

NEW NORTH AMERICAN HOMOPTERA.--No. V.

BY E. P. VAN DUZEE, BUFFALO, N. Y.

1. THAMNOTETTIX SMITHI, n. sp.

Male: Form of *Th. quadrinotata*, Fab., but with the vertex shorter and more depressed. Greenish-yellow; head yellow with a transverse black band on the anterior edge; body black the segments edged with yellow. Length $4\frac{1}{2}$ mm.

Head rounded before, very little longer at the middle than next the eye. Vertex a little depressed, anterior edge subacute; apex of the front two-thirds the width of the base, sides nearly parallel below the antennæ. Clypeus strongly widened apically where the width is but slightly less than the length, edge of the cheek rectilinear either side of the prominent lateral angle. Pronotum rather long, hind edge but moderately concave, the angles obvious. Antennal setæ long and stout, dusky. Valve obtuse-triangular, its length and breadth subequal; plates irregularly ovate, shorter than the valve, sutural edges arquated, touching only at the middle, outwardly heavily fringed with long white hairs; pygofers slender, longer than the plates, viewed from beneath lanceolate with slightly diverging tips.

Colour pale greenish-yellow, lemon-yellow on the vertex and connexivum, anterior edge of the head marked with a conspicuous broad black transverse band just below the line of the ocelli; sutures of the clypeus and front slenderly black. Meso-, and meta-thorax and abdomen deep black, narrow edge of all the segments, the scutellum and the genitalia greenish-yellow, the disc of the valve and a spot on the base of the pygofers blackish. Elytra sub-hyaline, smoky at apex, with slender greenish nervures. Wings smoky, iridescent.

New Brunswick, N. J. Described from a single male example kindly given me by its captor, Prof J. B. Smith, to whom I take pleasure in dedicating it. This is a neat little species pertaining to the group represented by the European *quadrinotata*.

2. THAMNOTETTIX LONGISETA, n. sp.

Female: Closely allied to the preceding species. Dull yellowish or dusky green. Vertex as in *Smithi*, anterior edge more obtuse, impressed line blackish at base, disc anteriorly with a small dot behind each ocellus, edge with a transverse row of four large subquadrate, approximate spots placed just below the line of the ocelli; edges of the front more deeply

excavated opposite the antennæ, disc with three or four blackish arcs interrupted on the middle; clypeus less expanded apically. Cheeks thin, discoloured exteriorly, angles more rounded than in *Smithi*, sutures of the face more heavily lined with black. Second joint of the antennæ annulated with black; seta long, as in the preceding species. Pronotum shorter, with the sides more oblique, the posterior angles more rounded, and the hind edge more deeply excavated than in *Smithi*; disc greenish, marked anteriorly by a slender, oblique black line behind the eyes, touching the lateral angles. Elytra hyaline, slightly infuscated toward the apex; nervures very distinct, pale blue-green, brownish at apex. Beneath black; narrow edges of the connexivum and abdominal segments, outer angles of the last ventral segment, and sides of the pygofers, yellow. Legs pale yellow. Last ventral segment rather long, hind edge entire, truncated, the outer angles slightly produced. Length 4 mm.

Northwestern Colorado. Described from a single female example received from Prof. C. P. Gillette. This is closely related to *Th. Smithi*, of which it may prove to be the female, but the differential characters mentioned above seem to entitle it to specific distinction.

3. *THAMNOTETTIX GILLETII*, n. sp.

Form and general appearance of *Th. letus*, Uhl.

Female: Colour yellow, tinged with greenish on the pronotum. Vertex moderately produced, apex rounded, basally with an impression either side of the middle. Front narrower than in *letus*; clypeus widened apically, the sides arquated. Apex of the head with two large round spots, and on the vertex on either side is a smaller one placed against the middle of the inner margin of the eye. Pronotum highly polished with an impressed line parallel to the anterior edge, hind edge nearly straight. Scutellum polished, the impressed line black. Sutures of the front and the antennal pits black, the setæ dusky. Sternal and pleural pieces black, the latter edged with yellow. Abdomen yellow, disc of the tergum and the oviduct black. Legs yellow, tips of the tarsal joints dusky. Elytra hyaline, smoky at tip, nervures yellow, becoming heavier toward the inner margin. Last ventral segment rather long, outer angles rounded, apex nearly straight with a narrow linear notch. Length 5 mm.

Colorado. Described from a single female example received from Prof. C. P. Gillette, to whom I take pleasure in dedicating this pretty little species.

In Mr. Gillette's material was an example of a species I take to be Mr. Uhler's *Jassus* (*Thamnotettix*) *latus*, but it differs from his description in wanting the minute fuscous dots at the tip of the vertex, and the black basal spots on the scutellum. In this specimen, a female, the last ventral segment is cylindrical, a little longer than the preceding and feebly arquated behind without a median notch. Clypeus slightly narrowed apically, its sides rectilinear.

4. *THAMNOTETTIX MONTANUS*, n. sp.

Allied to *Th. clitellaria*, Say. Smaller; dark brown or blackish, face pale. A transverse band on the pronotum and a small spot on the elytral suture yellowish-green, polished. Length $4\frac{1}{2}$ mm.

Female: Head obtusely rounded before, soiled white or yellowish, base of the vertex with a transverse fulvous-brown band between the eyes covering the apical one-half of the pronotum, ocelli fulvous; front with a few short brown arcs next the edges, the sutures blackish, clypeus slightly widened apically; cheeks infuscated below the eyes. Pronotum polished, pale greenish-yellow on the posterior one-half, hind edge feebly concave. Scutellum dark brown, blackish on the base and apex, the impressed line black. Elytra blackish, costal half of the corium as far as the apical areoles hyaline, apex of the clavus and its nervures black, sutural edge with an oblong greenish spot. Beneath black. Legs whitish. Abdomen black; connexivum, a slender median line on fourth and fifth, apex of the ultimate, and the narrow edges of all the ventral segments, and the oviduct, pale yellowish. Last ventral segment deeply cleft either side of the ligulate median projection, the shorter lateral lobes rounded, retreating at the outer angles. Male: More deeply coloured, scutel and elytra black; abdomen black, connexivum and ventral segments narrowly edged with yellow. Valve half the length of the last ventral segment; plates nearly three times the length of the valve, punctured, obtuse, suture straight, outer edge feebly convex; pygofers exceeding the plates, pale, as is the apical half of the plates.

British Columbia; Mountains of northwestern Colorado. Described from a fine pair received from Prof. Gillette and one male received from Mr. W. H. Harrington and labelled "British Columbia." This latter differs from the Colorado male in being more deeply coloured, with the transverse band between the eyes black, and showing two small transverse spots on the base of the front.

Mailed October 13th.