

with regard to it may be useful should the insects afflict us with a visit.

Were it not that the utmost care and perseverance have been practised to suppress them, the insects would have devastated the country. Each female moth lays an average of 600 eggs.

Fortunately she is so weighted with them that she cannot fly and therefore does not spread the plague as much as she might. She dies as soon as the last egg is laid but cases have been found of one female giving out as many as 1500 eggs.

Expert hunters can distinguish the male from the female moths when quite young.

The males can fly easily and for quite a distance. This has been proved by experiment. Thus the females have been taken to a place fully half a mile away from where moths have been found, and have soon been joined by males which have been caught and prevented from escaping.

This (July) is the time of year when they are eating the leaves off the trees; this is only while the creatures are in the caterpillar state, but about the first of August they will change into the pupa state and then, of course, they will cease their depredations. It has been found that they feed at night, and so numerous do they become in a short time that in one night they will destroy a greater part of a trees' foliage. And now for the means by which they are destroyed which, now their habits have been discovered, is much easier than at first.

By an ingenious plan—namely by catching some of the caterpillars, colouring them with a touch of red and then letting them go, the hunters can tell if the same insect returns to his hiding place after his night's revels in the tree. Such being found to be the case, pieces of burlap (coarse sacking) are tied loosely around the trunks of the trees; under this the insects, instead of descending to the ground and hiding under some stone or piece of wood, secrete themselves for the day. The hunter goes early in the morning as soon as the creatures have come down and kills them either with a strong leather mitten which he wears for the purpose or a sharp knife. The caterpillars sometimes measure 2 to 2½ inches in length. It is only by constant watchfulness and hard work that the pest is kept within bounds. There are other somewhat similar insects called the Brown-tail moths, but not so destructive because they are not so long in the caterpillar state their period of eating is shorter, they feed during

the day, which the gypsey moths never do, therefore are much easier detected and destroyed. In the winter their cocoons may be found on the branches of trees and can then be easily killed. The full grown caterpillars are about one inch and a half in length, a small number will soon strip a tree of its foliage. They are less to be feared than the gypsey moths.

THE PLANTING OF FRUIT TREES AND BUSHES

BY THE REV. FATHER-TRAPPISTS.

(From the French)

II.

Selection and preparation of the soil.—Fruit-trees may be cultivated on all kinds of land. Not that they are all equally suitable in a natural state; but they may be made suitable by the industry and intelligence of man.

Clays, with the addition of materials calculated to render them more friable, such as sand, ashes, etc., are especially fit for orcharding. Trenching, followed by a ploughing, before planting, and thorough drainage, are indispensable requisites in the improvement of such soils. One great advantage of clay soils is that they are not easily exhausted. Apples and plums grown on them are of better flavour than those fruits grown on other soils.

Siliceous soils, those in which sand is the chief feature, are inferior; though when the subsoil is clay, they may be improved by (if possible) ploughing up some of it; thus creating a new soil, so to speak, of the very best quality. In the absence of such a subsoil, the cleaning-out of ditches, heavy dressings of dung, the ploughing-in of green-crops, in fact, any kind of unctuous materials capable of increasing the consistency of the soil, should be applied.

Calcareous soils are those in which lime predominates; they are of a whitish hue, harden quickly and crack under the influence of the sun. (1) The addition to such land of humus and nitrogenous matters, turf and all dark coloured stuff, might benefit such land. It is the favourite home of the cherry. (2)

(1) Not the chalk-soil of the English Downs.—Ed.

(2) See the great cherry-orchards of the lovely district of Canterbury, in Kent.—Ed.