

terminal segment, one a little below the apex." The sketch supplied by Mr. Johnson indicates that the first of the flagellar segments has two of these weak segments, the next two have three each while the short terminal segment is not further divided, these totalling up to the nine distinct segments in *C. primitiva*. It will be seen from the figures (fig. 3) that the flagellar segments in *Pterochionea* are all short-cylindrical; in *C. primitiva* (fig. 4) the basal segments are short with short verticils, these segments gradually becoming more attenuated and provided with longer bristles, the last segment shorter with three terminal bristles.

The male hypopygia of *Chionea* and *Pterochionea* show a peculiar, powerful type of genitalia, consisting of a massive pleurite and a single elongate pleural appendage (figs. 1, 2). In *Crypteria* the appendages are small, two in number and quite normal. Thus in the structure of the antennae, *Chionea* comes closest to *Crypteria*, but in the hypopygium the condition is remarkably close to *Pterochionea*. There can be little doubt but that these two genera, with perhaps others yet to be discovered, are the direct ancestors of our familiar snow-flies, *Chionea*. As stated in another paper, this interpretation will place the group at the very end of the eriopterine series.

***Chionea primitiva*, sp. n.**

Size large; form stout; entire body hairy; head elongated; antennae with nine flagellar segments beyond the fusion segment.

Male.—Length 5.8 mm.; diameter across thorax, 1.5 mm.

Mouth parts yellowish brown; palpi dark brown. Antennae elongate, the scapal segments yellowish brown, the flagellum darker; first segment of the scape a little broader basally, with a group of long bristles on the outer face; second segment narrowed, basally enlarged, darkened and provided with bristles beyond the basal portion; fusion-segment of the flagellum conical, with short verticils; it is shorter than the second segment of the scape but longer than the following segment of the flagellum; beyond the fusion-segment are nine distinct segments, increasing in length toward the tip of the organ, the verticils also increasing in length from the base outward, those of the first four segments shorter than the segments that bear them, the others very long, longer than the segments that bear them; the terminal segment is smaller,