

The Insect Book. A popular account of the bees, wasps, ants, grasshoppers, flies and other North American insects, exclusive of the butterflies, moths and beetles, with full life histories, tables and bibliographies. By LELAND O. HOWARD, Ph.D., Chief of the Division of Entomology, U. S. Department of Agriculture. New York, Doubleday, Page & Company. 1901.

The very complete subtitle indicates the scope of the work, and if we add that 'where possible a typical life history has been given in each family treated,' we have the leading characteristic which distinguishes it from other American works which are nominally 'popular.' Another feature of importance is that these life histories, while interestingly and entertainingly presented, are nevertheless strictly correct and scientifically accurate, in strong contrast to some other 'popular' works where vague and extravagant statements to attract the wonder-loving are relied upon to win public favor.

Dr. Howard's book, then, in its plan and in its performance stands by itself in that it makes interesting reading for him who reads merely for general information, and helps the amateur who wishes to go a little further and learn something of the classification.

But it is in this latter feature that the only notable defect in the work is found; there is no introductory chapter that familiarizes the young student with the characters referred to in the tables, nor is there any explanation of how the tables are to be used. At the bottom of page 2 the last two lines read:

"1.—Pronotum not extending back to the tegulæ
2
Pronotum extending back to tegulæ, or the
latter are absent.....3"

But what a pronotum is, or what are tegulæ, has not been previously indicated and is nowhere clearly explained.

Of course there are other books that explain all this; but it is a question whether in a book of this expressed scope these tables in such form are of any real assistance to the owner. They could have been omitted without any loss whatever.

On the other hand, the chapter on collecting

and preserving insects is in all respects admirable and exactly what is needed by the tyro whom the book may interest in the subject. The ground covered by the book is so great and the general treatment is so concise and to the point that, aside from the statement that it could scarcely be better done, little remains to be said.

A book of this kind, put out in attractive form, liberally illustrated and at a really low price (\$3), will do much to create an interest in a series of insects concerning which little is generally known.

The illustrations are deserving of separate commendation. There are 264 text figures and almost without exception these are admirable. There are 48 half-tone plates, of which a fair proportion are colored, and these illustrate interestingly the limitations of this process where detail is required for identification. Nothing better has ever been done by this process and perhaps nothing better can be done. Some plates, like I. and II., are eminently satisfactory; in others, like XIV. in the same order, the majority of figures are useless for specific identification.

The book is well printed, small 4to, with xxvi + 429 pages. It contains a very complete index and a well-arranged bibliography covering the orders treated.

JOHN B. SMITH.

SCIENTIFIC JOURNALS AND ARTICLES.

THE *Journal of Comparative Neurology* for September (Vol. XI., No. 2) contains, in addition to the usual reviews of literature, but one paper, entitled, 'The Neurones and Supporting Elements of the Brain of a Selachian,' by Dr. Gilbert L. Houser, of the University of Iowa, a monograph of 110 pages, with eight plates. The entire central nervous system of the common dog shark, *Mustelus*, has been examined by a variety of the best neurological methods, both new and old, and the attempt is made to give a picture of the complete neurones characteristic of each important region of the brain. So far as this can be attained by the methods of Weigert, Golgi, Nissl and Haidenhain, among others, it has been quite successfully accomplished, and thus an important ad-