

THE ORCHARD.

Pruning.

THE season for pruning is drawing to a close, and the work remaining to be done should be expedited in order that these operations may be completed before growth commences. The tendency during recent years to adopt a system of long pruning or light thinning, in place of the general cutting-out and shortening-back, requires careful consideration. Good results have been obtained under the newer system, but in any except the best land and under good growing-conditions there is a danger of growth decreasing to below the safety-point, with a detrimental effect upon the size of the fruit. Any additional strain placed upon the tree's resources must be offset by more generous treatment in the application of manures and in cultivation.

Not the least important work in connection with pruning is the collection and burning of all prunings. Many of the most destructive orchard diseases continue their development in dead wood, from which the infection is transferred to the young growth or fruit, and leaving heaps of prunings in the vicinity of the orchard is providing a breeding-place for diseases which may cause loss and expense later in the season. This applies particularly to silver-leaf, which is annually causing losses in stone-fruit trees. In the normal development of this disease the spore-producing parts are not developed until after the death of the infected portion, and it is not uncommon to find active fructifications on stumps which have been dead for several years. Under these conditions the spread of the disease must be expected, and only the complete destruction of all prunings or dead wood will remove the danger.

Grafting.

This operation is performed in the spring just after the sap has commenced to flow. Wood intended for use as scions should be gathered while the trees are dormant, and stored to retain its vitality and freshness. Good results are obtained by rolling the sticks in a damp sack, and completely burying them in a cool moist place until required. The object in removing the wood while dormant is to retard its development, so that when the grafting is performed the sap-flow is more active in the root than in the scion, thus providing immediate nutriment. Grafting before sap-movement commences may yield poor results owing to the scions drying out. Trees intended to be worked over may be headed back now to within about 1 ft. of where it is intended to graft, and further shortened to the desired height at the time of working, in order to have fresh plump bark which will quickly form a union. Some stone-fruits are unsatisfactory subjects for grafting, and will give better results if headed now with a view to budding into the young growth in the summer.

Cultivation.

Cultivation should be hurried on as opportunity permits. Delay in ploughing-in green crops may have a detrimental effect on growth in the spring, in as much as with the early cessation of wet weather the undecayed portion may keep the soil too open and produce conditions akin to drought. The manurial benefit of green manuring is required by the tree from the time that growth commences, and to obtain the full value decomposition or the conversion of the green matter into available plant-food should be well advanced by the time that the trees are in a suitable condition to utilize it.

As an adjunct to disease-control cultivation is an important item. Insect pests which hibernate during the winter in the ground or under the cover afforded by a growth of grass or weeds can be considerably reduced