to clinical con-
ditions are clearly explained, and there are
many detailed examples of clinical manage-
ment.

This book is recommended for all physicians
as well as anesthesiologists. It is easy to read,
with large, clear type on glossy paper. Sub-
headings 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 KEN-
NETH M. MOSER, M.D. Cloth. $15.75.
Pp. 505 with 95 illustrations. C. V. Mosby

The first English edition of Physiologie und
Pathophysiologie der Atmung, by Doctors
Rossier, Bühlman, and Wiesinger (Springer-
Verlag, 1955 and 1958), will be enthusi-
astically 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 respi-
ration 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 in-
teresting 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, clar-
ified 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 sur-
prising in view of Rossier’s many contribu-
tions 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 (In-
vestigative Methods in Pulmonary Function)
are general principles of spirometry, tech-
niques for studying respiratory mechanics, ex-
amination of the blood gases, and specific
tests, such as the now widely used high oxygen
breathing test devised by Rossier to dis-
tinguish between right-left shunts and diffu-
sion 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 insuffi-
ciency and pulmonary vascular disorders. It
is to be hoped that this useful step might lead
even to further simplification of existing clas-
ifications, 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 in-
terest here to anesthesiologists are records
showing changes in ventilation and respiratory
gases during anesthesia, records showing pres-
sures and flows in various types of artificial
respiration, and a brief discussion of the effects
of anesthetic agents and other drugs on respira-
tion. Finally, the 80 pages of classified bibliogra-
y will be most useful to all interested in respi-
ration.

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 P. PERKINS, JR., M.D.

The Pathology of Cerebral Palsy. By ABRA-
HAM TOWHIN, M.D., Pathologist, Community
Memorial General Hospital, La Grange,
Illinois. Formerly, Associate Professor of