

bluish above. Sub-lateral, jet black, with pale blue apices. The dots between the dorsal and lateral rows of tubercles are much smaller than formerly, and have actually disappeared in several instances. Between the lateral and sub-lateral rows they are nearly gone in front, and entirely so behind. Upon the abdominal pro-legs they are broader below, and rapidly diminishing above. On the anal pro-legs, the two confluent spots have separated and grown elliptical in shape. That upon the head is somewhat longer and broader.

The jaws, lips and palpi have become more conspicuously colored, approaching the color of these parts in the mature caterpillar.

The spiracles, which all along occupied a middle lateral position on the 1st, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th and 11th somites, but, without being easily recognized from resemblance in color to surrounding parts, are now quite conspicuous. They are narrowly elliptical in contour, with the longest diameter arranged transversely, and have cream-colored centres with black borders.

The general color of the caterpillar upon the inferior surface, is a bluish green, with obscure patches of black between the segments. Along the middle of the dorsum, extends an obscure bluish band from the head almost to the last segment.

The caterpillars, at this stage, vary considerably in the time of moulting. Some reach this period much sooner than others, at least two days earlier, even in the same brood. It is the thrifty-looking caterpillars that are thus favored. The ill-favored ones contrast quite remarkably with the latter, in size, color and markings. A number of caterpillars was purposely confined to a bush of the red currant, whose leaves were small and sickly-looking. They thrived poorly, increasing but slowly in size, while their more fortunate companions of the same brood fairly outstripped them in size and vigor, and actually passed through an entire transformation in advance of them. At the start, they had no advantage over their brethren; all were favored alike. What could have wrought the difference? From the foregoing facts, the conclusion is irresistible that nutrition had been the force at work; the vigorous larvæ, being amply supplied with food of the very best quality, had rapidly added to their size; while their stunted companions, being supplied with plenty of innutritious diet, had remained almost stationary.

June 26th—The caterpillar has moulted for the third time. Its length