

NEW NORTH AMERICAN HOMOPTERA.—III.

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

Lamenia Californica, n. sp.

Form and size of *L. vulgaris*. Black, shining, densely pruinose; head, pectoral pieces, and legs fulvous. Length, 4 mm.

Front but little wider across the middle than next the vertex. Head fulvous, tinged with brown on the vertex, apex of the clypeus, margins of the cheeks, and on the front each side of the central carina. Eyes dark brown. Pronotum fulvous, more or less embrowned on the disc; propleura, base of the intermediate femora and the claws dusky or blackish. Elytra as in *vulgaris*, blackish with a row of fine white lines on the transverse nervures at the base of the apical areoles. Plates of the male concave on their inner edges, touching at base and apex only.

This species is very near our eastern *vulgaris* from which it may be distinguished by its fulvous head, pronotum, and pectus, and the form of the plates of the male. In *vulgaris* these are slightly retreating on their inner margins at base, and near the middle exhibit a distinct re-entrant angle.

Los Angeles, California. Described from six examples, all males, received from Mr. D. W. Coquillett. (Nos. 642 and 643.)

Cicadula punctifrons var. *americana*, n. var.

This variety differs from the typical form as follows: Front deeper brown, scutellum with a black spot within the basal angles mostly covered by the pronotum which is there discoloured or marked with a brown cloud; two outer areoles on the clavus and the three inner on the corium blackish, appearing as five oblique blackish vittæ; apical areoles infuscated; nervures of the wings deep fuscous. Other markings and the genital characters as in the parent form.

The apparently constant differences between this and the typical form seem to call for a varietal name, but it could hardly be considered a distinct species. About Buffalo it occurs in great numbers on low willow bushes from June to August. I have taken one example that does not differ from typical European specimens in my collection. It occurred on osiers in company with the variety July 12th, 1889, but does not seem to be common.

Athysanus parallelus, n. sp.

Closely allied to *A. striola*, Fall.; larger and stouter, vertex shorter;

pronotum shorter, its hind edge nearly straight. Colour and markings about as in that species. Length, 6 mm.

Head broad and short; vertex short, fore and hind margins parallel, but feebly arquated, width between the eyes three times the length, disc obscurely longitudinally rugose; face coarsely punctured; front moderately convex, its length and breadth subequal; clypeus oblong, sides straight, at apex slightly contracted; base feebly convex; loræ broad, rounded; outer edges of the cheeks scarcely angled below the eyes, apically margining the loræ and attaining the tip of the clypeus. Pronotum as long as the scutellum, broad anterior margin calloused, behind which is an arquated impressed line, hind edge feebly concave or almost straight. Elytra usually subhyaline, sometimes more or less infuscated toward the inner margin, nervures distinct.

Genital characters. Male: Valve slightly longer than the last ventral segment, broad, its apex rounded; plates broad, nearly square across their apex, outer angles rounded, inner edges contiguous nearly to their apex, a little shorter than the valve. Female: ultimate ventral segment a little longer than the penultimate, apical margin nearly straight, with a broad subtriangular central notch, not reaching the middle of the segment, extreme outer corners oblique; pygofers as in *striola*.

Colour yellow, pale on the face, pectus, legs, and disc of the pronotum. Front black, apex, median line and about six arcs on each side yellow; temples black marked with a yellow spot. Eyes, second joint of the antennæ, sutures of the face, median line of the clypeus, and front of the vertex black; ocelli fulvous, connected by a yellow band; posterior disc of the pronotum sometimes obscured. Elytra pale yellowish, inner and apical areoles sometimes smoky, nervures pale. Wings whitish hyaline, sometimes smoky toward their tips, nervures concolorous. Abdomen black; connexivum broadly, the genital and penultimate, and the margins of the ultimate segments, and sometimes the sides of the venter, yellow; sheath of the ovipositor black. In dark examples the outer surfaces of the femora are trilineate with black, and there is a black line on the edge of the anterior and intermediate tibiæ; tips of the tibiæ and tarsal joints embrowned.

Described from one male and seven female examples, all taken near South Falls, on the Muskoka River, Ont., about the first of August. This is the large form of *A. striola* mentioned in my list of Muskoka

Hemiptera, CAN. ENT. XXI., p 11, 1889. But a comparison of the genital characters with a series of *striola* received from Europe shows it to be a well marked species.

The true *striola* is common about Buffalo from July to September on swampy meadows and pasture lands.

Goniagnathus Palmeri, n. sp.

Form of *Pediopsis insignis*; short and broad, punctured, colour uniform deep shining black, tarsi and apical nervure of the elytra rufo-piceous. Length, 4 mm.

Head a little wider than the pronotum, closely punctured; vertex short, very little longer at the middle than next the eye, apex very obtusely angled, passage to the front well rounded; ocelli placed nearly half way from the eye to the apex of the forehead; front convex about one-sixth longer than wide, sides pretty regularly arquated, suddenly contracted at the apex, disc each side with a large smooth area crossed by about eight irregular rows of punctures; clypeus narrowed from its rounded base, (its apex?) lore broad; cheeks broad, prominently angled a little below the eyes; antennæ small, inserted beneath a feeble oblique ledge. Pronotum long, almost semicircular in outline, latero-posterior margins long, hind margin moderately concave; surface coarsely punctured, irregularly so on the disc, anterior submargin with an interrupted transverse impunctured band across its whole width; narrow hind margin impunctured. Scutellum acute at apex; anterior field coarsely punctured, disc with a finely punctured area each side of the middle; posterior field transversely wrinkled, with a few scattering coarse punctures. Elytra but little longer than the abdomen, oblique at tip, thick and coraceous, smooth; all the arcoles circumscribed by a single row of coarse punctures; apical areoles five, short, subequal; antiapicals three. Inner edge of the posterior femora somewhat expanded apically in a small rounded lobe; basal joint of the hind tarsi thickened. Abdomen stout, last ventral segment of the female longer than the preceding, its hind edge very feebly advanced in the middle; pygofers short, obtusely subtriangular in form, slightly exceeded by the ovipositor.

