

Fermente und ihre Wirkungen" must be considered as the most authoritative work that has yet appeared on this subject. A casual glimpse of the various volumes, of which eight have now appeared, indicates that a veritable "Beilstein" of information has been collected together. A closer inspection reveals the fact that the vast mass of experimental data has been carefully assimilated and subjected to a critical examination. The alternative points of view of various investigators have been given without bias.

The book may be divided into three parts. In the first the chemical and physico-chemical characteristics of enzyme action are discussed in detail. Nearly three hundred pages of text, plentifully supplied with diagrams, experimental data, and references which appear completed up to and including the year 1924, have been written by Dr. Richard Kuhn on the physical chemistry of enzyme action, forming in itself a monograph which is not only a mine of information but also a model of condensation and clarity.

A short section is devoted to a discussion on the biology of ferments, whilst the remainder of the work includes a systematic classification of various types of ferment and enzyme action.

The production of this work is an achievement on which both Dr. Oppenheimer and Dr. Kuhn as well as the publishers, G. Thieme of Leipzig, are to be congratulated; for, if it accomplished no more than to serve as a digest of the enormous quantity of work that has appeared during the last decade alone, and published in the most diverse periodicals, on this complicated subject, it would have been of great value. Presenting in addition a careful formulation of the considered views of those who have made a detailed study of enzyme action, the volumes may well be considered indispensable to those interested in the subjects of chemistry and physics in their biological application.

E. K. RIDEAL.

### Our Bookshelf.

*Dr. H. G. Bronn's Klassen und Ordnungen des Tierreichs wissenschaftlich dargestellt in Wort und Bild.* Sechster Band, Abteilung 1: *Pisces (Fische)*. Bearbeitet von Prof. Dr. M. Rauther. Lieferung 39. Pp. 583-710 + v. 15 gold marks. Fünfter Band: *Arthropoda*. Abteilung 2: *Myriapoda*. Bearbeitet von Dr. K. W. Verhoeff. Lieferung 100. Pp. 539-666. 14.50 gold marks. Dritter Band: *Mollusca (Weichtiere)*. Buch 2: *Pulmonata*. Bearbeitet von Dr. H. Simroth, fortgeführt von Dr. H. Hoffman. Lieferung 147. Pp. 737-832. 10.50 gold marks. (Leipzig: Akademische Verlagsgesellschaft m.b.H., 1924-25.)

BAND 6, Abteilung 1 contains accounts of the Leptocardii and the cyclostomes contributed by four successive authors—Drs. Lönnberg, Favaro, Mozejko, and Rauther, the last named being responsible for this

Lieferung 39 which completes the Abteilung. He has contributed the last dozen pages of the description of the urogenital organs of cyclostomes, a clear account of the development and organogeny of *Lampetra* and of *Bdellostoma* and of the biology of the principal species, and a scheme of classification in which the characters of the known genera and species are concisely stated. A short discussion on variation and similar matters, some general observations on geographical distribution, and an appendix on the origin and relationships of cyclostomes, form the concluding part of the text. There is an adequate systematic and subject index. Opportunity might have been taken to refer in the appendix to memoirs by Cole and others which have been issued since the earlier parts of the volume were published.

Lieferung 100 (Band 5, Abt. 2) opens with an account of the systematic characters of the Geophilomorpha, the families, subfamilies, genera, and subgenera being concisely defined and tabular keys provided where necessary. Supplements on the Scolopendromorpha, Lithobiomorpha, and Notostigmophora—two suborders and a subclass which were dealt with in preceding sections of the work—bring the information on these up-to-date. A concluding chapter is devoted to a detailed consideration of the geographical distribution of the Myriapoda, including the delimitation of the European and Mediterranean subregions, and a comparison of the chilopod fauna of the eastern and western parts of the latter.

Lieferungen 95-146 of Band 3, Buch 2, were written by the late Prof. H. Simroth and published in 1908-14. The first fifteen pages of the present Lieferung (147) are from his manuscript, and complete the account of the development of the reproductive organs of the Pulmonata, and summarise the records of natural and artificially produced developmental abnormalities. Dr. Hoffmann is the author of the rest of the Lieferung. He contributes a list of some 750 works published subsequent to 1908, which forms a continuation of the lists given in earlier parts of the book. A number of memoirs dealing with Indian and other species seem to have escaped attention and are not included in the list. The remaining pages contain appendices which embody the results of work published during the last twelve years. References are given to the earlier pages of the book to which these supplementary accounts relate; e.g. on the form of the body, shell, and operculum, on the integument, connective tissue, muscle, mantle, and on secretion of the shell.

*Faune de France.* Par L. Berland. 10: *Hyménoptères vespiformes, I. (Sphegidae, Pompilidae, Scoliidæ, Sapygidæ, Mutillidæ)*. (Fédération française des Sociétés de Sciences naturelles: Office central de Faunistique.) Pp. viii + 364. (Paris: Paul Lechevalier, 1925.) 45 francs.

THE author of this volume includes in the Vespiformes all wasp-like Aculeates other than the Chrysididæ. The present contribution deals with the five families Sphegidae, Pompilidae, Scoliidæ, Sapygidæ, and Mutillidæ, or, in other words, the fossorial forms. Owing principally to insufficiency of reference material, the Bethyloidæ are not included, and their treatment is postponed until the appearance of a second volume