

SOME NEW SPECIES OF NORTH AMERICAN GEOMETRIDÆ.

BY JOHN A. GROSSBECK, NEW BRUNSWICK, N. J.

The constant receipt of apparently undescribed species of Geometridæ for determination, makes it desirable that a few be now and then given names. The following species from Southern California and Arizona represent well-marked forms not very easily confounded with anything hitherto described :

Hydriomena densata, new species.—Expanse, 25 mm. Head, thorax and abdomen clothed with mixed brown and grayish scales, the gray ones predominating except on the front and on the palpi, where they are largely brown. The abdomen has also two brown dorsal spots, separated by a whitish spot, on the posterior margin of each segment. Primaries grayish, heavily overlaid with dark brown, the cross-lines composed of the ground colour. Basal line geminate, irregular, the interspace filled in with brown. Intradiscal line geminate, begins on costa one-third out from base, and extends, inwardly scalloped, to inner margin; as a whole, the line curves outward, but the large scallop between the cubital and anal veins gives the appearance of an inward curve. Extradiscal line geminate and much waved; begins on costa one-third in from apex, extends outward to radial vein, then curves inward to cubital vein, and outward again before reaching the inner margin. The space between the intra- and extradiscal lines is dark brown, sometimes with darker wavy lines running through it. Subterminal line wavy, whitish in colour, and runs parallel with outer margin throughout its course. Terminal line broken up into black spots arranged one on each side of the veins. Fringe gray, blackish at the veins. Discal spot black, scarcely to be differentiated from the dark band in which it is situated. Two black dashes are between veins M_1 and M_2 , and M_2 and M_3 , external to the extradiscal line; sometimes these extend beyond the subterminal line, and sometimes the two are more or less fused together, forming a single large spot. Secondaries smoky, the terminal line and fringe as in primaries. Beneath whitish, washed with pale brownish, which, external to the extradiscal line, becomes distinctly brown on both wings, especially at the apex of the primaries. Extradiscal line on both wings present as whitish bands. Discal spots rather small. Spots composing terminal line almost connected. Fringe as on upper surface.

Types: Two males in the collection of Dr. Wm. Barnes and in that of the author.

May, 1909