

In the introductory matter, which covers 76 pages, the author gives an interesting sketch of New England Orthopterology, an account of the principal collections of New England Orthoptera, and sections on the anatomy, habits, coloration, distribution and many other matters concerning the biology of the order. He also describes the injuries caused by locusts and other Orthoptera and the methods employed for their control, and concludes this part of the book with a very useful section giving full directions for the collection and preservation of specimens.

The general account of the habits of Orthoptera is based on those of the locusts, or short-horned grasshoppers, and is followed by a delightful description of the songs of grasshoppers and crickets and the methods by which they are produced. The next section on coloration contains much of interest. The three types of insect coloration, structural, pigmental and combinations of these, are all illustrated by species of this order, the majority being of the pigmental type. Many interesting examples of sympathetic or protective coloration are given, while the non-sympathetic coloration seen in the brightly coloured wings of the Oedipodinae, is regarded as being due, not to the phenomenon of "contrast mimicry" but as a means of signalling to other individuals of the community. Dichromatism and the varied coloration of certain species, such as the Carolina Locust, are considered to be independent of environmental coloration. The dichromatism of the Green-striped Locust is discussed in a special section by Dr. Phineas W. Whiting, who performed a series of experiments which seemed to show that temperature, and not humidity nor light, is the important factor in the colour determination of this species.

The sections entitled "Geographical Distribution" and "Colonization of New England—Dispersal Routes" are particularly excellent. In the former various faunal zones are characterized and their boundaries within the New England States clearly defined, and the characteristic species of Orthoptera inhabiting each are enumerated. Local distribution is also discussed and the author's well-known classification of locust habitats is introduced in illustration of this subject. Following this section is one on "Wingless and Vestigial-winged Orthoptera," in which the author's views on wing-length as a habitat relation are quoted from a former publication (Publ. 18, Carnegie Inst. Wash.).

The economic aspect of the subject is treated at considerable length in three sections dealing with the injuries of locusts and other Orthoptera in New England, remedies against locusts and earwigs, and natural enemies, including bacterial and fungus diseases, parasites, such as hair-worms, mites and tachinid flies, predaceous insects, amphibians, snakes and birds. Remedies against cockroaches are dealt with under the general account of the Blattidae in the special part of the volume.

In this second part, which deals with the classification and description of the various species, the same high standard of excellence is maintained, and the descriptive matter is relieved of the dryness usually characteristic of systematic works by the many vivid word-pictures of the habits and environmental relations of the different species. The author is wisely conservative in following a system of classification that has long been in general use, and in introducing