

previous stage, slightly more spiculate and very sharply pointed; spines i and iv longest, about .7 mm. long, iii short; on abdominal segments a minute black tubercle occupies the place of v (*i. e.*, well ventrad of iv), but is not present on thoracic segments; several other minute spines are situated in a row at base of prolegs; on the thoracic segments and those abdominal ones without prolegs, a large spine (vi?) occupies a similar position, being accompanied on 1st and 2nd abdominal segments by a smaller spine slightly anterior and ventrad to it. Spines of anal plate much reduced, only one pair, situated laterally, being black. Prolegs as before, and claspers entirely without black plate. Length, 38-50 mm., presumably according to the future sex.

Stage V.—Head reddish-brown, shiny, slightly furrowed and sparsely covered with very minute setæ; width, 4.5 mm. Body dark brick-red, very strongly granulate, with broken yellow subdorsal and spiracular stripes, the latter being chiefly confined to a yellow patch about spiracle. Tubercles of prothorax blunt, rounded; mesothoracic spine slightly recurved, blunt at apex, spiculation much reduced; length, 5.5 mm., all other spines sharply pointed and directed backwards, being shiny black and practically smooth, the spiculations of previous stages being obsolete. Length of spine i, 1.5 mm. Tubercle ii is again visible as small black spine; other tubercles as before. Numerous small black secondary spines are now present on anterior margin of each segment, forming a group anterior to iv, another below this tubercle and a band across base of prolegs, or in the case of the thoracic and first two abdominal segments, a group around the extra spine peculiar to these segments. Spiracle black; legs pale red, prolegs and anal clasper and plate as in previous stages. Length, 50-65 mm.

MELITÆA ALMA STRECKER, AND ITS SYNONYMY.

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Strecker, in his *Rhopalocera Heterocera*, etc., p. 135, 1878, described *Melitæa alma* from two specimens, one from Arizona and the other from Southern Utah. On Pl. XV a ♂ is figured above and below. There appears to be very little in our literature concerning *alma*. Holland, Butt. Bk., says: "The specimens I have came from Death Valley." He figures a male, fig. 1, on Pl. XVII, which is certainly a puny individual, if it is *alma* at all. Mr. W. G. Wright, Butt. West Coast, p. 162, 1905, says