

agricultural high schools and of physicians, fruit inspectors, the modern farmer, the nature-lover, or anyone who is concerned with the practical identification of insects." It begins with a conspectus of the higher groups of insects down to the families, following which is a key to the orders, dealing with the earlier as well as the adult stages. The remainder of the text is occupied by short diagnoses of each order, followed in each case by dichotomous keys to the suborders, superfamilies and families. A few typical genera are mentioned in connection with each family, and when these contain well-known species of economic importance, both the scientific and common names of such species are given.

The book is copiously illustrated by 427 simple but excellent figures, showing the general appearance of members of typical genera or characters of taxonomic value.

The classification into orders and the grouping of these into subclasses and classes is essentially that of Handlirsch\*, who recognizes five classes and divides one of these, the *Pterygonea*, into 11 subclasses and 30 orders, there being 37 orders altogether. Only the orders and lower groups, however, are characterized in the keys. This system is undoubtedly based upon a much broader and more thorough consideration of all available data on the subject than any other hitherto proposed, and probably expresses the true relationships of the main groups of insects with correspondingly greater accuracy, and yet we cannot but think that the wisdom of following it in a manual such as this is open to question, at least in so far as its usefulness to the average teacher, or the physician or nature-lover is concerned, for it is far more complex than any of the older systems, and can only be appreciated by the most advanced students. For some reason, not apparent to the reviewer, the most generalized groups, usually known as the *Apterygota* or *Thysanura* and *Collembola*, but divided by Handlirsch into four classes, are placed at the end of the series, although the general sequence of groups is an ascending one.

The book also contains a glossary of special terms, an index to genera and higher groups, and an index to common names. It should certainly prove a most useful addition to any entomological or zoological library.

---

\*Die fossilen Insekten und die Phylogenie der rezenten Formen. Leipzig 1908.

Mailed July 16th, 1915