

Pruning the Fruit Trees

R. W. Starr, Wolfville, N.S.

PRUNING should be considered as a system of education for the tree or plant—an effort on the part of man to assist nature in developing the form and shape that we wish, or as near to that as possible, without doing violence to its natural habit. To best accomplish this we must commence with the young tree as it comes from the nursery, either before, or immediately after it is set in the orchard, decide on the height at which to form the head, and prune as near to that as possible. Next, the position of the branches forming the head must be considered. They should spring from a single leader. Never allow two equal branches to struggle for mastery, or there will be trouble in the future. Select such branches as will give a desirable shape and a well-balanced head, cutting off the rest to relieve the root system injured in transplanting, and possibly shortening the side branches if necessary, in order to preserve the balance between roots and foliage during the first year.

As the tree grows older it should be carefully examined each spring and all superfluous branches, like bad habits, be suppressed or removed before they do serious injury. The aim of the pruner should be to keep the branches from crossing and crowding, to keep the tree standing fairly on its feet. If the tree has been carefully and judiciously pruned when young, so as to carry a well-shaped, evenly-balanced head, but little severe pruning will be found necessary in later years, except the annual cutting out of such small limbs as are crowding or crossing, and thus preventing the

full development of that perfect form which allows the sunlight to find all portions of the tree.

These may be considered as general principles that may be applied to all orchard trees. It must be borne in mind, however, that it is impossible to make trees follow any set pattern or form; not only has each tree its own individuality but each variety has its own peculiar habit of growth. These habits and peculiarities should be carefully studied, so that pruning may be done to advantage, without doing too much violence to nature.

Old trees that have been neglected will frequently need more severe treatment. Dead and diseased branches must first be cut off, and others that are in the way or too much crowded taken out. Care must be taken, however, not to overdo the thinning. In passing through the country looking at orchards in general, I see more overpruned, or butchered trees, than those in need of severe pruning. This is especially the case in some of the older orchards where a system of cutting from the inside has been used, and a cluster of bare branches is all that remains in the centre of the tree. All the foliage, and the fruit is borne on the ends of those limbs, and frequently they are interlocking with the branches of the adjoining trees, so that the nearest approach to sunlight to be found in such an orchard is by looking skyward from the trunk of the tree. In such case the pruning should be done from the outside. The ends of the branches should be cut back and thinned, and what are usually called "water sprouts" encouraged to start from the large bare limbs. These should be thinned to such as have room to grow and bear fruit. They may need to be pinched back or summer

pruned in order to throw them into bearing. This can frequently be accomplished in the third year. In this way the bare centres can be clothed with foliage and eventually with fruit.

Extra care must be taken to preserve all the fruit spurs possible. Many varieties form fruit spurs on large limbs and continue bearing for several years. These in time become brittle and are easily broken, but are seldom replaced. Pickers and pruners are apt to be careless and thoughtless. They must be taught to have more respect for those little spurs, and, instead of destroying them, try to induce the growth of more. This may not seem to come within the purview of pruning as a subject, but it is of too much importance to be lost sight of.

In cutting branches from trees there is usually only one place where it can be advantageously done; that is as close to the trunk or main branch as possible, without making the wound larger than necessary. By this method the wounds heal over most quickly, and the trees are least disfigured. This rule holds good for limbs of all sizes.

All pruning tools must be in good order and perfectly sharp; otherwise the work cannot be neatly done, and the wounds will not heal readily. All wounds over one inch in diameter should be painted immediately. Many years' experience has shown that nothing is better for the purpose than pure white lead and linseed oil.

In this branch of horticulture there can be few fast rules. Every tree is a study by itself, and every man must work according to his conditions, and the amount of brain power he can afford to devote to each special case, for he will find no two specimens exactly alike.

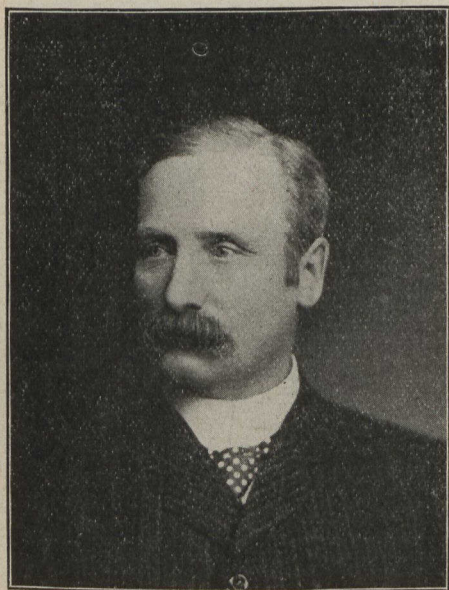
Planting Orchard Trees

AS the Canadian fruit industry develops, orchardists are paying more attention to planting and to the distances apart for trees and bushes of the various fruits that will bring best returns. The general tendency with all fruits is to wider planting, so that cultivation, spraying, pruning and other cardinal orchard operations may be carried on more easily and to better effect. In this way only can the high quality of fruit now in demand be produced. Fillers are being commonly used by leading growers.

In a letter to *THE HORTICULTURIST*, recently, Mr. W. H. Bunting, of St. Catharines, wrote:

"Apple trees should be set not less than 40 feet each way for permanent trees. If fillers are used, 40 by 50 feet would be more profitable. Early varieties, such as Duchess, Yellow Transparent, Wealthy, Ontario and others, could be used as fillers between the wider distances. I prefer the well-known and tried winter varieties, suitable for the export market, to any other for profit. A practice that is being advocated by many is to set an orchard with Talman Sweet or some such hardy free-growing stock, and later, top-graft to the varieties desired.

"Growers have been planting peaches too close. Peach trees should be given



J. C. Metcalfe, Port Hammond, B.C.
One of the Delegates from the Pacific Province