

resemblance with the next family" (*Nepticulidæ*), "but the larvæ have six well-developed true legs."—Ins. Brit., v. 3, p. 290. The six legs seem to have been Mr. Stainton's chief, if not only reason, for excluding *Bucculatrix* from *Nepticulidæ*, in which the six true legs "are wanting, and they are replaced by membranous processes or prolegs, yet neither on these segments nor on the remaining segments, each of which is furnished with a pair of prolegs (making eighteen in all), have the prolegs the usual coronet of little hooks" (Ibid, p. 296). Dr. Clemens says of *B. pomifoliella* that the legs are "very small," and though this can not be said of *B. ambrosiaefoliella*, yet its anal prolegs are destitute of the coronet of little hooks, having only a single little spine; while the abdominal prolegs have each only these little claws, rather than the usual tubercles; so that I do not hesitate to place *Bucculatrix* in the same larval group with *Nepticula*. The thoracic feet have each a single claw which is set around with numerous, rather stiff, bristles, and, as hereafter shown, are used to guide the thread in spinning the cocoon. Each segment of the body is clothed with numerous hairs, especially the pro-thoracic segment, where the hairs are stiff and project forward over the head; this segment in the adult larva has twelve microscopic red-brown spots, ten of which are on the back—four of them in the angles of a square, three others obliquely on each side of the square, and one other, larger but more indistinct, on each side; these spots I think are hypodermal.

The egg, a minute colorless globule, is deposited on the upper surface of the leaf, and the larva, leaving it, makes at first a short, tortuous, linear mine, which ends in a small blotch with the frass in compact lines. The first stage lasts probably between three and four days (the youngest larva I have seen was a little more than one-fortieth of an inch long). The larva at this stage is sordid white. Having ceased to feed, it doubles itself in what Mr. Stainton calls horse-shoe shape, the ventral surface of the anterior half being applied to that of the posterior half of the body, and thus it undergoes its first moult in the mine. The larva, when it has cast its old skin, is no longer sordid white, but is striped longitudinally; there is a dorsal green stripe, margined on each side by a white line, beneath which is another green stripe on each side, containing on each segment two white spots placed obliquely, the lower spot being the largest, and the under surface is pale greenish; the larva frequently has a faint pink tinge, and the longitudinal stripes, which are very faint at first, become darker with age. It remains in the mine and feeds for about one day