

raised a little above the other ; on 13 but one ; on 2 are three lateral tubercles, each of which gives two hairs, and placed, one above, one in front of, and one below, the spiracle : on 3 and 4, in line with the lower tubercle of 2 and the lower of the pair on the segments after 4, is a single tubercle and hair ; over the prolegs are two short hairs each, and in same line, on 5, 6, 11, 12, is one hair ; head rounded, a little depressed at suture, color black, shining ; surface much covered with fine tubercles and bent black hairs. (The tubercles and hairs of this species are similar, and similarly placed, to those of *V. Antiopa*). Duration of this stage about two days.

After First Moulting.—Length at 12 hours, $\frac{1}{16}$ inch ; the middle of dorsum green cut by a brown line ; the junctions of segments also green ; the rest of upper half black-brown, below this and the under side yellow-green (some examples are darker than others, more brown, less green) ; above the spiracles is a yellowish wavy line from 5 to 10 inclusive, and with the spiracles a brown line ; there are several rows of spines, one dorsal and three on either side ; these are disposed as described in last stage, are low, rounded, with a small cone on summit ; from the apex a single long black hair, and five or six short hairs around the basal part ; on the cross-ridges of each segment after 2 are many fine points, each with a short hair ; 2 has a blackish dorsal patch, with many hairs, bent forward ; feet brown ; pro-legs green ; head cordate, shining, black, thickly covered with fine low conical tubercles, varying in size, each with its hair. Duration of this stage about two days.

After Second Moulting.—Length at 6 hours, $\frac{1}{16}$ inch ; color black over dorsum to middle of side ; a mid-dorsal black line, with a pale gray-green line or stripe on either side of it ; on the cross-ridges many white points, each with long whitish hair ; in some examples the lower part of the black area is mottled with green-yellow ; in one was a greenish patch on mid-dorsum on front of each segment after 2 ; the lower half of side green-yellow ; on this area, with the spiracles runs a blackish line overlaid by a yellow line ; under side yellow-green ; the spines now long, slender, tapering to a point, with a bristle at top and eight or ten about the sides ; color of the five upper rows black, of the lower laterals yellow ; head as at second stage, the tubercles more numerous, and more prominent, the one on each vertex a little largest, some white, some black, the hairs all black. Duration of this stage less than two days.