

GARDEN AND ORCHARD.

INSECTS INJURIOUS TO SMALL FRUITS
(Continued).

Another insect attacking more particularly the black and the red currant is the Currant Geometer or measuring-worm (*Ellopiæ ribearia*)—see Fig. 61. As to its characteristics and resistance to mild methods of treatment, Mr. Saunders says:—

"It is a spotted larva about an inch and a quarter or an inch and a half long when it is matured, a great feeder, and a much more difficult insect to destroy than the saw-fly. Hellebore, which will promptly destroy the saw-fly, will have very little effect on the geometer. There is something very robust in its constitution, which enables it to resist the action of this poison, and it requires to be used much more strongly, and even then it will not always prove effectual. I have found that Paris green is much more effectual, but it is undesirable to use this poison after the fruit is formed. The insect appears very early, and if the bushes are sprinkled with a solution of Paris green in the early spring, before the fruit is formed, I think there is no danger attending its use. Still, if hellebore and water, used of additional strength, will answer all the purposes, I should prefer it to Paris green. This insect has a habit of dropping from the bushes when they are struck, and suspending itself by a silken thread, and then, with a stick, you can gather a number of these threads and draw the insects together and trample them under foot."

The Spinous Currant Caterpillar (*Grapta prognæ*), a pretty but not often very hurtful butterfly, and the four-striped plant bug (*Capsus linearis*), which punctures the leaves and so stunts the growth of the bush, are noticed. The only known remedy for the latter is the old-fashioned one to "catch him and kill him."

The Gooseberry Fruit Worm (*Pempelia grossularia*)—See Fig. 62—which attacks the interior of the gooseberry, is thus described:—

"The parent is a small narrow-winged gray moth, which when its wings are expanded measures nearly an inch. It spends the winter in the chrysalis state, in the ground, and early in the spring the moth appears on the wing; having escaped from the chrysalis about the time the gooseberries are formed, and growing rapidly, this moth deposits an egg here and there on the fruit. The egg hatches, and the young larva eats its way into the fruit, and lives in the interior portion of the gooseberry, and in a very short time the berry it feeds upon becomes discoloured, and having partially consumed it, the insect takes to another, and finally it draws together, with silken webs, a cluster of three or four berries, living in one as a sort of home, from which it issues to feed on the berries about it. When it attains a growth of about three-quarters of an inch, it descends to the ground, enters into the chrysalis state, and remains there until the following spring, when the moth issues to enter upon its destructive mission. There is only one brood of this insect during the year, but it is getting very destructive, sometimes destroying as much as twenty-five or thirty per cent. of the gooseberry crop in some sections."

Of artificial remedies for the fruit worm, Mr. Saunders says:—

"By jarring the bushes you can collect this larva in the same way as you can the gooseberry geometer. It drops to the ground, retaining its hold on the bush by means of a silken thread, by which it climbs up again when the danger is past. By drawing the threads together with a stick, you can sometimes readily collect a number of specimens of the larva. I have found that by sprinkling the bushes with air-slacked lime, about the time that the moths appear, they can be kept almost entirely free from the attacks of this insect. Where the lime is used the eggs do not seem to be deposited on the berries, as insects have a great aversion to this substance. But such a

remedy does not destroy the insect; it only drives it somewhere else."

Two species of currant borer, the Imported and American, are next in the list, and described as follows:—

"The imported currant borer (*Egeria tipuliformis*) is a small wasp-like moth with transparent wings and a body banded with gold. It flies about very actively in the middle of the day, when the sun is shining brightly. After pairing, the female deposits her eggs upon the twigs, generally one at the base of the bud; when this is hatched, the young grub bores into the bark of the stem to the centre, and works up and down, devouring the substance of the stem, and finally when it attains its full growth, eating a hole

CURRENT GEOMETER, OR MEASURING WORM.—*Ellopiæ ribearia*.



Fig. 61.

GOOSEBERRY FRUIT WORM.—*Pempelia grossularia*.