Colour a uniform deep shining black; apical nervure of the elytra, tarsi, base of the eyes beneath, and the antennal setæ, rufo-piceous.

Described from a single female example taken at Mt. Balsam, N. C., Aug. 1st, 1890, by my friend Mr. W. J. Palmer, jr., of this city, to whom I take pleasure in dedicating this singularly neat and elegant little species. This is certainly a notable addition to the homopterous fauna of this country. It is a remarkably trim compactly built little creature, mimicking very closely the genus *Pediopsis*, from which it differs, however, by all the characters separating that genus from the Jassidæ proper. In its intensely black colour it has few equals in our Jassid fauna. In mounting this specimen the apex of its clypeus was unfortunately covered so its characters cannot be given.

DESCRIPTIONS OF SOME BUTTERFLY LARVÆ FROM
YOSEMITE.—I.

BY HARRISON G. DYAR, YOSEMITE, CAL.

Limenitis lorquini, Boisd.

Egg.—Nearly spherical, the base flat; covered with elevated reticulations from the intersections of which arise short spines. The depressions between the reticulations are rounded. Colour pale green with a silvery lustre. Diameter .9 mm. Laid singly at the extreme tip of a leaf on the upper surface.

First larval stage.—Head rounded, brown, not shiny; ocelli and jaws black; a few minute hairs arising from yellowish elevated bases; width .6 mm. Body slightly enlarged at joint 12; feet normal. Colour yellowish, with rows of short conical tubercles, which are largest dorsally on joints 3, 4, 6 and 12; some very short and minute hairs. The larva builds out a long perch in continuation of the mid-rib of the leaf on which it rests. It collects a little bundle of bits of leaf, etc., at the base of this perch.

Second stage.—Head rounded, brown, with two paler lines in front converging toward the vertex. It is roughly tuberculate, the tubercles yellowish. Width .9 mm. Body densely tuberculate, each tubercle with several points, beside many minute granulations. General colour dark brown, with a broad, dull ochre, dorsal patch, which widens on joints 3-5 and 8-10. The larva rests on its perch as in the first stage.

Third stage.—Head bilobed, bulging in front, very rough and tuberculated, but the tubercles are not large. Colour nearly black, the clypeus and tubercles paler, the latter tipped with yellowish on the sides

of the head. Width 1.3 mm. Body rough and tuberculated, a pair of short subdorsal tuberculated processes on each joint except joint 2, those on joints 3, 12 and 13 the largest, those on joints 4, 6 and 11 next in size, the others all smaller; other similar smaller tubercles in a double dorsal line and two lateral lines, besides numerous small granulations. Colour black with a dorsal white patch on joints 8-10, reaching down the sides on joint 9. All the tubercles and granulations are dull yellowish, more especially on joints 2-4. The larva builds no perch in this stage.

Fourth stage.—Head as before, densely tuberculate, the tubercles larger laterally and especially so at the vertex. Colour blackish-brown, darker centrally, the tubercles pale. Width 1.8 mm. On the body are a series of round wart-like prominences covered with tubercles, the subdorsal ones on joint 3 produced into a pair of horns 1 mm. long, while those on joints 4, 11, 12 and 13 are larger than the others. Body densely tuberculate, black with a dorsal white patch as before. All the tubercles are pale brown. Some dorsal cream coloured shades on joints 3 and 4 and a black dorsal dot on joints 8 and 9 each. Indications of a white substigmal band, especially on joints 11-13.

Fifth stage.—Head bilobed, the apices produced, rough and tuberculated as if covered with warts, higher than wide and depressed along the median suture. Colour dull olive-brown, the excrescence paler; ocelli black; mouth dark. Width 2.8 mm. The body is enlarged dorsally at joints 3, 4 and 6; on joint 3 is a pair of subdorsal horns, roughly tuberculated, 2 mm. long. On joints 4, 6, 11, 12 and 13 are small subdorsal tubercles, the largest on joint 13, and close together. A number of small, round, smooth, elevated bluish dots, most conspicuous dorsally on joints 5-7 and 11-13. General colour olive-brown, shading into pale pinkish on joints 2-4, but still partly mottled with the ground colour. On the hump on joint 6 it is pale olive-yellow, except in a dorsal band where the ground colour prevails. A large patch, nearly white on joints 8-10 dorsally, but on joint 8 posteriorly and joint 9 laterally, it contains a few streaks of the ground colour. An irregular, broad, white, substigmal band on joints 5-13. Spiracles black, pale centrally and encircled by white. The processes on joint 3 and tubercles on joint 13 are blackish-brown; venter mottled with whitish with a medio-ventral nearly white line.

Anal feet elevated in repose and the body humped, the head turned to one side. The larva usually rests on the stems of its food-plant.