

pressed in the middle, broad at the top, crowned by five equal, blunt-tipped spines around a sixth in the middle; each with hair; these processes are black in the black larvæ, and in the light ones either red or red with black tops; face and whole head thickly covered with simple white spines of variable length, all white, except that sometimes there are one or two of the longer ones on side face below the vertex which are black, or black and white; along back of head and down the sides is a row of these spines close set. From 4th moult to pupation 5 days.

CHRYSLIS.—Length .8 to .9 inch; greatest breadth .24 to .26 inch; cylindrical; head case high, compressed transversely; at each vertex a long, conical process; the mesonotum elevated, the carina very prominent, thin, nose-like, followed by a deep excavation; wing cases raised, flaring at base, compressed in middle, with a point on the margin; on the abdomen three rows of tubercles, those corresponding to the dorsal row of the larva small, to the first laterals large and conical, the pair in middle of the series particularly prominent, and those in the excavation silvered, gilded or bronzed, varying; color variable, many examples being dark brown, with lighter or with yellow-brown, and much reticulated with dark lines; others are dead-leaf brown; others are light, up to dead-white shaded slightly with yellow-brown, with a bronze lustre over the wing cases and anterior dorsal parts. Duration of this stage about 7 days.

*Grapta Comma* is found abundantly in New England and thence through the Northern States to Nebraska; also through Canada and in Nova Scotia; and to the South, at least as far as the Kanawha district of West Virginia. In the Northern States the species is two-brooded, in Kanawha three-brooded. It is seasonally dimorphic, the winter form being *Harrisii* (i. e., the form described by Dr. Harris), the summer form *Dryas*, Edw. Both these are figured in Butterflies of N. A., Vol. I. Where there are three broods, the middle one is made up of the two forms. Eggs laid by the hibernating females (form *Harrisii*) in April or May, give *Dryas* in May or June, and this is the first brood of the year. Eggs laid in July by *Dryas* give both forms in August—the second brood; and eggs laid in September by either form give *Harrisii* in October. The first eggs are laid in April or May, according to the forwardness of the season. In 1882, I obtained eggs from *Harrisii*, tied in bag over a hop spray, 14th April, and from 22nd to 25th May, had therefrom 35 *Dryas*, 17 ♂, 18 ♀. In 1874, the first eggs were obtained 10th May, and the result up to 27th