

all ; entire upper surface studded with low rounded tubercles varying in size, but always small, placed on the cross-ridges ; these are whiter than the ground color and from each proceeds a very short, straight white hair ; under side, feet and legs a shade lighter than the upper, 5, 6, 11, 12 crossed by tubercles ; head sub-ovate, depressed at top, the height to the breadth as 8 to 7 ; color gray-green, thickly covered with tubercles like those on body, small and large ; among these are larger ones, three on either lobe in triangle, so disposed as to make a row of four across forehead ; these are white, with a brown rim about base, or the inner pair are white, the others black ; on each vertex a triplex process as described at fourth stage, black ; along the back and sides white processes, of which a duplex or bifid one, taller than elsewhere, stands on either side suture ; ocelli black. From fourth moult to pupation ten days. Mr. French, But. East. U. S., p. 228, gives the length of mature larva as 1.55 inch, and probably wild examples are larger than my bred ones.

CHRYSA LIS.—Length .65 inch ; breadth across mesonotum .38 inch, across abdomen .4 inch ; shape much as in *Danais Archippus*, the last segments retracted in same way, so that the abdomen is greatly shortened, and the shape that of a dome ; the head case short, narrow at top and bevelled to a sharp, slightly incurved ridge ; the sides sloping ; mesonotum prominent, carinated, rising posteriorly to a rounded point, the slope to top of head regular, and at about 45° ; the depression behind shallow and broad ; the dorsal edges of wing cases prominent, the sides excavated ; color light green granulated with whitish ; the edges of wing cases and top of head case whitish. Duration of this stage nine to twelve days.

Some stages of the larva of this species were figured in *Butterflies of N. A.*, vol. 1, 1871, under the name of *Glycerium*. The drawings were made expressly for me by the late Dr. H. K. Hayhurst, then at Sedalia, Mo. They are before me as I write. The same drawings were used by Prof. Riley, before my Plate appeared, in his paper on *P. Glycerium*, Second Ent. Report, Mo., 1870, and his wood cuts were reproduced in Prof. French's *Butterflies of the Eastern U. S.*, p. 228, 1886. These are the only published illustrations of the life history of any species of *Paphia* so far as I know, and whatever defects there may be in the figures of the larvæ are common to all three of the works mentioned. The principal figure is that of the mature larva, and in But. N. A. a fair general view of the stage is given. But the peculiar armature of the body and head is not represented, and therefore this figure has very little value. Another