Fig. 62.—Moth and Cocoon.

THE IMPORTED CURRANT BORER.—*Egeria tipuliformis*.



Fig. 63.

THE AMERICAN CURRANT BORER.—*Psenoscerus super-notatus*.



Fig. 64.

almost entirely through the current stem, leaving only about the thickness of tissue paper of the bark unbroken; and inside of this opening it forms a chrysalis, with the head of the chrysalis pointing to the thin layer of bark. When the chrysalis is about to change, it has only to break through this thin layer of bark and escape. (See Fig. 63.)

"The other species, the American currant borer (*Psenoscerus super-notatus*), has similar habits, although it belongs to an entirely different family—the family of long-horned beetles. It deposits its eggs in the same manner as the *Egeria*; the larvae go through all their changes within the stem of the bush, and finally emerge in the perfect beetle form by eating their way through the stem. The remedy for these two pests is to remove, at the end of the season and during the winter, all those stems which manifest any symptom of being injured, and burn them. In that way you destroy the chrysalides, and thus lessen the danger of their increase." (See Fig. 64.)—Report of the Ontario Agricultural Commission.

DANDELION CULTURE.

Dandelion culture is becoming a common industry with American gardeners. A New Hampshire paper says concerning a garden at Manchester, in that State: "Great reliance is placed upon good dandelion seed of home production, and improved by selection. Enormous crops of this green are grown, and some days as many as sixty bushels are sold. The past season a single plant weighed 8½ pounds, proving that good seed and high cultivation will tell even in a dandelion. Dandelions for open-air culture are sown between the rows of beets early in June. The beet rows being only twelve inches apart, with the dandelions between, make close work at first weeding, but as soon as the beets are large enough every other root is taken out and sold for greens. The remaining rows are thinned when large enough for bunching, and thus the second crop goes to market. The third crop goes off in the fall—the table beet crop—and still there is another left to occupy the ground. This last is the dandelion crop, and will be sold early next season, and then followed by one or more of the rotation. Under glass dandelions are followed by lettuce, and in some instances tomatoes, and then cucumbers follow lettuce. We noticed some of the finest specimens of lettuce here, showing a remarkable tendency to full heads even when growing up for seed, and we concluded that some of the plants would outweigh the 3½ pound dandelion. This variety has been produced by crossing two well-known sorts, and he has secured a remarkably large, thick, and finely curled lettuce."

PROTECTING TREES IN WINTER.

Many fruit trees are lost every year for want of a little care at the proper time. Many young trees are destroyed by rabbits, and many almost every winter by the heat of the sun in warm days towards spring. Frequently the rays of the sun, shining on the south side of the trees, will take out the frost, and, if near spring, start the sap, and probably in a day or two it will turn very cold, this sudden thawing and freezing will cause the bark to crack up, and perhaps peel off the next summer, and very frequently kill or cripple the tree. A preventive is to take what is called "straw board," or the thick paper used under the ceilings in building houses, or to take tin, or bass-wood, or hemlock bark, and put around the tree, and let it extend pretty well up around the body of the tree, so it will keep the sun from taking the frost out. When setting trees, they should be marked, so that the side of the tree that stood to the north in the nursery is set to the north when put in the orchard. This will also save many trees.—Cor. Country Gentleman.

WINDOW GARDENING.

The season is approaching when the care of the house plants will demand attention of many housekeepers. The following directions for watering plants will be of advantage in keeping them in a healthy condition. Take carbonate of ammonia four parts; nitrate of potash (saltpetre), two parts; pulverise and mix well. Put one dram (one-eighth of an ounce) of this powder into a gallon of rain water. Use this for watering plants. Give them good sunlight and not too much heat, and plants will keep green and fresh.

LANTANAS require rich, strong soil, a liberal amount of water, plenty of sunshine, free circulation of air. They are easily grown from cuttings stuck in moist sand in a warm place. It is hardly worth while to attempt the growing of cuttings in the fall or winter.