

Garden, Orchard and Forest.

Caterpillars and Cankerworms.

As the warm weather comes on, the insects will rapidly increase, and if not looked after will do vast injury to fruit trees and to the crop of apples, pears, currants and other fruits. They must be headed off so far as lays in our power. As for caterpillars, they not only injure the trees, but constitute one of the greatest eyesores on the farm. A tree all covered with the nests of the web caterpillar is highly suggestive of shiftlessness. Fortunately they may be easily seen, even before the foliage has got to be very thick. It is an easy matter to fix a swab on the end of a pole, dip it in gas tar and go at them. Gas tar kills every one instantly when it touches him. The great point is to touch him. Whale oil soap is good also, and so is a thin lime wash, and a simple bush is not a bad thing to have, with a scientific twist it will destroy the nest and the inmates are left for a time homeless, to say the least.

It is rather late to attack the cankerworm with any prospect of success. The time to take her was when she was trying to ascend the tree. If she has got up, the only way is to grin and bear it till next fall.

Soft soap is good to apply to the trunks of apple trees. It helps destroy the eggs of the borer. But after the fellow has made its hole, it is necessary to hunt him up and give him a sharp punch with a wire or some other sharp and flexible instrument. Towards the end of this month, the curculio will begin to show his work on the plum trees. One way to head him off for the future is to collect all the young fruit as it falls and burn it, or otherwise get it out of the way. This destroys the larvæ. Another way is to turn in the pigs or the hens and let them take care of the little Turk. Jarring the trees will knock down a great many, and if they fall on a sheet they can easily be consigned to the flames.

On the whole, it is best to adopt the plan of actually killing most kinds of insects. They are not easily scared, and death is good enough for them.—*M. Ploughman.*

Correct Planting of Ornamental Trees.

There are two classes of men who fail to properly understand the true meaning of this term. The one crowds his trees and shrubs to make an immediate effect, with an idea that in the future as they become too thick a portion can be removed; the other sets his trees as if patterning after a "city of magnificent distances," in mortal fear that some time to come, "far on in summers that we shall not see," they may by some possibility touch. There is, however, a happy medium between these extremes, in which the trees and shrubs may be made to produce an immediate effect, and yet not crowd sufficiently to look out of place.

The most beautiful examples of true landscape art will embrace groups and masses so intertwined that we lose sight of the crowded appearance of the foliage, in admiring the commingling of colors and forms. In fact, a properly constructed mass is one of the difficult tasks for a landscape artist to arrange; he may not carelessly choose his trees, nor should he set them regardless of the effect that their peculiarities in the future will produce. On the other hand, he who unthinkingly sets the trees regardless of the future, looking only at the present, makes even a worse mistake, if that be possible. In the future, when the trees are grown, after the fearful crowding they have received, it is worse than useless to thin out judiciously, and indeed, during the planter's life, this is but rarely done. The attachment that has grown with and for his trees, generally proves a barrier that it seems impossible to break down. And so they live on, year by year increasing in size, as they assuredly decrease in beauty, until they are past help.

All this truthful illustration of two classes of planters, who follow out each season the extremes of a system that has for its basis the ultimate beauty of model lawn. It is a difficult task to find a newly-planted place to-day where the owner has so evidently said to himself, this maple will extend over an area of thirty feet, or this spruce will require at least a circle of forty feet diameter, that this red bud will only need twenty feet, and so on? Such cases are far from rare; yet the

other extreme, of sufficient trees for a larger lawn crowded into a little yard, is of still more frequent occurrence; and it behooves every faithful writer who loves trees, truly to guard the inexperienced against just such mistakes.—*N. Y. Tribune.*

The Imported Currant Borer.

From an Essay on the subject by A. J. Cook, Lansing, Mich.

This beautiful wasp-like moth belongs to the same genus as the peach borer. The moths of this family may be readily told by their trim form, quick movements, diurnal habits, flying in the hot sunshine, and especially by the brush-like character of the tip of the body. This last character will serve to distinguish them from the wasps—an important fact, as even entomologists of considerable experience are liable to be deceived, so striking is the resemblance. The larvæ of the family, so far as I know, are without exception borers. They are white with a brownish head, and generally pupate in a cocoon made of their own chips or dust.

This Algerian, as will be noticed by the name, is imported, and as is generally true, is all the worse from that fact. As a rule the imported species are the most destructive.

DESCRIPTION AND NATURAL HISTORY.

The moth is a little less than one-half inch long, and expands three-fourths of an inch. The color is deep blue, with three yellow bands across the abdomen, a yellow collar, and a yellow mixed with blue marking the legs. These yellow bands, so like the same in many of our wasps, render this species all the more liable to be mistaken, especially as they mingle with the wasps, making a gay company in the bright sunshine. Yet the tufted extremity, in lieu of a pointed one tipped with a dreaded spear, will quickly undeceive us.

These moths appear in June and July. I found several specimens yesterday, June 22nd, 1875. They deposit their eggs near a bud, at which work they seem very busily engaged during the heat of the day. These eggs soon hatch, and the tiny caterpillar at once bores to the centre of the stem. What more strange than this minute larvæ, almost microscopic, can thus perforate the hard, woody stem? These larvæ may be found in the stem from June to July the following year. I have taken the moth from the bushes with my net, and the nearly full-grown larvæ from the hollow stem the same day, June 22nd, 1875.

