

around each spiracle, probably the vestige of a stigmatal stripe, as a similar spot, in line with the others, is to be found on the thoracic segments without spiracles. Spiracles yellowish-brown or buff; dorsal shield (thoracic) white or yellowish anteriorly, near the incisure livid or with a rosy tinge (possibly by contrast with the green), and studded with dark brown, slight elevations. Head above gray-green or brownish-yellow, labrum and mandibles rich brown, ocellar fields black. Pile red (?) brown—possibly also by contrast.

The body markings are evanescent, and are conspicuous for a day or two only, when the larva has attained its full growth, or a little before; they fade rapidly as the time for pupation approaches. The mediodorsal line grows fainter, and as it does so the indications of the stigmatal line appear. Then all the markings gradually fade, the line on the substigmatal fold being the last to disappear. While this is taking place the caterpillar eats little or nothing at all, the body grows shorter, the segments fill out, obliterating the laterodorsal ridges and reducing the folds and foveæ considerably. In one case the posterior half of the abdominal dorsum became tinged with dull russet-yellow, but as the chrysalis which was formed never disclosed an imago, this coloration was probably due to pathological conditions.

*The Change to Chrysalis.*—Having found the emergence of the pupa instructive in tracing the life-history of other species, I took precautions to witness it in the case of *augustus*. Slight peristaltic movement was noticed shortly after midnight (June 10th, 1906) in one of the larvae fastened to its final mat. This was repeated at intervals for more than three hours, the peristalsis becoming more violent and the periods of rest less frequent, until at 3.23 a.m. the old skin split along the dorsimeson of the thorax. Three minutes later the exuviae had been pushed beyond the body, the cremastral hooklets were fastened, and the insect was quiet.

*The Chrysalis.*—The newly-formed chrysalis was bright green on the head, thorax and wing-covers, gray-green on the abdomen ventrally, yellowish-white dorsally; the pulsating dorsal blood vessel (plainly visible on mesothorax, and second to seventh abdominal segments) dark green; incisures brownish-yellow; spiracles nearly white. Six series of shallow pits on the abdomen represent the principal foveæ of the larval skin; the lateral series largest, rounded; the infralateral smaller, elongate; the others minute. (See Plate 3.) The position of each pit is usually marked by a spot of black pigment beneath.