

Horticulture.

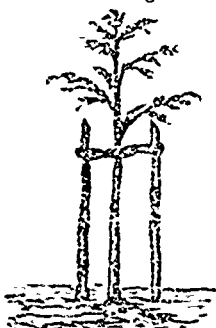
THE ORCHARD.

More about Staking Trees.

EDITOR CANADA FARMER.—I see in past numbers, many good ideas, such as those on staking newly planted trees, or others needing support. Much depends on doing such things in the best manner, and so to this end it becomes the duty of any one having ideas which appear good to themselves to communicate them to others, especially when such ready means are at hand as are afforded by the columns of the CANADA FARMER. So I give mine on staking trees, etc.

When a tree needs support, two stakes, on opposite sides, of sufficient strength and height as the case may require, the stakes may be set before planting the tree, but little or no injury will be done by setting them after, by taking a good smooth hand-spike and sharpening one end nice and smooth. With this make holes for the stakes by striking repeatedly into the ground, swinging the spike around until a hole of sufficient size is made, using no maul or anything of the kind. Or, which is better, take a crowbar or any rod of iron of sufficient size, with one end sharpened. With either of these implements holes of any desired size may be made with ease.

Now to the way of securing the tree: Take any good tying material, as rye straw, elm or other tough bark,



strips of leather, etc., as they present themselves from time to time. Take the band, of whatever material, in middle on one of the stakes and at a proper distance from the ground make a loop round the stake by crossing it and the tree; then another loop around the tree crossing between it and the other stake, around which make another loop as before and secure. If the band is of straw, it may be made fast by the common twist and tuck used in binding sheaves of grain. If of bark, tie a knot; if of leather, secure with a nail or two driven through it and into the stake.

Set the stakes firmly that they may stand straining, which should be done by drawing the band tightly and securing firmly, thus giving support to the tree in all directions. Two stakes are better than one for several reasons and especially in orchards where hogs are allowed to run. They will prevent the hogs from rubbing against the trees, which is very essential.

Small shrubs and flower stalks may be supported in the same manner.

Pleasant Plain, Warren Co., O.

WM. FERRIS.

Manuring Orchards with Clover.

From the observations we have made, and from our own experience in enriching orchards with clover, we would recommend the following course: In the first place, the trees should attain a certain age, say a good growth of at least five or six years after setting out. If much younger, the growth of the clover will produce too great a check of the trees while it is growing. While the trees are small, the ground must be kept clean and mellow by cultivation, or hoed crops only planted; with the addition of manure, as the natural condition of the soil may require. Then, if the land is sufficiently dry, either naturally, or by draining, (as all orchards should be,) plough it and make it mellow and smooth late in autumn; or omit the ploughing if it can be made clean and smooth without it. Early in spring, sow clover and nothing else. Do not think of sowing any grain crop with the clover unless you want to stunt and spoil your trees.

To make the seed take well and with certainty, it will be better to roll or brush it in as early as the soil will admit, and more certain than to sow earlier on the surface and trust to a "catch." This has been our experience at any rate. By mid-summer or a little later, there will be a dense growth of clover; larger, if the young plants have

had a bushel per acre of plaster or gypsum. It is better to cut at early blossom than to let it go to seed and exhaust the soil. You may leave the cut crop to lie and rot on the ground; but if you draw it off for fodder, be sure to spread on the clover stubble immediately afterwards, a small even dressing of manure. This will start the young plants, as well as make the land richer. Then, next spring, by the time the leaves of the trees are just opening, and the clover has made a good start, turn the whole under to a moderate depth, and plant corn, or any hoed crop. You will have a fine growth of corn from land thus treated, and the trees will start up with renewed vigor, after the check they have met with the previous year in consequence of the growth of the clover, and the want of surface stirring.

For trees that are rather young, one year is about as long as it will do to allow the orchard to remain uncultivated in clover; but when the trees are twelve to twenty years from transplanting, the clover may grow two years before it is ploughed under, giving it a light dressing with manure the first autumn as before, and if the soil is not rich and the trees not very thrifty, another dressing the second autumn. The clover will feel this manure and respond with great vigor, and it will help the trees. Those who have not much manure, may enrich their orchards to much advantage, in this way, the benefit from ploughing under the clover being several times greater than from the light coat of manure. If much manure has been applied during the early years of the orchard, the clover may not need any top-dressing; and if this manure has made the trees grow too rank for the healthy ripening of the young wood, the clover may prove a positive benefit, even for the time while it occupies the ground. On soils naturally very rich, this treatment for increasing the fertility will, of course, not be necessary.—Country Gentleman.

