

have found joints 3 and 4 to be equal in length, sometimes 3 longer than 4, and again 4 would be longer than 3, and in one instance joint 3 was very long, $108\ \mu$; in this case joint 4 was only $24\ \mu$ long.

Pulvinaria innumerabilis, on *Aesculus octandra*, East Las Vegas, N. M., Oct. 14, 1902.

A NEW SAWFLY.

BY R. A. COOLEY, AGRICULTURAL COLLEGE, BOZEMAN, MONTANA.

The Sawfly here described is a common pest on the leaves of various species of *Populus* in Montana, and a Bulletin dealing with its life-history and economic significance is about to be published from the Montana Experiment Station. We give here an outline of its life-history, followed by descriptions of the two sexes.

The adults appear on the foliage in May and continue there for about eight weeks. The female deposits her eggs singly on the very young, tender leaves, and at the same time stings them in such a way as to cause the edge to fold under on the lower surface. The egg is found under the epidermis in the end of the fold nearer the petiole. One edge or both edges may be folded. The larva, at first, feeds in the fold, eating off the surface of the leaf, but later ventures out and eats holes in the leaves, always preserving the fold for a retreat. The cocoon is formed in the fold and drops to the earth with the leaf. This leaf, among the others on the ground, forms the hibernating place for the insect.

In this paper the writer has adopted the form of description used by Mr. C. L. Marlatt in his valuable "Revision of the Nematinae of North America."

Pontania Bozemani, n. sp.—*Female*.—Length 6 mm.; robust; emargination of clypeus a semicircle; lobes of the clypeus rounded; longest hairs of the mouth-parts about as long as the distance from lobe to lobe of the clypeus; lateral furrows of the vertex broad and rather shallow; ocellar basin distinctly defined; frontal crest almost absent; antennae moderately slender, 4 mm. long, with joints 3 and 4 subequal, joint 5 shorter, joints 6, 7, 8 and 9 still shorter and subequal in length; sheath acuminate, hairy below at the apex; claws cleft for one-third their length. Colours principally resinous-yellow and black; antennae, large spot on vertex, thorax above except sides of pronotum, dorsum of first abdominal segment, most of dorsum of second and spot on the next four