

ing brown ; pile of abdomen erect and largely black. Front and middle femora destitute of bristles. Wings yellowish gray, a hyaline streak in base of marginal cell, a darker gray cloud in apex of first submarginal and along front edge of the second submarginal cell ; stigma and a small spot at base of the second submarginal and of each posterior cell, dark brown ; fourth posterior cell closed and short petiolate.

Length, 10 mm. Washington. Received from C. W. Johnson, and collected by Prof. O. B. Johnson, after whom the species is named.

### SOME NOTES ON MICHIGAN INSECTS, PRINCIPALLY COLEOPTERA, AFFECTING FOREST TREES.

BY C. H. TYLER TOWNSEND.

The following notes were presented to the Entomological Society of Washington, May 1, 1890, under the title of "Some insects affecting certain forest trees." They are herewith somewhat revised and sifted for publication, since the matter which follows is of some value.

The paper furnishes a record of certain insects mostly coleopterous, which I found many years ago in Michigan affecting either the trunks or foliage of forest trees and shrubs and which I have since been able to identify in connection with my notes. All are southern Michigan records, and belong to the vicinity of Constantine. Many coleoptera found under dead bark, but which feed merely on decaying vegetable tissue, have been omitted. Such are *Prionochaeta*, *Scaphidium*, *Ditoma*, *Bactridium*, *Melanotus*, *Cis*, *Tenebrioides*, *Melandrya*, *Uloa*, *Platydema*, *Penthe*, *Cratoparis*, and many others.

#### COLEOPTERA.

*Brontes dubius*, F.—Under bark of linden (fall) ; elm and butternut logs (May).

*Paromalus acqualis*, Say.—Under bark of decaying butternut and linden logs (May).

*Hister lecontei*, Mars.—In burrows under decaying bark of butternut, elm, and linden.

*Adelocera aurorata*, Lec.—One under bark of old oak log (Jan.)

*Alaus oculatus*, L.—Boring stumps and dead trunks of oak, hickory, poplar and linden.