

transverse row, those on joint 8 tubercular, the rest small, color vandyke brown, each supporting a minute hair. Color brown, pale on the dorsum of all the joints but 5 and 6, but dark back of the elevations; the sides of the joints from 8 back with more or less vandyke brown patches situated on each side of a dorsal line of dark brown; traces of a stigmatal and subdorsal whitish line; general color of sides and venter yellowish brown, the latter with two broken vandyke brown lines; head brownish, of a honey cast. There is not so much difference in shade as during the former period, traces of subdorsal white lines. Seventeen days after this moult the larvæ began to spin leaves together for their cocoons, without my noting whether they moulted once or twice more.

Mature Larva.—Length 1.50 inches; width of head .06 inch, of middle of joint 7, .10 inch, of posterior part of joint 7 over row of tubercles .16 inch, the width of enlarged portion of succeeding joints .14 inch. Slender, tapering slightly from the head back; head rather flat, the posterior part not higher than the anterior part of joint 2; joint 7 enlarged near its posterior part, where it bears four tubercles; joint 8 enlarged posteriorly, but the tubercles are very small; on joint 9 the two dorsal tubercles a little larger; tubercles on joints 10 and 11 scarcely perceptible, but the two dorsal tubercles on joint 12 prominent. Color yellowish brown, in some places amounting to brownish yellow, marked with umber and blackish or vandyke brown. Head and joint 2 slightly reddish brown; joint 3 yellowish brown with a dorsal brown V on its posterior part; joints 4, 5 and 6 of a little darker shade, the V not so distinct and followed by a brown patch that coalesces with it, more or less of a distinct subdorsal whitish streak; joint 7 with an oblong brown patch back of each dorsal tubercle, a vandyke brown patch on each side mottled with yellowish; within this patch is situated the lateral tubercle; joints 9 and 10 the same as 7, the vandyke brown extending down on the legs; some vandyke brown on joint 11; there is a sub-obsolete dorsal dark line, and all the joints are more or less mottled with brown. Venter with rather distinct stripes, the central one pale, all formed by a mottling of yellowish white and dark, the dark part lighter on the pale stripe than on the others, the white forming an irregular line on each side of this.

Chrysalis.—Length .65 inch, wing and antennæ cases .40 inch, reaching to posterior part of joint 5, cylindrical; depth through joint 1, .15 inch, through joint 4, .18 inch, through joint 5, .17 inch, from this tapering to crenaster; not depressed on joint 1, but gradually tapering from