

Subdivision of the genus may be expected to be necessary, having regard to marked differences in the genitalia of the better known species. The presence or absence of cross-veinlets before the bulla of the subcosta in the submarginal area of the fore wing seems to be of minor importance; and the hind wing may vary a little in shape with the sex, the costal elbow perhaps being farther from the wing-roots in the female than in the male, as is the case in many Ephemeridæ. Further material is needed for the elucidation of these points.

### 1. *Thraulius primanus*, sp. n. (Tab. I. figg. 7, ♀; 7 a, ♂.)

*Imago (dried)*.—♂. Femora not banded. Hind wing less oblique than in the typical species (*Th. bellus*), with the costal elbow nearly opposite the middle of the wing; subcosta straight, parallel with the costa as far as the elbow, and ending abruptly at a cross-veinlet; radius nearly straight, ending before the apex of the wing, joined by three veins (of which the nearest to the apex is forked and the others simple) and followed by another vein; cross-veinlets very few.

Body pitch-brown. Legs, in opaque view, intense piceous; fore tarsus translucent light bistre-brown, shifting to a darker tint of the same. Setæ brownish-grey, with some of the joinings opaque or blackish. Forceps stout; apical joint oval. Wings vitreous; the fore wing in its basal half, and in the marginal area up to the bulla, faintly tinted with very light pitch-brown; the hind wing similarly tinted throughout. Neuration in opaque view light pitch-brown, shifting to golden-brown; longitudinal neuration fairly distinct to the naked eye over white paper; cross-veinlets numerous in the apical half of the wing and in proximity to the margin thereabouts; marginal area of the fore wing with traces of ten obsolete cross-veinlets before the bulla, and about fourteen simple veinlets beyond it.

♀ (*dried*) (either of this species or of a near ally). Fore wing clear, except at the extreme base; neuration rather lighter in tint than in the ♂, and the cross-veinlets more numerous—nine before and about twenty-four beyond the bulla in the marginal area; longitudinal neuration fairly distinct to the naked eye. Costal elbow beyond the middle of the hind wing; neuration much the same as in ♂; cross-veinlets few. (Ventral lobe of ninth segment shrunken.)

Length of body, ♀ 9; wing, ♂ 9, ♀ 13 millim.

*Hab.* MEXICO, Atoyac in Vera Cruz (*Schumann*; two ♂ imag.), Teapa in Tabasco (*H. H. Smith*; one ♀ imag.).

### 2. *Thraulius versicolor*, sp. n.

*Imago ♀ and subimago ♀ (dried)*.—Femora not banded. Hind wing similar in plan of neuration to that of *Th. primanus*.

*Imago*.—Body light pitch-brown, with the metathorax lighter and more of a light raw umber-brown; abdominal joinings opaque. Legs in opaque view very intense bistre or pitch-brown, approaching pitch-black; tarsi and coxæ light raw umber-brown. Setæ intense pitch-brown. Wings vitreous, uniformly tinted with bistre-grey. Neuration in opaque view piceous, in transmitted light bistre-brown; longitudinal nervures fairly distinct to the naked eye; cross-veinlets numerous in the apical half of the wing and along the outer margin; marginal area of the fore wing with traces of two or three obsolete cross-veinlets before the bulla, and about thirteen cross-veinlets beyond it.

*Subimago*.—Wings and neuration subopaque white, tinged at the extreme roots with violet-black or grey-black. Legs intense pitch-brown, with the tarsi yellowish-white. (Setæ shrunken, probably piceous. Body faded.) Thorax varying from pitch-black to medium bistre-brown.

Length of wing, imag. and subimag., 11–12; setæ, imag., 9 and 14 millim.

*Hab.* COSTA RICA, Caché (*Rogers*; three ♀ imag. and three ♀ subimag.); PANAMA, Volcan de Chiriqui 3000 feet (*Champion*; one ♀ imag.).