tance in diagnosis and treatment. The various drugs of value in allergic conditions are considered, including the newer agents, the antihistaminic drugs and the steroid hormones. Allergic conditions in children are separately treated in five chapters and allergic manifestations of the nose, throat, paranasal sinuses, and ear have been presented in an equal number of chapters.

In *Clinical Allergy* Hansel has presented the result of many hours of study and of effort. Although in a subject such as allergy there are many ideas, concepts, and procedures not yet uniformly acceptable to those practicing in this field, the author has accumulated much valuable information in this volume.

W. C. SPAIN

116 E. 53rd Street, New York

Zoogeography of the Sea. Sven Ekman; trans. from Swedish by Elizabeth Palmer. London: Sidgwick and Jackson, 1953. (Distributed by Macmillan, New York.) 417 pp. Illus. $6.50.

Ekman has here extensively revised his *Tiergeographie des Meeres* (1935) and has published it as one of the series of *Textbooks of Animal Biology* under the editorship of H. Munro Fox.

Although the book appears to be intended primarily as a reference work for specialists in oceanography and zoogeography, the general zoologist can hardly fail to find examples and illustrations that will enrich his thoughts and his lectures. Four general types of fauna are dealt with successively and in considerable detail: (1) Shelf fauna (bottom animals living in depths of less than about 200 meters); (2) the deep-sea benthic fauna; (3) plankton and other pelagic life of the upper waters; (4) the bathypelagic fauna. Some 60 per cent of the book is devoted to the first of these groups, and rightly so, since their diversity and their mode of life make them particularly interesting and profitable for zoogeographic study.

Within this broad framework, the subject is subdivided according to geographical regions and temperature zones. Two chapters are devoted to geological and paleontological information, and a careful attempt is made throughout to discuss present-day populations with due regard for their historical background. In the details of regional comparison, Ekman has performed a monumental task in searching the literature and assembling the essential facts about the populations of the various regions. He has drawn upon a list of about 600 references, many of them voluminous expedition reports that even specialists seldom find time to read in their entirety. The information he has gathered represents both synthesis and compilation. A wealth of tabular material is presented on species occurrence, ecological characterizaitons of each region, and other pertinent facts. Graphic and textual descriptions attempt throughout to emphasize small segments of the population that are particularly useful for the exposition of zoogeographic principles.

The amount of factual material that is presented does not make for light nor vastly entertaining reading. It is solid and descriptive throughout. Greater attention to modern zoogeographical theory and to ecological discussions would have made the book more readable although prehaps less enduring. It is characteristic of Ekman that he is able to dismiss the fascinating subject of the origin, history, and general ecology of coral reefs in a mere six pages. Whether this is a criticism or a commendation may be debated among those who have studied the literature.

The concept of temperature zonation is a dominant theme, but nowhere in the book does one find a well-rounded discussion of the physiological background of the subject. More attention to our rapidly growing information on temperature tolerances and to the effects of temperature on respiration, feeding, and reproduction would have illuminated his discussion.

In short, Ekman has chosen to leave out much that is provocative but sometimes misleading. He has not given us any bright new theories, but his excellent descriptive account of marine zoogeography, requiring years of thoughtful and painstaking work, is an invaluable addition to our literature.

GORDON A. RILEY

The Bingham Oceanographic Laboratory
Yale University

The Permeability of Natural Membranes. Reissue. Hugh Davison and J. F. Danielli. New York: Cambridge Univ. Press, 1952. 365 pp. Illus. $6.00.

It is a distinct pleasure to find this volume, which has been out of print for almost ten years, again available. The authors remark in their new preface that it has not seemed worthwhile to bring out an entirely revised book at this time, and they have merely added bibliographic citations of current literature at the end of each chapter while no changes have been made in the text of the chapters. Such a change is of little help in interpreting to students the very considerable advances that have been made in permeability studies with, for example, the use of radioisotopes, and it is to be hoped that a completely revised work will appear shortly.

L. J. MULLINS

Department of Biophysics, Purdue University