

## TWO NEW SPECIES OF PAPIRIUS.

BY JUSTUS WATSON FOLSOM, CAMBRIDGE, MASS.

*Papirius vittatus*, n. sp.

Younger specimens dark purple above with pearly markings, lavender or lilac beneath; older ones maroon to almost black above, sides mottled with several shades of purple and brown. Head free, purple, with a broad, white transverse band across the front; oral region whitish; vertex with a distinct, white, sagittate mark from antennæ to prothorax; a black ocellus-like speck on the middle of the vertex; a few short bristles upon vertex and front; eyes dark, close behind antennæ upon a black patch narrowly surrounded by purple. Antennæ longer than the body, except in largest individuals, segments variable in relative length, but approximately in the ratio of 1:6:7:1.5 or 1:7:9:2; basal segments stout, as long as broad, brownish, with short, white bristles; second brownish at base, purple at middle, pearly apically, hairy distally; third purple, hairy, with obscure, whorled subsegments on apical half, broadening towards apex, penultimate subsegment swollen on one side; terminal segment purple, lanceolate in outline with five to seven distinct, whorled subsegments. Body ovate dorsally with a re-entering angle. Dorsum dark purple to blackish, with a pattern in pearly white, essentially as follows: On anterior half of dorsum a median longitudinal purple streak between two pearly streaks with dentate margins; behind these a squarish purple spot bounded by pearly and bisected by a short, median longitudinal, pearly streak; on either side, two short, irregular, pearly lobes extending obliquely forwards; next behind on the median line are one to three roundish purple spots broadly surrounded by pearly white; on posterior of abdomen a long, oblique pearly bar directed forwards from either side of the median line. Largest abdominal segment with a small, pale tubercle on either side of the middle. Dorsum naked anteriorly, with short white bristles posteriorly. Anal tubercle with bristles four times as long, and with a median longitudinal purple bar. Sides purple to blackish, with conspicuous hazel, chestnut and cinnamon mottlings. Thorax with a broad, lateral, longitudinal pearly band, sometimes replaced by one to four bright white spots. Sides of abdomen with two to five large, conspicuous, pure white spots, widely separated. Ventral surface lilac or lavender. Ventral filaments extensible to the length of the antennæ. Legs long, purple and yellow; tibia with broad alternate bands of dark violet and wax-yellow, white bristly. Claws