The paper was briefly discussed by Dr. Gill, who stated that he was glad to see that the author was not afraid to erect a subfamily for a single genus. So many systematists seem to be influenced in their erection of higher groups quite as much by the number of forms as by morphological significance.

-Mr. Marlatt read the following paper:

## THE AMERICAN SPECIES OF SCOLIONEURA KNW.

## By C. L. MARLATT.

The genus Scolioneura belongs to the subfamily Blenno-campinæ and was separated by Konow from the genus Blenno-campa on what appear to be valid grounds. The important characters separating the genus Scolioneura from Blenno-campa are, the curved basal vein which converges with the first recurrent, and the broad inner tooth which projects from near the base of the claw. In Blenno-campa the basal vein is straight and parallel with the first recurrent, and the claws are bifid or nearly so, the inner tooth being large and almost as long as the outer. In the Tenthredinid material now in my possession I find two species which may be properly assigned to Scolioneura, and of the described American species of Blenno-campa B. capitalis Norton may also be so referred. The following characterization of the genus is given by Konow:\*

Body small, ovate, compound eyes reaching base of mandibles, antennæ rather slender, filiform, basal nerve of upper wings curved, not parallel with first recurrent vein, transverse radial often not interstitial, posterior lower angle of third cubital cell acute, discal cells of lower wings wanting, inner tooth of claw near base and broad.

## Scolioneura capitalis Norton.

Female.—Length 4 mm. Soft, delicate species; clypeus broadly, squarely truncate; vertex smooth, shining, sutures indistinct. Antennæ filiform or very slightly thickening towards tip, 3d and 4th joints subequal; basal vein strongly converging with 1st recurrent, distinctly bent near origin; 1st cubital cross-vein wanting, or indicated by a minute stump on cubital vein; stigma broad, rounded; hind wings without discal cells or bordering veins; claws with broad but short basal inner tooth; sheaths projecting, narrow, obliquely truncate at tip; color light honey-yellow; antennæ, except two basal joints, head, epimeræ and more or less of tip of abdomen, brown; wings hyaline; veins yellowish-brown.

Redescribed from one specimen collected in New York (Norton's type). Type in collection Amer. Ent. Soc., Philadelphia.

<sup>\*</sup> Deutsche Ent. Zeits., 1890, p. 239.

This insect has the venation of Fenusa if the rudimentary stump of the 1st cubital cross-vein be ignored.

Scolioneura canadensis n. sp.

Female.—Length 3.5-4 mm. Rather robust, smooth, shining. Clypeus truncate, head smooth, sutures not distinctly defined; antennæ shorter than thorax alone, scarcely tapering; inner tooth of claw short, inconspicuous; radial cross-nerve not interstitial.

Color.—Head, thorax except anterior and lateral lobes, and abdomen, brownish-black; legs pallid; femora, especially middle and hind pair, brownish; clypeus and mouth-parts pallid; anterior and lateral lobes of thorax reddish-yellow; eyes green iridescent; wings hyaline; veins brown.

Described from two specimens collected in Canada. Types belonging to the American Entomological Society of Philadelphia.

Scolioneura populi n. sp.

Female.—Length 4 mm.; very robust, glistening; clypeus broad, truncate, projecting over labrum; prominent sutures running from base of antennæ to occiput; basin of anterior ocellus small, circular and connecting with elongate posteriorly-tapering antennal fovea; antennæ very short, not twice length of head, third joint twice as long as fourth, others subequal, shortening but little towards terminal ones; transverse radial and third transverse cubital veins interstitial or nearly so; sheaths moderately robust, truncately rounded, somewhat pointed at upper apical angle; claws with large sub-apical tooth, below tooth greatly broadened.

Color.—Yellowish ferruginous inclined to whitish on head, thorax and abdomen; lateral and basal sutures of vertex, antennal fovea, ocellar basin, occiput, thorax dorsally except distinctly defined border of anterior and the sides and apex of lateral lobes of mesothorax, two spots on scutellum, abdomen dorsally except two or three terminal segments, meta-episterna, lower third meso-epimera, black; legs, meso-epimera and light area of lateral lobes of mesothorax inclined to ferruginous; antennæ black, obscured by white pubescence, fulvus beneath; wings hyaline, veins and stigma brownish, costa pale.

Male. -4 mm. long; less robust than female; structurally as in female; lateral lobes of mesothorax marked with white laterally, scutel black, terminal abdominal segments light apically; abdomen infuscated beneath, especially basally, hypopygium pale; ferruginous limited to legs—otherwise color as in female.

Described from three females and one male, from C. H. T. Townsend, Las Cruces, N. M. Types in the Coll. U. S. Nat. Mus.

This species is supposed by Mr. Townsend to be the parent of the larva which mines the leaves of *Populus fremontii* injuriously throughout the Mesilla valley in New Mexico.\* Mr. Townsend has failed to rear the adults, but has collected these saw-flies on the cottonwoods just as the leaves were beginning to expand, early in April. He also reports that they were very abundant, flying everywhere during the latter part of March. A saw-fly belonging to a different genus, however, mines the poplar leaves in the larval state in exactly the manner described by Mr. Townsend; and the reference of the New Mexican species to the poplar-leaf miner is therefore still open to question.

So far as known, the larvæ of the European species feed ex-

posed on the surface of leaves of Betula and Tilia.

-Mr. Coquillett read the following:

## ON THE NESTING HABITS OF THE DIGGER-WASP, BEMBEX CINEREA HANDLIRSCH.

By D. W. COQUILLETT.

On September 11, 1891, in company with an enthusiastic naturalist, Dr. A. Davidson, of Los Angeles, California, the writer spent several hours in digging out the nests of this wasp in a sandbank near the ocean beach adjoining the little village of Redondo, a summer resort distant about ten miles from Los Angeles. The sand-bank in question is in the form of high ridges with intervening depressions, and the nests were located in or near the bottom of these depressions. The mouth of the burrow leading to the nest was closed, and the only indication of its presence was a more or less circular pile of loose sand surrounding it. The burrow extended obliquely downward a distance of from sixteen to twenty inches, passing entirely through the loose surface sand and entering the moist, hard-packed sand beneath. At a point about four inches before its terminus a branch was formed which passed beneath the main burrow, going still deeper into the earth. The entire burrow had somewhat the form of an obliquely inverted Y, one arm of which lay directly beneath the other. Nothing was found in the main burrow, the nest being invariably located at the farthest end of the branch.

À large number of the burrows were examined, and all of them were constructed on this same plan, the philosophy of which is not very apparent. It cannot be for the purpose of excluding

<sup>\*</sup> Canadian Entomologist, vol. xxv, p. 304, December, 1893. Zoe, vol. iii, pp. 234-236, October 1892.