

work on the Diptera of Denmark. The first part, which treated of the Stratiomyidæ, Xylophagidæ, Cœnomyiidæ, Tabanidæ, Leptididæ and Acroceridæ, appeared in 1907; the second part dealt with the families Asilidæ, Bombylidæ, Thereoidæ and Scenopinidæ, appeared in the following year, and the present volume forms the third part. The work is being published in both the Danish and English languages. The method of treatment of each species is similar to that adopted by Schiner in the "Fauna Austriaca," though in many cases it is fuller, especially where bionomic notes are available. The illustrations of anatomical features of value in the determination of the species, and in many cases of the larvæ, greatly increase the value of the monograph. The author follows Brauer's classification, as given in the "Katalog der paläarktischen Dipteren von Becker, Bezzi, Kertész und Stein."

The family of Empididæ is a large one; about 440 species are recorded from North America and about 675 species from the palæartic region; 11 species are recorded as common to both regions. These dark, gray or yellowish flies of a medium to a very small size are generally characterized by their somewhat small, more or less globular head and slender bodies. Many species, especially belonging to the genera *Empis* and *Rhamphomyia*, are seen dancing in swarms over water and in other places. The phenomena connected with these dances, which are of an amorous nature, are of great interest. Copulation takes place in the air, and in many of the species one may see the males capture a small insect, which, instead of devouring, they carry to the females, and copulation takes place while the female is engaged in eating this love offering. The physiological bearing of these phenomena is not known, but it is certainly worthy of investigation, as in the case of many other insects, such as certain mosquitoes, Hemiptera and Orthoptera, where feeding and reproduction bear a close relationship. As in the case of the adults, the larvæ are carnivorous and live in the earth, below leaves, in decaying wood and similar damp and wet situations. Little is known, however, concerning the life-histories of the Empids, but, as a group, they present problems of great interest to the entomologist.—C. GORDON HEWITT.

CONTRIBUTIONS TOWARD A MONOGRAPH OF THE BARK-WEEVILS OF THE GENUS *PISSODES*. By A. D. Hopkins. (Technical Series, No. 20, Part I, Bureau of Entomology, U. S. Dept. Agriculture.)

This is the first part of a bulletin to be entitled "Technical Papers on Miscellaneous Forest Insects," and is modelled on much the same plan