# DESCRIPTIONS OF CERTAIN SPECIES OF WASPS OF THE FAMILIY SPHECIDÆ. 

By Henry T. Fernald, Of the Massachusetts Agricultural College, Amherst, Massachusetts.

The following descriptions and notes have accumulated since the publication of my paper on this group, in the Proceedings of the United States National Museum, in 1906. Nearly all that has been added to our knowledge of the group since that time has come as the result of additions to the collections of the United States National Museum.

## CHLORION MANDIBULARIS (Ciesson).

This species was described from a single female specimen taken in Cuba by Gundlach, and the redescription given by $\mathrm{me}^{1}$ was prepared from the type.

Another specimen collected in Santo Domingo and now in the United States National Museum enables me to determine more definitcly which characters given in the above paper are individual and which are of specific importance.

The characters in which this specimon differs from the type are as follows:

Pubescence everywhere silvery. Clypeus with a slight, bilobed median projection on its anterior margin. Greatest width of cheeks behind the eyes at about the middle of the head. Scape of antenna very faintly ferruginous below. Lateral pubescent bands of mesonotum meeting posteriorly; anterior median groove not pubescent; post-scutellar pubescence only at the sides, not in the middle; dorsum of median segment thickly clothed with white hairs and with a trace of pubescence on each side above the petiole. Abdomen about equally pointed in outline at each end; the first dorsal plate sericeous; the second, third, and fourth glistening and with a bluish reflection. Hairs on the last two abdominal plates above, brownish; terminal plate rather more acuminate than "rounded acuminatc." Wings

[^0]slightly fuliginous, least so basally, with a slight violet reflection. Tegulæ dark brown. Anterior coxæ pubescent in front; fore metatarsi with nine comb teeth hardly longer than half the metatarsus. All the tibix and tarsi very dark brown. One female, 20 mm . Otherwise as described in my paper ${ }^{1}$.

## CHLORION RESINIPES Fernald.

This has heretofore been known only from the female. A male now in the collection of the United States National Museum, which I have examined, has made possible the preparation of the following description:

The male of this species differs from the description of the female published in $1906^{2}$ as follows:

Clypeus quite long and convex, its anterior margin slightly excavated in the middle, but with a rounded projection at the central third of the excavation. The surface of this plate entirely covered with pubescence, but without any backward extension of the ferruginous color from the middle of the anterior margin. Outer ends of the longer clypeal hairs not tipped with black. Distance between the lateral ocelli equal to or slightly greater than from them to the eyes. Cheek less than half the width of the eye at its widest point. Scape of antenna faintly ferruginous beneath. Lateral mesonotal pubescent bands not meeting behind. Pubescence absent on the posterior end of the median segment and along the stigmatal groove. There is no sericeous band between the middle and hind coxæ (nor on a female in this lot). Petiole slightly bent, the projection of the curve being downward, and on its posterior third; as long as the second segment of the posterior tarsus. Abdomen dull ferruginous, darker behind; with a black spot on the first dorsal plate on each side rather toward its posterior margin, and with a median triangular spot, apex forward, at the anterior margin of the second plate (these markings are probably variable). Entire dorsal surface of the abdomen yellowish sericeous and with coarse yellowish hairs on the last two plates. Terminal plate broadly rounded in the middle and with a slight median longitudinal ridge. Beneath, plates three to seven are coarsely yellow sericeous, the hinder margins of the fourth to seventh plates emarginate, the emargination increasing posteriorly, and with the hairs longer and coarser toward the sides, almost forming lateral tufts on the sixth and seventh plates. Terminal plate truncate, rather sharply acuminate from the center of the truncation. Wings with no yellow tinge, evenly, slightly fuliginous and with a decided violet reflection. Tegulæ dark, almost black, but with traces of ferruginous
here and there. Trochanters partly black, the hinder pair least so. Otherwise as in the female.

Length, 21 mm .
San Francisco Mountains, Santo Domingo, West Indies, June 9, 1905; Aug. Busck. collector.

## CHLORION FLAVITARSIS Fernald.

It may be desirable to note here that Chlorion flavitarsis Fernald was given $a_{\text {, new }}$ name in the paper on these insects in the Proceedings of the United States National Museum, mentioned above, because the specific name flavipes Smith was preoccupied.

## CHLORION BRIDWELLI (Fernald),

A specimen from Union County, Illinois, in the collection of the University of Illinois considerably extends the range of this species beyond what has been previously recorded.

## CHLORION PENNSYLVANICUM (Linnæus).

It was stated ${ }^{1}$ that this species should occur in the mountainous regions of Mexico. This has since been sustained by the capture of a female in Sonora, Mexico, now in the United States National Museum collection.

CHLORION CHICHIMECUM (Saussure).
The distribution of this species may now be extended, a male 20 mm . long captured at Turrialba, Costa Rica, being in the collection of Schild and Burgdorf in the United States National Museum.

## CHLORION TEXANUM (Cresson).

This species has heretofore been reported only from Texas. It has been taken by C. H. T. Townsend at Meadow Valley, Mexico.


[^0]:    ${ }^{1}$ Proc. U. S. Nat. Mus., vol. 31, 1906, p. 410.

