

ral Society that

275 000
 11 000
 20 000
 8 000
 4 800
 65 750
 3 150
 12 000
 \$399 700

20 449
 18 500
 4 800
 1 600
 45 349
 5 000
 50 349 bbls.

the county the
 sting \$3.50 per

total of \$3,600.
 total sum of \$135,-

equal to 500,-
 1,000,000

165,000
 1,165,000

price of \$2.50

ae County had

oing great dam-
 that they are as

d severely from
 d in November,
 ms hatch out in
 nto the ground,
 e autumn. He
 am,

The following description of these insects is taken from the Entomological Report of 1875, page 25, it having been ascertained that there are two species of this insect. The one is called *Anisopteryx Vernata*. The egg of this species is not unlike in form a miniature hen's egg, but is of a very delicate texture and pearly lustre, with irregular impressions on its surface. The eggs are laid in masses without any regularity or order in their arrangement, often as many as a hundred together, and secreted in the crevices of the bark of the trees. The eggs are usually hatched between the first and middle of May, about the time when the young leaves of the apple tree begin to push from the bud. The little canker-worms, on making their escape from the egg, cluster upon and consume the tender leaves, and on the approach of cold or wet weather creep for shelter into the bosom of the expanding bud, or into the opening flowers. The newly hatched caterpillar is of a dark olive green or brown colour, with a black, shining head, and a horny plate of the same colour, on the second segment. When full grown they measure about an inch in length. The colour of the body varies from greenish yellow to dusky or even dark brown. The head is mottled and spotted, and has two pale transverse lines in front; the body is longitudinally striped with many narrow pale lines; along the sides the body becomes deeper in colour, and down the middle of the back are some blackish spots. When not eating they remain stretched out at full length, and resting on their fore and hind legs under the leaves. When full grown they leave the trees, either by creeping down the trunk or by letting themselves down by silken threads from the branches. When thus suspended in great numbers, as is frequently the case, under the limbs of trees overhanging roads and sidewalks, they become a great annoyance. Having reached the ground, they soon begin to burrow into it, and having penetrated from two to six inches, a simple earthen cell is formed by compressing the earth, and lining it with a few silken threads; this makes but a fragile home for the chrysalis, and is easily broken to pieces. The chrysalis, which is about five lines long, and one and a half in diameter, is of a pale grayish brown colour, with a greenish tint on the wing-sheaths in the male; that of the female is more robust than the male, and both are sparingly fitted with shallow dots over their surface. Sometimes the chrysalis produces the perfect insect late in the autumn, in other cases it remains quiescent during the fall and winter months, emerging during the first warm days of early spring. The female moths of both species of canker-worm are wingless, and present a very odd, spider-like appearance. With a body distended with eggs, she drags her weary way along in a most ungainly manner, until she reaches the base of a suitable tree, up which she climbs, and there awaits the arrival of the male. The male is active, although a delicate and slender looking creature. Its fore wings are ash-coloured, or brownish-grey, of a silky, semi-transparent appearance, with a broken whitish band crossing the wings near the outer margin, and three interrupted brownish lines between that and the base. There is an oblique black dash near the tip of the fore wings, and a nearly continuous black line before the fringe. The hind wings are plain pale ash-coloured, or very light gray with a dusky dot about the middle of each.

The other is called *Anisopteryx pometaria*. This species, although closely resembling the preceding, has many points of difference. The eggs are flattened above, have a central puncture and a brown circle near the border, and are laid side by side in regular and compact masses, and are usually deposited in exposed situations. The newly hatched caterpillar is pale olive green, with the head and horny covering of the upper part of the second segment of a very pale hue. The full-grown caterpillar is also differently marked, the longitudinal lines being fewer in number, but broader and more distinct. The chrysalis is much tougher than that of the former species, being formed of densely spun silk of a buff colour, interwoven on the outside with particles of earth. In the male moth the antennæ have a greater number of joints, there being fifty or more in this species, whereas in *Vernata* there are not quite forty. The wings are less transparent but more glossy, the fore wings brownish gray, but of a darker hue than on the other species, and are crossed by two more regular whitish bands, the outer one enlarging near the apex, where it forms a large pale spot. The hind wings are greyish-brown, with a faint central blackish dot, and usually a more or less distinct white band crossing them. Both of these species are very destructive, when numerous, to apple and other trees.

Linus Woolverton, Grimsby, had considerable experience with these canker-worms, and tried three ways of combatting them. Had found the use of bandages, smeared with tar, pitch tar, not coal tar, the easiest and very successful. After a few days the tar hardens and