

The Canadian Entomologist.

VOL. XXX.

LONDON, JUNE, 1898.

No. 6.

CLASSIFICATION OF THE HORNTAILS AND SAWFLIES, OR THE SUB-ORDER PHYTOPHAGA.

BY WILLIAM H. ASHMEAD, ASSISTANT CURATOR, DEPARTMENT OF INSECTS,
U. S. NATIONAL MUSEUM.

(Paper No. 1.)

For many years past, those most interesting of Hymenopterous insects—the Horntails and the Sawflies—have received the closest study by some of the ablest Hymenopterists of the world. Cresson and Norton, in America; Newman, Westwood, Kirby, and Cameron, in England; Klug, Hartig, and Konow, in Germany; Lepelletier and André, in France; and Thompson, in Sweden, have all contributed much to our knowledge of these insects, and made decided improvements in their classification.

Mr. Peter Cameron, in his excellent Monograph of the British Phytophagous Hymenoptera, Vol. I., published in 1882, has given a thorough review of the progress made in the systematic arrangement of these insects; besides, on the completion of the work, some years later, gives a full bibliography on the subject; so that it is unnecessary here to repeat or enter particularly into this part of the subject, since this work is so easily accessible to the student.

I shall here, therefore, very briefly refer to Cameron's work on the group, and that of a later writer, Mr. F. W. Konow.

Mr. Cameron, in his work, made some decided improvements in the classification of these insects, and gave excellent tables for the separation of families and genera.

He recognized only four families: I. *Tenthredinidæ*, II. *Cephidæ*, III. *Siricidæ*, and IV. *Oryssidæ*, and some of these he again subdivides into subfamilies, tribes and subtribes.

The latest systematist to work in the group, a most prolific writer, and a profound and energetic student of these wasps, is Mr. F. W. Konow, of Teschendorf, who in the *Deutsche Entomologische Zeitschrift*, for 1890, proposed almost an entire new arrangement, besides giving a very unique and original method for showing the relationship of the different groups or tribes recognized by him.