

in his views as to the position which should be held in relation to each other of a number of genera, but as Dyar's list is certain for many years to come to be used largely by American students in arranging their collections, he has thought best to follow it. As in the 'Butterfly Book,' the 'Moth Book' contains a number of digressions and quotations. The quotations are extremely apt, and the digressions are extremely readable.

Dr. Holland's literary style is charming, and his cosmopolitan training and wide range of information lend interest and value to every line of the digressions. The one entitled 'Walking as a Fine Art' deserves a place in literature as well as in a treatise on hygiene. The book is by no means confined to descriptive matter of the species treated. Statements concerning the habits and the life histories are scattered through the pages, and much sound information of a practical economic character accompanies the accounts of many of the injurious species. The general chapters on the life history and anatomy of moths, and on the capture, preparation and preservation of specimens, contain all the information that is necessary, and in the chapter entitled 'Books about the Moths of North America' the author has given a competent bibliography for the use of students who wish to go further into the subject. The index is very full.

As a bit of book-making, the volume is a handsome one. Some of the text figures suffer in the printing on account of the character of the paper used, but this is by no means a serious blemish.

Dr. Holland is to be congratulated on the completion of this very attractive and useful work, and the number of collectors and students is sure to be increased rapidly as the result of its publication. L. O. HOWARD.

*Allgemeine Physiologie. Ein Grundriss der Lehre vom Leben.* By MAX VERWORN. Fourth Edition, revised. Jena, G. Fischer. 1903. Pp. 652; illustrations 300.

The favor with which this work is still regarded is evinced by the fact that the fourth edition is now called for within nine years of

the book's first appearance. The author has made in it less radical changes than in previous editions. Those portions which have received the most considerable alterations are the section on 'Physical World and Mind,' which has been rewritten and enlarged, and endeavors to present more clearly than before the author's psychomonistic conception; the section on 'Enzymes and Their Mode of Action,' which has again been rewritten, largely for the purpose of showing the analogy between ferment actions and the catalytic actions of inorganic chemistry; and the section on 'Growth as the Fundamental Phenomenon of Change of Form,' which has been revised and extended by Professor Rhumbler, and contains the latest conclusions of that well-known investigator, with figures and discussions of Rhumbler's and Heidenhain's models of the dividing cell. In the revision of the chemical portions of the book the author has had the counsel of Professor von Baeyer, of Munich, and Dr. Coehn, of Göttingen, and the alterations, though not great, represent improvements.

Engelmann's law of complementary chromatic adaptation is cited, according to which the color of an organism becomes more and more complementary to that of colored light to which the organism is subjected. Macfadyen's observations are summarized on the resistance of bacteria to extreme cold, and Regnard's observations of the temporary cessation of vital activity in a large variety of organisms subjected for not too long a time to great pressure. Wallengren's demonstrations are quoted of anodic, cathodic and transverse galvanotaxis in the same organism by the application, to the same spot, of polar stimuli of different intensities. Many other recent discoveries are cited; but with the multiplicity of present investigations in general physiology one naturally finds many important omissions. By judicious excisions and condensations of the previous text the enlargement of the book, caused by the additions and a much-needed revision of the index, is limited to twenty-one pages.

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