## Garden and Orchard.

## Planting Apple Trees.

BY L. WOOLVERTON.

Most farmers will be more or less occupied during this month with tree planting. Either ornamental trees are to be set along the roadside and in the door yards, or vacancies in the orchard need filling, and new orchards are to be planted. The trees that have been ordered from the nurseries are seldom at hand before May; and if they are, few farmers find their soil dry enough for planting any earlier; while on the other hand, it will not be safe to delay this work beyond the 15th or 20th inst.

1. Thorough preparation of the soil is most essential to success in tree planting.-Many careful farmers, who would never sow grain without preparing the soil with the utmost pains, plant their apple trees in the most careless manner. They throw down the bundles of trees where they are exposed to the burning rays of the sun, as if they were so many fagots for kindling fires; they dig holes like post holes into which they crowd the roots, down so deep that neither the action of the atmosphere nor the benefits of cultivation can reach them; and then in after years they wonder at the slow growth of a profitless orchard. Hurry never pays. Pennywise and Poundfoolish never got rich yet, and never will, whether he is a farmer or a fruit grower. The ground for an orchard should have been prepared the previous autumn as carefully as for grain, and if wet, properly underdrained. If single trees are to be planted in the lawn or orchard, the sod should first be removed in a circle of say three feet in diameter, the larger the better, and this space well spaded and pulverized to a depth of one or two feet. When the soil is ready for their reception, the trees may be brought out from their trenches for planting, but their roots should still be shaded from the sunshine.

2. No tree should be planted that has not an abundance of fibrous roots. -In the hurry of tree digging many trees are ruined in the nurseries. I once bought one thousand peach trees from the States, and found on their arrival that fully one-half were worthless for want of roots. Better throwaway such trees than plant them. It would be well to have a special clause in the order for trees, giving the buyer the right of refusing to pay for trees which lacked fibrous roots proportionate to their tops. A buyer would at once refuse a tree with a broken or mutilated top why then should he not with more reason refuse a tree from which a far more important part had been severed by careless diggers? The profits of apple culture are cut down too low to allow any margin for planting poor trees. Before planting the torn ends of the roots need to be smoothly pared, and the top boughs shortened back according to the loss of roots; but where a tree is young and can be removed entire, no pruning will be necessary.

3. It is a common mistake to plant trees too close together. -To gain correct ideas upon this point, it would be well to measure the diameter of the space covered by a full-sized tree. One will be astonished at the space covered by a full-grown oak, maple, or apple tree, when

apple orchard of nearly a hundred years of age, and each tree covers a space of about forty feet in diameter. It is evident, therefore, that forty feet each way is not too great a distance for apple trees on good soil, unless for Northern Spy, or Early Harvest, or other upright or slow growers.

4. It is a great mistake to plant trees too deep. -It is the action of the atmosphere upon the soil that converts the elements of fertility into such a state that they can be absorbed by the little spongioles of the roots. But if these rootlets are buried so far below the suface that they cannot reap the benefit of such action, the sure effect must be a most unsatisfactory growth.

Mr. S. E. Todd, in his "Apple Culturist," describes an experiment he once made of planting apple trees directly upon the surface of the ground. It was a plot which could not be ploughed for rocks, stones, &c., and the trees were set right on the grass; they were then banked about with loam shovelled from a wagon. He states that the result was eminently successful.

I have also frequently observed trees set in deep furrows to fail or become stunted, while those set upon the top of ridges grew luxuriantly. Some say, plant the same depth as the trees stood in the nursery; probably it would be quite safe to say, plant your trees with their roots as near the surface as possible without bending them out of their natural positions.

## Care of Trees and Plants in Transplanting.

BY W. W. HILBORN.

Spring has come again, and with it a desire to plant trees, small fruits, etc. There are many thousands of dollars lost every spring by farmers buying trees and plants, and not giving them any chance to grow. A very large percentage of the nursery stock sold in Canada is sold by travelling agents, and delivered at the nearest village, sometimes not in the best condition. The farmer will load it into his wagon and perhaps stop around town an hour or two, then drive two, three or more miles with the roots of his trees and plants exposed to the wind and sun, perhaps getting home too late to plant that day; hence they are left in the wagon or barn quite often without any protection from the air, sometimes with a horse blanket thrown over them. The next day planting begins. He perhaps takes out quite a number at once, and lets them lay out in the hot sun and wind until the holes are dug.

Planting not being a very rapid process with those unaccustomed to the work, the last trees have to stand the exposure quite a length of time; the wonder being that so many live, and in most cases the nurseryman gets the blame for all that perish. If the trees, plants, etc., had proper treatment after leaving the nurserymen's hands, there would be but few failures, comparatively.

In the first place, when you start after trees, put enough straw into your wagon to cover up all the roots well; put on water enough to thoroughly wet them; then get your plants packed into the wet straw as soon as possible after they are taken out of the boxes; or, if you go right to the nursery, as soon as they are taken out of the ground. Then cover up with

prevent the wind drying the roots. Dig a trench in mellow soil deep enough to admit the roots, then untie your packages and plant, covering up all the roots well. If you are not ready to plant out for several days they will take no harm. When you are ready to plant, take a number out of the trench at once, and when you get to the planting place, throw a few shovelfulls of earth on the roots to prevent

When trees, currants, gooseberries, raspberries, blackberries or grapes, have become shrivelled in the roots or tops, dig a trench long enough to admit the whole length of them and cover up root and top with earth, throwing on water, and letting them remain from three to ten days; the larger and more shrivelled the trees or bushes, the longer they should be left covered. As soon as the bark swells up and the buds begin to start, they may be taken out and planted. In this manner I have saved trees that would never have sent out a bud, if planted out in the condition I received them.

The whole secret in successful transplanting is to keep the roots in as near the same condition as possible while out of the ground that they were while in, and the nearer you approach that, the greater success you will have.

Plant about the same depth as they were in the nursery, spread out the roots well, putting the finest soil among the roots and packing in as firmly as possible.

Should the weather become very dry, so that it is necessary to water them, do not put the water nearer than a foot from the plant or tree. When it is put against the tree it follows the roots and is apt to loosen the earth around the small rootlets, preventing them taking hold readily. A mulch of straw or coarse manure, or oft-repeated hoeing, is better than water in nearly every case.

## Planting Flowering Shrubs.

BY HORTUS.

The usual custom in planting shrubs is simply to mass them indiscriminately in borders without any attention being paid to the different habits of growth or those conditions which best suit the requirements of each plant. The consequence is that in a few sons the strong and tall growing kinds soon dwarf if not entirely crowd out of existence the low growing ones. To plant to advantage and to best show off the various beauties pertaining to shrubs, it is desirable then to so arrange them that each may have a reasonable space allowed it to grow naturally. Syringas, Lilacs, Tartarian Honeysuckles, Purple Fringe, Vibunas, and all strong, tall growing shrubs, should be planted singly in conspicuous points about the grounds, or if intended to form a screen to hide any unsightly sheds or back premises they can be planted alternately in a line with a row of shorter growing shrubs in the front of them. Never plant tall growing kinds in front of the residence, as in this position they obstruct the view from the house and hide the house from the public. For such positions select the dwarf or low growing species of Spireus, Mahonia, Mezeremis, Deutzia, Corchorus, Calycanthus, &c. Where grounds are of a size to permit of ascertained by actual measurement. I have an a horse blanket as soon as you arrive home, to it, and especially in cities, it is much nicer to