

middle of the body incline to yellow. The brown and pale brown mottlings of the head, though irregular, seem to follow in a measure the stripes of the body in arrangement. Pro-legs concolorous with the body, thoracic paler. Venter dull white, black in the middle of the joints. Hairs black. Duration of this period, 3 days.

After 4th Molt.—Length 1.05 inches. Marked and colored very much as during the preceding period. Piliferous spots less prominent, except the posterior pair of joint 4. Each one of these contains a white dot with a similar dot in its front. Joint 11 a little raised with the posterior pair of spots tubercular. Duration of this period 3 days.

After 5th Molt.—Length 1.35 inches. The plan of marking of the insect has not changed, but the colors are so modified that the caterpillar has a yellowish brown appearance with a decided chrome yellow tint at the intersection of joints 4 and 5. The piliferous spots are black, but from joint 4 back each is accompanied by a small white spot. In general the piliferous spots have grown less prominent, the posterior on joint 4 about the same, those on joint 11 a little more elevated. The dorsal stripe is a little irregular in outline at the intersection of the joints, consisting of one or more expansions and contractions. The difference in color of the stripes seems to be due to the difference in shade of the brown dots of which the stripes are composed, the yellowish green ground color being about the same. Venter about the shade of the pale stripes, the middle of each joint being brownish black tinged with wine color, these spots being connected.

Mature Larva.—Length 1.45 inches. Width of head .12 inch, of middle of body .18. Head flat, sloping; ocelli 6; in shape and number of ocelli resembling larvæ of *Catocalæ*. Marked very much as at the beginning of this period, three stripes on the dorsum and three on each side, alternating light and dark, but these are less distinct, approaching a uniform brownish drab; the white spots also less distinct. The first and second pro-legs are about half the length of the others. Venter a little paler than above, with an elliptical reddish brown spot in the centre of each joint. Legs and palpi concolorous with the body, jaws dark brown. Duration of this period 13 days.

Chrysalis.—Length .80 inch, depth of thorax .25 inch; basal abdominal depression very slight. Depth of 4th abdominal joint .27 inch, from this gradually tapering to the end; the wing cases covering five joints in front, the legs and antennæ cases extending the same distance as the