The Philosophy of Transplanting

Plants have lives and are susceptible of injury by wounds and bruises. In the course of transplanting they undergo the amputation of the outer ends of the main roots, where the feeding fibres are most numerous. That, with the disturbance of all the roots and their exposure for a given time to light and air, checks their thrifths, which they do not regain until they make new fibres after being reset. In digging up save the roots as much as practicable, and expose their roots to light and air as short a time as possible. Dig the soil some days before planting; break the soil fine; and if it is stiff, mix a portion of sharp sand with it to make it friable (sand at five dollars per ton will be profitable to so use in transplanting trees and shrubs especially); the more friable the soil put about the roots in planting, fibres will be put out the more readily; so the plants will sooner recover from their injuries. Hard-wooded trees take a longer time to put out new fibres after removal than soft-wooded species do; so they should be transplanted while young. An oak and hard maple, four feet high, will be slower in making new fibres than a poplar and willow, twelve feet tall. Among fruiting trees, cherry, pear, plum and all nut-bearing trees are slow in making new fibres after being transplanted; so they should all be transplanted when four or six feet high, and also all other stone fruit trees. Apple trees have soft roots when young and make new fibres readily; they may be six to eight feet tall when transplanted. Oaks, beeches, birches, hawthorn and other hard-wooded trees may be transplanted when four to six feet high. Poplar, willow, linden, soft maple and other soft-wooded trees may be transplanted when eight to twelve feet high. Pine, juniper, corymbia, &c., are among the slowest of evergreens in making new fibres; plant when thirty to fifty inches high. Spruces, pines, arbor-vitae make fibres readily and may be transplanted from three to six feet high. So all soft and hard-wooded trees and shrubs in the same ratio. For transplanting trees from nurseries they should be tied into bales, with wet straw about their roots, and bass mats or sacking sewed over the whole. Send by express for quickness' sake. The practice of transporting trees and shrubs in wooden boxes without other coverings to their roots is reprehensible, and will soon ruin the trade of any nursery. We have witnessed many heavy failures by that practice. In high inlands, a mulch may be put over the roots of lately planted trees, if the weather be hot and dry; say, apply the mulch middle of June, and remove it middle of September. Artificial waterings are often absolutely necessary. If litter is used as a mulch, turn it over every fortnight, as it encourages the growth of mould which would soon kill the trees. If sawdust or tan bark is used, hoe them in when cutting up weeds about the roots of the trees.

Dogwood, deciduous cypress, larch, salisburia, hickory and tulip trees should be transplanted when thirty to fifty inches high; they are all very slow in making new fibres after removal. The tree boxwood is hard-wooded, yet it is very prolific and quick in making new fibres (that is an exception, not the rule). *Cydonia japonica* is the slowest deciduous shrub in making new fibres; transplant it when twelve to eighteen inches high. Austrian

pine is the slowest evergreen tree that I can think of in making new fibres; always plant it when young and small. *Biola auria* and mostly all the golden gilded evergreen shrubs, should be planted when twenty to thirty inches high. Such care will ensure success. Success and failure attend both spring and autumn transplanting. I have transplanted Norway spruce trees when thirty feet high in the opening of spring, and hemlock spruce trees twenty-three feet high at the same time; and all grew well and still flourish after ten years so removed. I have also transplanted soft maple trees fifty feet high; sugar maples and red maples, lindens, sycamore trees, &c., when thirty feet tall and well branched. They all grew well. The roots were followed out long distances, and all soil removed from them with picks and digging forks. Let me have all the roots and I do not want soil with them. The transplanting of those large trees were upon the same grounds; say, a hundred yards removed and staked for support. The frozen ball system is a humbug, but many other humbugs are successful, so is this at times, after heavy costs.—Cor. Germantown Telegraph.

Plums on Peach Roots.

Josiah Hoopes writes to the New York Tribune:—I claim that my plum trees, grafted on peach roots, are just as healthy as any of my neighbors; that the principle is correct; and if the facts do not coincide with the popular theories of the day, then it is bad for the theories. If any one can tell me why plums on peach roots will not do equally as well as those budded on plum roots in a country where the peach thrives with unexcelled vigor, then I shall have to assume another position. The opponents of this system claim that the "borers" soon destroy the peach root. I admit that, but the man who is too lazy to devote a few minutes once a year to killing them don't deserve to have plums nor peaches either. Practice after all is the sure test to prove such disputed points as the above, and practice in this case says that in peach countries the peach root will thrive as well—yes, I will even say better—than the plum, but in heavy clay soils the latter is the better stock of the two in all probability; yet I suppose there are plenty of "Walking Encyclopedias" similar to a neighbor of mine, who are ready to argue that it is cheating because it is.

WASH FOR FRUIT TREES.—The Practical Farmer, speaking of a wash for bodies of fruit trees, recommends the following: One ounce of copperas to eight or ten gallons of water, forms a good wash, and is advised for trial as preventive against blight. One pound of bleacher's soda and one gallon of water forms a wash that cleans off all insects, and leaves the trees with fresh, young-looking, healthy bark.

WATERING TREES.—As a general rule, watering young trees in summer does more harm than good, by crusty the surface, without reaching the roots; and even if the roots are reached, the relief is only temporary, unless the watering is regularly repeated. There is a great want of appreciation of the amount of water required for trees by those who apply this remedy. A young tree four or five feet high, if growing well, soon throws out roots several feet on each side. If these roots are only three feet long, the circle of roots will be six feet in diameter, and at a depth of only one foot there would be no less than twenty-seven cubic feet of earth to saturate with water, requiring for one-fourth the bulk nearly one hoghead for a single watering. It is true that a young tree just set out may have had its roots cut much shorter, but as new ones are to be quickly thrown out into the soil as it commences growth, a narrow watering will do but little good. Clean, mellow culture is better than all the watering that can be given—or wide and heavy mulching if cultivation is impracticable.—Country Gentleman.

THE WILD GOOSE PLUM.—I have referred more than once to the probable value of this new candidate for popularity, and have advised readers to give it a fair trial; but as so many of the novelties lose their early reputation after a few years' test. I have thought best to be cautious in recommending this plum too highly until better known. An article from the pen of D. B. Wier gives additional weight to the testimony in its favor. Mr. W., who is well known to the horticultural world as a careful experimenter, states: "I am willing to stake my reputation as a man of truth and a horticulturist that the genuine Wild Goose Plum will prove to be all I have claimed for it, and that all with whom it has failed have been imposed upon by a spurious variety. This is pretty strong evidence, and seems to settle the controversy in respect to its value. Should this variety retain its standard of excellence in every section of the country, in addition to being 'bug proof' and entirely hardy, it strikes me there is a pleasant prospect ahead for all lovers of plums." Unfortunately, however, as Mr. W. observes, there is such a host of worthless, spurious sorts now being disseminated, that one really does not know what he is getting; even should the Wild Goose be ordered.—An Old Orchardist in New York Tribune.