

spotted with yellow-brown; under side wholly brown; the spines long, sharp; head as before. To next moult 2 days.

After 3rd Moult.—Length .7 inch; slender, whiter than before, the color not pure but with a green tint; dorsal spines .1 inch long, upper laterals .09 inch, lower laterals .07 inch; head greenish-yellow, the processes more like the body spines, .08 inch long, directed forward and a little recurved. To next moult 3 days.

After 4th Moult.—Length 1 inch, and in 3 days reached maturity.

MATURE LARVA.—Length 1.25 to 1.5 inch; cylindrical, slender, nearly of even size from 2 to 12, the segments a little rounded; color dead white, with no gloss, smooth, with no hairs; spotted with black or black-brown, the spots disposed in cross rows, two of which are back of the spines and one on the extreme anterior end of the segment; mostly rounded or oval, but those on medio-dorsal line are half-oval except the spots on the posterior edges of the segments, which are triangular; these spots form one dorsal row and two on either side; over the basal ridge, on 4 to 11, is a brown patch covering the adjacent edges of the segments; another patch covers each spiracle; under side reddish-brown with a green tint; segment 2 has a dorsal chitinous bar divided in middle, and on either part are two black tubercles with hairs; the body furnished with six rows of spines, two sub-dorsal, one on middle of each side, and one infra-stigmatal; the dorsals run from 3 to 13; the upper laterals from 5 to 13, the lower from 5 to 12; and between 2 and 3, 3 and 4, in line with upper laterals, is a spine; the spines of the four upper rows are straight and erect, but those of the lower row are turned down and a little recurved; all are alike, shining black, and about each are from 5 to 7 short black bristles irregularly placed; the dorsals measure .16 inch, the 1st laterals .14, the lower 1 inch, and there is little variation in the length of the spines of each row; legs brown, tipped black, pro-legs brown, with a black spot on the side of each; head obovoid, rounded in front, truncated, a little depressed at the suture, the vertices but little elevated, rounded; color greenish-white, vitreous; on either side the suture on mid-front a round black spot; the ocelli black on a small black patch; mandibles black; on each vertex a black spine nearly like those of the body, but less tapering and more blunt, .1 inch long, directed forward at about 45°, and a little recurved.

As the larvæ approach suspension the spots change to brown, and the