

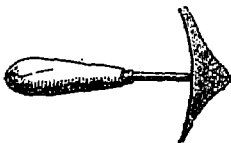
any rubbish or dead leaves. Sometimes it ascends another tree and conceals itself in a nest, which it constructs of little bits of bark, knit together with silk, and covered over with a gummy fluid. Should the apple be upon the tree when the insect comes out, it spins a silken thread by which it lets itself down to the ground, and then secretes itself, or else climbs another tree.

In order to prevent the caterpillars from ascending trees, bands made of old bagging or hay ropes should be tied tightly round the stems close to the ground early in the summer. Before placing these bandages, the bark should be scraped off. These traps must be occasionally examined and any caterpillars found in them destroyed; two bands, one about a foot above the other, will be more effective. It is now compulsory by law in Tasmania and California that all apple trees must be thus banded. Permanent traps made of wood or tin are also used.

Windfalls should be all cleared away as they drop. Sheep, pigs, and horses are useful in orchards to eat up the "drops" as they fall.

Apple-trees must be sprayed *after* blossoming with Paris green, 1 lb. to 200 gallons of water, which must be kept agitated while it is being applied. Or coal oil emulsion may be used, 1 part of oil to 14 parts of water with enough soft soap to make it mix. The latter recipe is the safer. Spraying must be repeated several times while the fruit is growing, because the moths do not all come at once. No rubbish or dead branches should be allowed to accumulate in, or near, an orchard.

The walls of the apple room should be kept well lime-washed and the floors well scrubbed with soft soap.



A useful bark-scraper.

Scraping the bark of apple trees, after which hot lime-wash, with a little sulphur mixed with it, will have a good effect, if well brushed in.



MINUTE INSECTS.

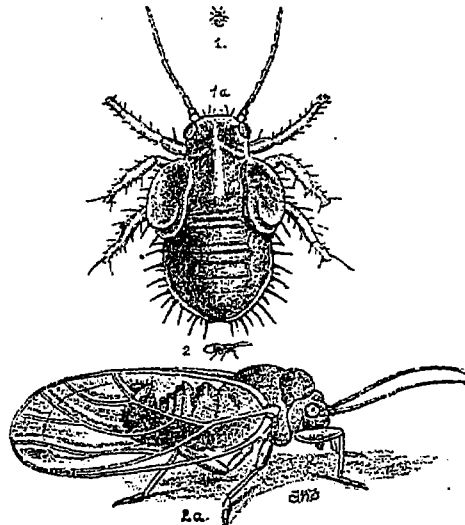
(Continued).

This insect is frequently the unsuspected cause of much injury to the apple crop. Its larvæ, which cause the mischief are so small and so closely concealed in the buds, that they are easily passed over by the casual observer. Their action is often confounded with that of caterpillars, weevils, or aphides which appear about the same season.

THE APPLE SUCKER. (1)

(*Psylla mali*, Forster).

(1) *Psylla* is Greek for a flea. Ed.



1, larva, nat. size. 1a, larva after third moult, much magnified. 2, perfect insect, nat. size. 2a, much magnified.

The larvæ can be seen only by careful inspection within the folds of the buds, actively engaged in sucking up the juices and thus preventing the development of the leaves and blossoms. The exhaustion of the sap, and the irritation set up by the larvæ, soon cause decay and prevent the blossom buds from becoming fruitful.

It is only recently that the Apple-sucker has been recognized as a serious enemy to the apple-crop, although an allied species, *Psylla pyricola*, has long been known to be very destructive in pear orchards.

If you notice quantities of little greenish yellow fly-like insects upon the leaves of apple-trees in September and October, which upon being approached leap on to another leaf, you may make sure of the presence of the apple sucker.