cylindrical, enlarging little or none toward base, and with distinct flange at apex. The cauda is very peculiar in form, is directed up and back, and is moderately broad at the base, but soon becomes small, tapering and crooked, appearing as if it had been twisted off. (Fig. 4.) Beneath the cauda the anal plate is protruded into a blunt point projecting back and ventrally, and appearing, often, more like the ordinary blunt conical cauda than does the real cauda. I have not seen a similar cauda in any other species. Beak long, much surpassing hind coxæ, the third joint long and slender.

## Winged Viviparous Female.

Specimens taken by L. C. Bragg at Longmont on June 14, 'o7,
Differs little from the apterous form; the cauda is somewhat straighter and more symmetrical, wings rather stout, 4 mm . long, with subcostal nervure and stigma rusty-brown. Length of body about 3.4 mm ., antenna much shorter, about 2.10 mm . Joints: III .6r, IV .43, V .3I, VI .14, VII .49 mm .; cornicles, .50 mm .
Winged Male.
Same date and place as the preceding females.
Colours as in the winged females. Length of body, 2.70 mm .; antenna, 2.40 mm .; cornicles, .54 mm . Antenna joints: IlI .65 , IV .42, V.40, VI.13, VII .50 mm . Joints 3 and 4 strongly tuberculate, the former with about 40 , and the latter with a single row of about ten small circular sensoria. Cornicles cylindrical, black. Cauda as in the alate female. Slight antennal tubercles.
Apterous Oviparous Female.
From specimens taken at Fort Collins, Oct. 27, 'o7.
Colour as in viviparous apterous form, except that the anal plates are conspicuously black.

Length, 2.5 mm . long by I .35 mm . broad. Antenna, 1.8 mm . Joints: III .50, IV . 36, V . 30 , VI .13 , VII .43 mm . On joint 3 are a small number, about 15 to 25 , circular, slightly tuberculate sensoria. The cauda is small, pointed, black, upturned, and does not show the peculiar twisted appearance as well as in the viviparous females. Beak reaches considerably beyond hind coxæ. Cornicles, 40 mm . Several specimens taken in copula. They are much smaller than the viviparous females. Oviparous females and males quite numerous, but I find no eggs yet. There are many ant attendants,

