HORTICULTURE

Pruning Standard Pear Trees

W. V. Hopkins, Halton Co., Ont.

We start the tops of standard pear trees three feet from the ground. Three or four limbs are left to form the top. For four or five years we attend well to the shaping of the tree, not allowing it to bear until then. As the bearing increases, we prune more heavily. We endeavor to have the tree bronden out if there is room, and not reach upwards too much. All our Bartletts can be pruned from the ground with an eight-foot pruner. We keep the trees well thinned out.

When necessary, large limbs are cut off. When this results in a large number of new growths, we cut them all out but one or two, and, at most, three, and head them back. The next year new growths will be on these, and are easily pruned and kept headed-in.

This method of pruning increases the size of the fruit, and makes the operations of pruning, spraying and picking more conveniently done. We have treated Kieffer, Bartlett, Howell and Clapp's Favorite in this way for many years, and they are very free from blight.

Building a Hotbed

For early vegetables, some provision for starting certain plants earlier than can be done in the open air is desirable; for this purpose nothing is better than a good hotbed, and its construction is so simple and the expense so slight that every garden should have one. A hotbed proper not only protects the plants from the cold, but supplies bottom heat. By this term the gardener means that the soil is constantly kept several degrees warmer than the air above, that being the condition, so far as heat is concerned, which is most favorable for rapid and vigorous growth, and gardeners usually secure it by making a compact pile of some fermenting material and covering it with the earth in which the plants are to grow.

HEATING MATERIAL

The best heating material that is easily available is fresh horse manure, containing a liberal quantity of straw bedding. Such manure, if thrown into a loose pile, will heat violently and unevenly, and will soon become cold. What is wanted in the hotbed is a steady and moderate, but lasting heat. To secure this, the manure should be forked over, shaken apart, and if dry, watered and allowed to stand a few days, and then be forked over again, piled and allowed to heat a second time, the object being to get the whole mass into a uniform degree of fermentation, and as soon as this is accomplished it is fit for use.

SASH

Some gardeners use sash made especially for hotbeds, and glazed with small lights cut from odds and ends, and so furnished at very low rates. Such sash can usually be procured in any of our large cities, and costs much less than if made to order. For garden use, however, we much prefer a smaller sash that can be easily handled, and the use of larger and better glass. We recommend that for home gardens the sash be about two and one-half by four or five feet, and that the glass be not less than 10 x 14, laid with not more than one-quarter inch lap. In giving the order to one unaccustomed to the work, it would be well to state what they are to be used for, and that they need to be made like skylight sash.

THE FRAME

This may be made of sound one-inch lumber, the back 12 to 14 inches high, the front 10 to 12. It should be well fitted to the sash so as to leave as little opening as possible, and yet allow the sash to be easily moved up and down, even when the frame is quite wet.

THE SOIL

This should be light, rich, friable. Any considerable amount of clay in it is very objectionable. If possible, it should be unfrozen when put into the bed; for this reason it is much better to prepare it the fall before, and cover the pile with enough coarse manure or straw to keep out the frost.—Extracts from a pamphlet issued by the Wm. Rennie Co., Ltd., Seedsmen. Making the bed and management will be dealt with in later issues.

Preparing Land for Planting

Various methods of preparing land for planting fruit trees are practised. Some growers commence the preparation of the soil one or two years in advance, while others plant almost in sod. In a recent issue of THE CANADIAN HORTICULTURIST the following letter on this subject from Mr. W. E. Corman, Stoney Creek, Ont., was published:

"In the first place, I subsoil the soil both ways fifteen inches deep and then cover the soil with refuse lime and ashes from the kilns at the rate of three tons to the acre. This material costs us thirty to forty cents a load of three tons. We sow it from the waggon with a shovel. After cultivating it in, the land is rolled and is then in good shape for planting."

Subsoiling 15 inches deep allows the roots to spread out at a depth that the frost will not penetrate to injure the trees and it allows the feed, that goes down, to be more evenly distributed to the roots and the drought does not have the same effect on the fruit in a dry season. Plant the trees twenty feet apart each way, which allows the roots to spread and not run into the roots of other trees.

"Sow buckwheat about the first of June and disc it down about the first of August and let it go until the following spring and repeat the same. This buckwheat forms a blanket for the roots and keeps the ground from freezing to any great depth and it holds the buds back in the spring until all danger of frost is over."

Pruning Fruit Trees

"Scientific pruning is one of the most vital factors in fruit growing, in that it permits of the free circulation of light and air through the branches of trees, thus making possible the production of uniform fruit of color, size and lusciousness." George W. Ferguson, deputy state horticultural commissioner for south-eastern Washington, who is recognized as an expert throughout the apple belt in the Spokane country, said this in the course of an interview in discussing orchard-ing from a commercial viewpoint. He added, among other things:

"The training of the tree to produce the best quality fruit is the factor now dominant among fruit growers. Many who have not devoted time to study the methods of the tree, entertain the idea that more fruit is produced by making the tree healthier through this operation. This statement, obvious to a careful student of horticulture, is erroneous. It is consistent to say that a tree grows as nature intended that it should, and it is an encroachment to alter its growth in narrowing it into a channel unproposed by nature.

"The prime objects of pruning are to allow circulation of light and air through the branches. It should not be merely a custom. Just because one man who has had success in pruning and raising good fruit primes at a certain time, should not mean that another can do likewise. Pruning is a phase of fruit growing in which reason and precision must be exercised. The apple tree must not be an object of butchering because it happens that it needs pruning, and because of superfluous branches. In the first pruning a grower should exercise the greatest care. The head and the members of shoots with which to start the career of the tree are factors requiring study and attention.

"Sunlight should reach every twig. The sap should flow to every leaf proportionately. This is what assists in the later production of a luscious fruit with quality that will find a ready market.

"With a tree which has many branches close together, it will be observed that the fruit may be large, but is lacking in both essentials, color and lusciousness. In this case the superfluous limbs should be cut away in such a manner as to allow sunlight to pass down the tree and spread impartially through it.

"Careful study of local conditions has disclosed the fact that every grower must not do as his neighbor has done in recent years, or what he intends to do; but he must understand that it is essential to devote his attention to the many peculiarities existing in his own orchard. Each variety of fruit, as well as the peculiarities of the variety must receive attention. No two trees can be or should be pruned alike."