A curious example of wise foresight is afforded by these larvæ in their eating through the hard wood and bark before assuming the pupa state, as without such forecast and action the hollow stem would be a fatal dungeon to the moth, whose slender sucking tube and wanting jaws would render her escape hopeless.

In May, June and July the insect becomes a pupa, the pupa always lying very near the outside opening, in a poor apology of a cocoon, if any, made of its own leavings. That able entomologist, Rev. C. J. S. Bethune, of Ontario, speaks of the chrysalis sleeping peacefully in this cavity while the bleak wintry winds howl among the branches. Such a remark would be true only of the larvæ.

In June and July the moths again appear. These insects seem to attack the red currant more generally, yet the black variety, and even the gooseberry is not exempt from its blasting work. Not only do the broken stems, so weakened as to be unable to stand upright, but also the sickly appearance of the foliage tell of this insect's presence and work. Bending the stocks will also generally give the needed information, as the affected ones bend more readily. The hollows in stocks cut across will inform us of their privious or present work.

It has been suggested that we catch the moths. I think this is not a practical remedy. The moths are so small, so quick, so wasp-like, that I should despair of this ever becoming generally practiced. I would suggest letting the bushes sprout up pretty freely, and then each spring practice heavy pruning, taking pains to cut and burn the feeble and limber stocks. This should be done about May 20; if later, some of the earlier moths might escape, if earlier, the pruner could not discriminate so wisely between healthy and diseased stems.

Foreign fruits in England cannot compete with the native grown. Grapes, pines, bananas—none are so good as the English raise in their forcing houses. The American Newton Pippin apple is, however, the most popular in the English markets of all apples. English pears are said to be superior to any. Glott Moreau and Winter Nelis, are the favorites at Christmas time.

The English Cabbage Butterfly.

By W. Saunders, London, in the Report of the Entomological Society.

This destructive pest is rapidly spreading westward. During the past season it has appeared for the first time in London and the neighborhood, and will probably reach the western limits of the Province before the end of the summer of 1876.

It was brought to Quebec from Europe most probably in the egg state on cabbage leaves, about the year 1857 or 1858, its event being chronicled by an entomologist in Quebec, in 1859, when the first specimens were captured.

The eggs of this insect are laid on the under side of cabbage leaves, singly or in clusters of two or three, where they are attached by some adhesive substance. They are so very small that they easily escape observation; in shape they resemble a sugar loaf, and under a sufficient magnifying power their surface appears beautifully ribbed and sculptured. When newly deposited the eggs are white, but they soon acquire a yellow tinge, and in about a week they hatch, the enclosed worm escaping by gnawing a hole through the egg shell, after which it devours the remainder of the egg shell, and then sets to work with an insatiable appetite on the cabbage leaves.

There are at least two, perhaps three broods during the year, and the ratio of increase of the insect is enormous.

The caterpillar is dreaded by cooks in every country where it prevails; it is not content with riddling the outside leaves, but prefers to secrete itself in the heart, so that every cabbage has to be torn apart and carefully examined before being cooked; and even after it has been dished up, one needs a watchful eye to avoid an undesirable admixture of animal with vegetable food.

REMEDIES.

One method suggested is to search for the eggs at the proper season and destroy them; another, to employ children with nets to catch the butterflies, and as these latter are rather slow and heavy flyers, this is not a difficult task; while a third method recommended is to lay boards between the rows of cabbages, supporting them two or three inches above the ground, with the view of luring the worms to select such places in which to pass the chrysalis stage of their existence, and so secure their destruction. Objections can be readily found to all these methods, but they are the best which man's experience has yet enabled him to devise.

Mulching in the Fruit, Flower and Kitchen Garden.

Mulching (i. e., covering the surface of the ground between growing crops with some loose material to prevent evaporation) will effectually save much labor in watering, and to a very considerable extent make up for poverty in the soil. Materials for mulching are generally plentiful in most gardens; decayed hot-bed manure is one of the best, and when this cannot be had short grass is generally plentiful. Most fruit and vegetable crops are benefited by mulching, but some more so than others. The raspberry, for instance, which delights in a somewhat moist soil, and is a shallow rooter, should always be mulched in dry situations. Our soil is dry and thin, and not well adapted to the raspberry; but by mulching thickly, we always secure great crops of fine fruit. In fact, the weight of the fruit is nearly doubled in consequence. Celery, too, is mulched thickly with short grass as soon as planted, and it seldom requires more than one or two good waterings. Let the weather be ever so dry, the surface under the grass is always moist. The mildew which affects the pea in dry summers is greatly checked, or altogether prevented, by good mulchings along the rows, and extending outwards from the sides about 18 inches. Brussels sprouts, broccoli, cauliflower, etc., which often hang fire after planting in a dry June, make marvellous progress with their roots under a good layer of short grass. Potatoes, though they too are benefited by the same means in dry seasons, are better without it, as a rule, in case of wet setting in autumn, and thereby aggravating the disease; but this is the only exception. The health of gooseberry and currant bushes is greatly promoted by mulching, and indeed all kinds of fruit trees, especially stone-fruits; and newly-planted trees of all descriptions are often saved from perishing by a good top-dressing of rotten litter, and such like, during summer and winter.