

cable to many areas of equal extent and equal diversity of ecological conditions in the North Temperate Zone."

It is almost superfluous to add that this excellent work should be in every entomological library, and that no teacher of systematic entomology can afford to be without it.

E. M. W.

ORTHOPTERA OF NORTHEASTERN NORTH AMERICA with Special Reference to the Faunas of Indiana and Florida. By W. S. Blatchley. The Nature Publishing Co. Indianapolis, 1920. 784 pp. 5 plates and 246 text figures.

The aim of this manual is to furnish a ready means of identifying any species of Orthoptera found in the United States east of the Mississippi River and Canada east of the 90th meridian. It is intended for the use of the beginner rather than the specialist, but the subject matter is treated in such detail that it is thoroughly well adapted to the needs of the most advanced student as well.

It is an outgrowth of the author's well-known treatise on the Orthoptera of Indiana, but not only deals with a large number of species not included in the Indiana fauna, but the data on the latter forms is revised and considerably expanded. It also differs in plan from the older work in that it contains an alphabetical list of synonyms at the end of the book, instead of listing these under the head of each species; although the principal synonyms are mentioned in the notes that follow the descriptions.

One of the many excellent features of the book is the full discussion of the habits, habits and songs of the various species, in which Mr. Blatchley has quoted at considerable length from other authors, selecting those passages which are considered to be of most value to the subject.

The illustrations are for the most part selected either from the author's earlier work or from the works of other specialists, but include also two plates of excellent original figures, by Mr. Fox, of the genitalia of the various species of the genus *Ceuthophilus*. Unfortunately a few of the text figures were inverted by the printer, but the pages on which these occur have already been reprinted with the figures in their correct positions. One of these figures is that of *Arphia sulphurea*, and it was unfortunate that this figure was selected to illustrate this species since, in the reviewer's opinion, it must have been taken from some other species, the tegmina being quite unlike those of an *Arphia* in their transverse fasciae, which with the shape and pattern of the hind wings, are typical of *Circotettix verruculatus*.

It is the reviewer's unpleasant duty to point out also certain other errors and inaccuracies in this otherwise excellent manual, which have come to his notice.

The Articulata (p. 12) are divided into two great groups, the Vermes and the Arthropods. The term Vermes is here used, of course, for the segmented worms (Annelida) only. It is now obsolete as the name of a taxonomic group, but when in use was understood to include a number of other groups besides the Annelida.

In the description of the mouth-parts on p. 14 it is stated that the labial palpi are attached to the labrum, and no mention is made of the labium.

On page 21 the term *tergite* is used to designate one side of a tergum, whereas it is generally employed to denote the entire dorsal sclerite.