

BOOK REVIEWS

HYPOXIA. By Edward J. Van Liere and J. Clifford Stickney. Chicago, The University of Chicago Press, 1963. x, 381 pp. \$8.75.

Dr. Van Liere's earlier book on this subject* was probably the first detailed study of the biology of low oxygen pressure. Investigations of the effect of high altitude, using mountain climbing or balloon ascent as a tool, go back to the late eighteenth century, but the major impetus seems to have been the need for military aviation in World War I. This interest was maintained until about 1935 when, judging from published reports, it seems to have tapered off. World War II with its high-flying aircraft, and, later, the enthusiasm for space travel have given an enormous boost to these studies. Thus, although Dr. Van Liere's first book was exhaustive in its coverage, an enormous amount of new detail reported in the current book was not available in 1942.

The present volume, although a critical review, contains a great deal of the authors' original thought. Their 20 years of work in the field since Dr. Van Liere's first volume has obviously changed some of their concepts. This is shown by the more complete treatment of such subjects as "Lymph and Vessel Permeability" even though relatively little has been added to the literature of this subject. This chapter, and the sections devoted to the effect of hypoxia on blood formation and the nervous system reveal many interesting aspects of basic physiology, and at the same time shed considerable light on clinical problems. Similarly, the sections on mountain and altitude sickness and acclimatization are remarkably pertinent to clinical problems of our age. Considering the key position of oxygen in most biological mechanisms, one is impressed by the importance of hypoxia to all branches of biology.

Although the book is exhaustive in its coverage of the subject, there are a few statements which might have been improved by expansion or by bibliographic references. An example is the statement on page 19: "Evidence is also available that below a minimal oxygen tension the velocity of oxidative processes in the tissues is proportional to the partial pressure which the oxygen exerts." Further discussion of this important point, or references to the literature, would have been helpful. The bibliographies are extensive, and obviously have been accumulated with critical consideration.

This is a particularly valuable book for everyone interested in cardiopulmonary physiology. Moreover, because hypoxia affects every organ of the body, it should prove valuable to anyone interested in any other branch of human physiology.

FRANK D. GRAY, JR.

GARROD'S INBORN ERRORS OF METABOLISM. By Archibald E. Garrod. Reprinted with a supplement by H. Harris. New York, Oxford University Press, 1963. xi, 207 pp. \$9.75.

This book is one of a series of Oxford Monographs on Medical Genetics which will include both handbooks on the genetics of such clinical specialties

* Van Liere, E. J.: *Anoxia. Its Effect on the Body.* Chicago, The University of Chicago Press, 1942.