

11 this ridge is distinct, cleft to the body ; color variable, some examples being white, some decidedly greenish ; many have the posterior slope of the 2nd segment black or dark brown ; some also have most of the dorsum dark brown, irregularly mottling the light ground ; some have only small brown patches disposed without rule on the dorsum, and mostly on the anterior segments ; the whole surface velvety ; this appearance is caused by minute stellate glossy processes, scarcely raised above the surface, only visible under a magnifier, mostly six-rayed, and sending from the centre a concolored filamentous spine a little longer than the rays ; these stars are arranged in pretty regular rows, and are light except on the brown patches—there both star and spine is brown ; on the 11th segment, near posterior edge of dorsum, is a transverse slit, in a sub-ovoid spot, from which proceeds an ovoid membranous process ; and on 12, back of and between the stigmata, on either side is a mark like a stigma, but a little larger, from which proceeds a membranous tube, in form of a truncated cone, ending in a crown of feathery tentacles ; these three special organs are exposed or concealed at the will of the larva ; (similar openings are found in the two preceding stages of the larva, but less easily seen) ; head small, obovoid, dark brown, placed at the end of a long, pale-green, conical neck, which is retractile, both neck and head being covered by 2nd segment.

The foregoing descriptions are taken from the summer larvæ, feeding on flowers of *Cimicifuga racemosa*. The larvæ in the fall, feeding on flowers of *Actinomeris squarrosa*, differ much in color from the description after second moult, being generally in last two stages yellow-green and olive-green, the sides darkened, the dorsum lighter, and there is an absence of the brown patches seen in the summer larvæ ; the back of 2nd segment sometimes green, sometimes brown. On the dark shades of the sides the stellate processes are often pink.

Before changing to chrysalis the summer larvæ sometimes turn pink and from pink to brown, or become brown without the pink stage ; but others remain white, changing to sordid ; the body contracts to about .3 inch, and becomes rounded. Duration of larval stages 19 days.

CHRYSALIS—Length, .28 inch ; greatest breadth, .12 inch ; the ventral side straight, the dorsal rounded and evenly except for a very slight depression below the mesonotum ; both ends rounded ; the abdomen broadest ; color dark brown or yellow-brown, varying ; on dorsal part of abdomen on either side is a row of blackish dots, continued to