

has a dark patch on the posterior part of the dorsum. Head pale reddish, the same shade as the red ground color, marked with irregular longitudinal rows of white dots; feet pale red; ventre pale yellow with black centres to the joints, those at the anterior and posterior parts of the body small. At this time there is a distinct fringe of fleshy appendages on the sides.

Mature Larva.—Length 2.75 inches; cylindrical, tapering slightly to either extremity, with short lateral fringe. Marked as at the beginning of the period with seven longitudinal stripes from stigmata to stigmata, the lower dark one stigmatal, below this the space to the fringe the same color as the dorsal stripe, making the nine stripes mentioned before. The stripes are very nearly the same color, the only difference being that the dark ones have a little more of the black mottling than the pale ones; the stripes are divided by narrower stripes or broad lines of the ground color, which is dull, pale, smoky red. The thoracic joints are a little darker than the others. Piliferous spots pale nankeen, the dorsal tipped with orange; the space between the posterior dorsals on joint 9 black, only a little elevated; the posterior pair on joint 12 about three times as large as the others; each tipped with a very short black hair. Head, the ground color striped with reddish white that consists of transversely elongated dots; feet the ground color; fringe white; ventre pale yellow, a black patch on each joint. Duration of this period seven days.

Chrysalis.—Length 1.10 inches, depth .35 inch, width .40 inch; cylindrical, tapering from joint 5 back; tongue and wing cases extending back to the posterior part of joint 5, tongue case as far back as wing case; abdominal joints moderately punctured, anterior part of each a little corrugated; head moderately rounded. Color chestnut brown, covered with a white powder as is usual. Duration of this period from 30 to 32 days.

In pupating, the larva fastened leaves together with silk, slightly lining the interior, and into this thin lining the cremaster was fastened.

Food plant hickory.

The eggs from which the larvæ from which these notes were taken were found Oct. 5, 1886, in a crevice in a piece of hickory bark, there being fifty-eight of them in a mass, laid so that they overlapped each other, one edge of each being against the bark. I have since found the shells of other eggs in the crevices of hickory bark deposited in the