

known by the humming caused by the rapid vibration of wings. Stir not, or this aerial body will float away. Now you see it deigns not to alight or touch the margin of the chalice, but, poising itself in air, stretches out its long tubular tongue, and quaffs the nectar at the bottom." The potato sphinx may be found in almost all parts of Ontario. The larva has a preference for tomato plants, if they are convenient, but in their absence will content itself with the leaves of the potato, which as we have already seen is a member of the same botanical family as the tomato. It never appears in such numbers as to cause any very material damage, although the larva will often strip nearly all the leaves off a single vine in one night; yet, from its great size and conspicuous form, we deem this insect worthy of notice, the more especially as we feel in duty bound to raise our protest against the absurd and malicious slanders that each recurring year sees brought against this much maligned and harmless caterpillar by ignorant persons and editorial wiseacres.

At Fig. 83 we give a representation of the larva or caterpillar, the pupa or chrysalis, and the perfect moth. The latter is a large insect measuring from five to five and a half inches across the wings. Its general colour is grayish, variegated with blackish streaks and bands, and on each side of the body are five round orange coloured spots surrounded with black, it is from these spots that the insect derives its English name of the "five spotted Sphinx." The whole moth is densely covered with hairs and scales which totally conceal the surface of the body from view. The head and thorax are very large, the eyes are especially remarkable for their size and prominence. The antennæ are long and thick, the extreme ends tapering into a sharp point which curves backwards. The tongue is some five or six inches long, and when the insect is at rest is kept coiled up between the two thick feelers or palpi.

The thorax has some peculiar black markings on it which remind one very much of the English Death's Head Moth, indeed in some specimens we have seen, the markings bear a most striking similarity to the fancied death's head and cross bones.

The wings are long and narrow, the hind ones, according to Professor Fitch, being twice, and the forward ones thrice as long as broad. When in repose, the wings remain close to the body, but slanting at somewhat sharp angles, like a house-roof.

The larva (see fig. 83) is a well known object; not a summer passes but the papers abound in most exaggerated stories, about "DEATH in the Tomato patch," "another victim POISONED by the Tomato worm," etc., and accusing this harmless caterpillar of all sorts of imaginary misdemeanors. It is almost needless for us to inform our readers that the larva is utterly incapable of voluntarily causing any harm; feeding as it does exclusively on soft leaves of the potato or tomato, its jaws, large as they appear, are fitted only for masticating its food, and are not at all adapted for use on a hard material, we repeat again that it would be impossible for the larva to inflict a wound with its jaws; if the hand was pricked by the spike on the anal segment of the body, it might pierce the flesh, but so might a pin or any sharp point, and we are satisfied no real wound could be caused by the horn. We have bred many specimens of this caterpillar, and have captured and handled them in all stages of their growth and are therefore perfectly satisfied that the insect is harmless, apart from the fact that our knowledge of their history and the formation and component parts of their body plainly corroborate our belief.

Professor Asa Fitch has well described this larva. It grows, he says, to the thickness of one's little finger, and is somewhat over three inches in length, or three and a half inches when crawling, it being then more elongated than when at rest. Its surface is destitute of hairs or bristles. It is divided into thirteen segments, those at each end being shorter and less distinct, the surface of each segment of the body is crossed transversely by impressed lines and elevated spaces giving them a ribbed appearance. In viewing this larva the eye first of all notices a formidable looking stout thorn-like horn placed at the hind end of the back, and projecting obliquely upward and backward, slightly curved and its surface rough from little projecting points. Low down on each side is a row of large oval dots which are the spiracles or breathing pores. The head is green, small, horny and shining with a black stripe on each side. The larva has three pair of small tapering feet placed anteriorly upon the breast, each having a sharp hook at its end, and four pairs of short, thick, fleshy pro-legs along the underside of the body with two similar ones at the tip. The colour of this worm is commonly bright green marked with white, along each side are seven straight oblique greenish yellow stripes, the last one of which is prolonged more or less distinctly to the base

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