

gradually shading into the purple; yellow tinted between the joints; piliferous spots black; joints in the middle of the body with black patches on the venter. The posterior pair of piliferous spots on the dorsum of joint 9 are, like other species, more approximate than the others and the intervening space elevated, the elevation containing four spots in a transverse row with a patch of pale yellowish back of these. Duration of this period five days.

After 4th Moul.—Length, 1.20 inches. Color, pale green, almost white, with a slight yellow tinge, more distinct underneath the top of joint 2, the legs and a substigmatal stripe distinct yellow; the transverse folds between the joints with more of the yellow tinge. Head striped with dark reddish purple (this was black before) and white, the markings arranged as before but the stripes are almost obliterated on the body except on joints 2 to 4, and the transverse folds between the joints where they are distinct as to the rows of black dots that mark the boundary of the stripes, faint traces of these on the middle of the joints; the black on the venter small except on the middle joints. Piliferous spots black, not very large; a prominent black patch on each side of the posterior part of joint 9, composed of three spots, a short dorsal orange line between them; the posterior pair of spots on the back of joint 12 more prominent than the others; no lateral fringe, but a slight fold above the pro-legs; the anterior two pairs of pro-legs pretty well developed.

Mature Larva.—Length, 2.25 inches. Color, sordid white, a little green tinted, very obscurely striped as at the beginning of the stage, the bordering blackish dots marking the boundary of the stripes most distinctly on the intersegmental folds; the black on joint 9 the same as before with a very short orange stripe between; the substigmatal pale stripe orange on joints 5 and 6; joints 2 to 4 with the rows of spots distinct. Piliferous spots small, black; venter white, tinted a little with yellow, black only on the joints bearing feet; no fringe. Duration of this period nine days.

Chrysalis.—Length, 1.05 inches; diameter, .40 inch; of joint 5, .30 inch; tapering from joint 5 to the end; rather strongly indented on joint 1; tongue and wing cases equal, extending back to posterior part of joint 5; cremaster two long hooks at the tip, two shorter at the base, outside of these and a little removed from them several other short hooks; abdominal joints slightly punctured, the tongue and wing cases shallowly corru-