

black and creamy white ; under part grayish brown, with two pretty well defined streaks of this color on the white part of the sides. The colors above are as follows : Joints 2 to 5 black, 6 white, 7 to 10 black, 11 white, 12 black, and the terminus of 13 black ; a fine dorsal line, of clear white ; the tubercles the same as before, each bearing a cluster of hairs of various lengths, the longest nearly as long as the body ; the two dorsal tufts on joints 5, 7 and 12 with small pencils of short black hairs ; a few black hairs from the tubercles on the other black joints ; the hairs from the tubercles of the white joints clear white, with a few brown hairs intermingled in the dorsal pencils ; head and feet black. Duration of this period, 4 days.

After Third Moulting:—Length .60 inch. On the dorsum are three stripes, a broad gray one in the middle, in the centre of which is a fine white line, and each side of this stripe a whitish stripe ; below this most of the side is pale yellow ; the whole strongly tinged with green. The tubercles bear thick clusters of short spreading hairs ; the dorsals on joints 5, 7, 8 and 12 black, with a few black ones in some of the others, but most of the rest of dorsal hairs white ; those from the white stripe, white ; those from the yellow stripe, yellow and mostly longer than the others ; a long fringe each side of the body, extending round the posterior extremity. Head and thoracic feet black. Duration of this period, 6 days.

After Fourth Moulting:—Length 1 inch when at rest. Color of body yellowish green, with a gray dorsal stripe ; under parts grayish brown ; the whole body covered with fine yellow hairs that spring from the general surface as well as from the tubercles ; the tubercles or piliferous spots scarcely distinguishable from the general surface save that from these the hairs are more in clusters ; a few black hairs in place of the former black pencils. Head black, the front with the usual pale inverted Y ; the sides mottled with black and pale brown. Duration of this period from 4 to 5 days.

Mature Larva:—Length when crawling 1.60 inches ; when at rest 1.40 inches. Characters the same as at the beginning of the period.

Chrysalis:—Length .80 inch ; to end of wing cases .40, these extending almost to the posterior part of joint 5 ; depth from .21 to .22 inch ; cylindrical, tapering gradually from joint 5 back, the tongue case extending only to the anterior part of joint 5 ; the anterior part of abdominal