When we come to the genus *Cistogaster*, and find 8 new species, we may well be astonished. This genus has never before been turned up in Mexico, or anywhere in tropical America. Though most numerous in individuals in most parts of the United States, there were heretofore but 3 species to be distinguished, and these might easily all be considered but forms of a single variable species. Bearing this in mind, we are wholly unprepared for such a sudden increase in the number of species, and may well doubt their validity. With the single exception of the first species (*C. ruficornis*), they are probably all referable to the three already known species. From the description of *C. ruficornis*, I cannot resist the conclusion that Mr. van der Wulp has mistaken *Gymnosoma filiola*, Liv., for a *Cistogaster*.

Of course it is difficult, and to a certain extent uncertain, to judge of these forms from the brief diagnoses alone that have so far appeared. For this reason I feel called upon to delay the publication of Part I. of the Monograph of North American Tachinidæ, referred to in *Psyche*, Jan., 1893, until the Biologia supplement appears giving fuller descriptions of these species with drawings.

If any of the above comments prove to be erroneous in their conclusions, I shall be most happy to amend them.

DESCRIPTION OF THE GRUBS OF CHRYSOMELA EXCLAMATIONIS.

BY C. H. TYLER TOWNSEND.

This species is quite common in New Mexico, where it feeds on the native sunflower (*Helianthus sp.*). On August 7, 1892, at Belen, N. Mex., I found the native *Helianthus annuus* badly infested with the adults and numerous light green grubs of this species, which were eating the leaves extensively. From these grubs the following description is drawn:—

Larva (about full grown).—Length, $5\frac{1}{2}$ to 7 mm.; greatest width, 4 to $4\frac{1}{2}$ mm.; greatest thickness, 3 to $3\frac{1}{2}$ mm.; width of prothoracic segment, 2 to $2\frac{1}{2}$ mm.; of head, $1\frac{1}{2}$ mm. Colour wholly light green, except head and legs, which are slightly tinged with brownish; eyes, antennæ and jaws, brown. Shape subpyriform, curvate, very strongly convex dorsally; slightly concave ventrally in lateral profile, but a little convex in longitudinal profile;

tapering anteriorly to head, stout posteriorly, coming suddenly to a point at anal extremity. Transversely wrinkled, both above and below. Consisting of thirteen segments, head chitinous, other segments fleshy, the prothoracic segment hardly less so. Nearly naked, clothed only with a few very sparsely distributed hairs, somewhat more numerous on the prothoracic segment and head. Head semi-circular in outline from above, not retracted, narrower than prothoracic segment; second, third, fourth, and fifth segments each successively wider than its predecessor, and increasing at about the same rate; segments 6 to 8 about same width, a little wider than 5; 9 to 12 narrowing successively, each with greater rapidity than its predecessor; 13 very small. Prothoracic segment a little longer than head; segment 3 (in wrinkled condition of alcoholic specimens) about two-thirds length of second, the following segments increasing very slightly to the somewhat greater length of 6 to 9; 10 and 11 successively a little shorter; 12 and 13 very short, of about equal length, 13 bearing a blunt subbifid anal proleg. All the segments with a few short hairs on lateral edges, varying in number usually from 3 to 5, second segment and head with more. Eyes represented by six prominent brown or blackish, often glistening, simple eyes on each side of the head, four of them arranged in a transverse diamond just posterior to antenna and a little removed inwardly from edge of head; the other two situated on edge of head, more separated, one ventrad of the antenna and the other ventrad of the upper four. Antennæ small, situated in an excavation and somewhat sunken, 3-jointed; first joint stout, cylindrical, hardly as long as broad; second joint less than one-half the diameter of first, not as long; third joint nearly as wide as second, hardly as long. Labrum twice as wide as long, front border hollowed out, bearing two bristles on its dorsal surface, clypeus appearing as a long transverse narrow strip posterior to labrum. Mandibles stout, 5-toothed on the blunt apical portion. Maxillæ well-developed. Maxillary palpi 4-jointed, first joint short; second a little shorter than first, but nearly same diameter; third longer than first, narrower than second, cylindrical; fourth conical, almost as long as third, not as wide at base as third, and tapering evenly to a point. Labial palpi 2-jointed; basal joint stout, tubercular, hardly as long as wide, subcylindrical; the second joint conical, hardly as wide at base, and hardly longer than basal joint. A spiracle (the mesothoracic) on lower anterior portion of third segment; 5 to 12 with a spiracle on lateral portion dorsad of the lateral

ridge which separates the tergum from the venter on these segments ; the thoracic segments extend farther ventrad on the sides. Legs apparently 4-jointed, corneous, first two joints more or less amalgamated, fourth shorter than third, terminated by a hooked claw.

Described from many alcoholic specimens. Belen, N. Mex. August 7.

A LIST OF SPECIES OF DIPTERA FROM SAN DOMINGO.

BY S. W. WILLISTON, LAWRENCE, KANSAS.

Some years ago I received a small collection of diptera from San Domingo, made by Mr. F. Frazar, a list of the species of which it is composed I herewith give. Hitherto scarcely two score species have been recorded from the island. The habitats followed by an exclamation point are given from specimens which I have examined :—

1. *Odontomyia*, sp.
2. *Cyphomyia*, sp.
3. *Lepidoselaga crassipes*, Fabr. South America ! Mexico ! Cuba.
4. *Chrysops costatus*, Fabr. South America ! Cuba.
5. *Chrysops Frazari*, Will.
6. *Tabanus parvulus*, Will.
7. *Tabanus fenestra*, Will.
8. *Plesiomma lineata*, Fabr. St. Thomas.
9. *Laphria ruficauda*, Williston. Cuba !
10. *Andrenosoma chalybea*, Will. Cuba !
11. *Atonia Mikii*, Will.
12. *Proctacanthus rufiventris*, Maco. Honduras. Porto Rico.
13. *Erax*, sp.
14. *Ommatius vitreus*, Bigot.
15. *Psilopus chrysoprasius*, Walker. Cuba ! Brazil ! Porto Rico.
16. *Plagioneurus univittatus*, Loew. South America ! Cuba.
17. *Microdon pulcher*, Will.
18. *Mesogramma aurulentum*, Will.
19. *Syrphus simplex*, Loew. Cuba.
20. *Ocyptamus dimidiata*, Fabr. Brazil ! Mexico !
21. *Ocyptamus latiusculus*, Loew. Cuba.
22. *Ocyptamus fasciatus*, Roeder. Porto Rico.
23. *Eristalis atrimanus*, Loew. Cuba.
24. *Eristalis albifrons*, Wied. Brazil ! Mexico ! United States ! Porto Rico.
25. *Eristalis hortorum*, Fabr.