

At the time when the above deposits were made, the weather was more or less cloudy, and both light and heavy rains were of frequent occurrence. Such was its unfavorableness, that fears were entertained of the complete failure of my experiments. On many occasions, eggs were broken, and their contents examined with very strong magnifying glasses, to ascertain whether putridity had taken place. Within a week of the time of hatching, numerous eggs were examined, and the only evidence of change apparent, was a slight turbidity of their contents. The weather for a day or two previous had been exceedingly fine, and the heat rather powerful. This happy state of things continued with slight, unimportant changes, until the hatching process was over. Eggs, as well as chrysalids, can endure a strong degree of cold without injurious effects, provided transformation has not already commenced, when vitality receives a check from which it never recovers. An alternation of wet and dry, or of extremely cold and very warm weather, is exceedingly detrimental. May it not be that the extreme paucity of certain kinds of insects during some years is due to the causes which have just been noticed?

The caterpillar of this species (when hatched) is nearly three-sixteenths of an inch in length, and scarcely thicker than an ordinary darning-needle. Its general color is a jet black. It is armed with two dorsal rows of glossy black spiniferous tubercles, those on the second and third somites being the largest; and also two lateral rows on each side, making six in all. The antennæ are short, black, triple-jointed, and moderately tapering. The true legs are black, three-jointed, and armed with short, in-curved claws; the pro-legs occupy the 6th, 7th, 8th, 9th, 10th and anal segments, and are furnished with a double row of black ciliæ.

June 10th—First moulting takes place. The caterpillar now measures nearly one-half of an inch. At first, it is greenish-yellow, but gradually changes to a yellowish-brown, with a slight tinge of green when perfectly dry. The caput and star-crowned protuberances still remain a beautiful glossy black. Each somite, between the different rows of tubercles, is diversified with a pair of black spots which ultimately become conjoined, forming longitudinal lines throughout their entire length. Between the segments, they are continued as obscure bands.

With age, the color becomes a dark yellowish-brown. At this stage, the caterpillar ceases to feed, and becomes considerably shortened. It is