Planting a Fern Case.

In planting fern shades made wholly of glass, it is a good plan to lie down a good depth of broken flower-pots, or clean cinders of the size of walnuts, and to supply at first enough water to fill up as high as these, so that when filled the water may be heard to rattle among the crocks if the pan is tilted on one side. By lifting off the glass every day for an hour, the exhalations are got rid of speedily, and the ferns are constantly supplied with what rises through the soil by capillary attraction. Success in these matters often turns on points of management that appear trifling, therefore it is well to set forth the mode of planting a fern case.

If the case be intended for a winter ornament, it should be planted in July or August, that the ferns may be established before the decline of the season; and if they are evergreen kinds, they will have plenty of time to throw up plenty of fine fronds, which the liberal supply of water from below, with regular ventilations, will render luxurious and beautiful; and before winter comes, the excess of moisture will be gone, but the soil will hold enough to render watering quite unnecessary until spring. In the case of a large pan, say six inches in depth, the planter should lay down two and a half inches of drainage, and the top stratum should consist of very small stuff, not larger than hazel nuts. On this should be laid a thin coating of half decayed moss or sphagnum. Fresh green moss is apt to go sour or breed fungi, and therefore it is preferable if it has been for some time exposed to the action of moisture. The next step is to fill up to the level of the rim with a mixture of turfy peat, leaf mould, small broken charcoal, and the siftings with plenty of silver sand. As it is well in the case of young beginners to be as exact as possible, the compost in which the ferns are to be planted should be pretty nearly as follows :—Peat three parts, leaf mould one part, silver sand one part, broken charcoal and crock siftings one part. The compost should be broken up and mixed with the hand, and should be in a free lumpy state. Ferns rarely prosper when the compost is sifted, as it becomes too closely set, and stiff; but a little of the finest of it should be put aside to dress the surface with, when the planting is completed. The new process is one strongly recommended, namely this :—Take a can of boiling water, and water the soil till enough is supplied to rise to the top of the drainage. The water should be poured into the centre first to warm the soil gradually; if poured against the glass suddenly it may shatter it. This should be done carefully, and with a little caution, there is no risk. The use of the boiling water is to destroy any insects that may have escaped the planter's eye when making up the compost. It will not only do that, but it will kill their eggs also, and equally make an end of the seeds of the weeds and the mycelium of fuugi; all of which are enemies better got rid of at first than to be hunted for when their ravages become a source of alarm.

When the pan is nearly cold, the ferns may be planted, and the process of planting will consolidate the compost, so that it will, when all is finished, be an inch below the edge of the pan, as it ought to be; it may indeed go below that, and need filling up with some of the finest of the mixture, which should be sprinkled over as a finishing touch.—[Land and Water.

Saving Frosted Plants.

As the season of frost is approaching when tender plants are liable to be frozen, it is of advantage to know how to save them. Cold water will do it, but it must not be applied in the light. Cover them so they may be entirely dark and excluded from the air. After treated thus, all except very tender ones will come out all right. It is even better that they be not watered while frozen. The proper way is, when the frost has been partially drawn out of them, naturally, to drench them with cold water from a fine-rosed watering pot, and immediately cover again and let them so remain until they regain their natural color. When they are removed, clip off all such parts are as blackened. The better way, however, in the fall, is to remove all tender plants to the house or else carefully cover them when frost may be feared. Thus, dahlias, cannas and other herbaceous plants may be made to do duty in the West for a month longer than usual, since we often have a few frosty nights. and after that a long season of beautiful weather for weeks.

Governing Tree Growth.

I was glad to see your article on the effects of cultivation, the principles of which agree exactly with my experience, and are certainly of a good deal of importance. How many thrifty young trees, and only thrifty ones, do we see in the spring with dead points at leafing time! It is often the result of injudicious forcing by cultivation late in the season, pushing the growth beyond the natural growing time into the ripening period, and thus, tender and immature, the terminal buds are killed by the frost. The principle has reference only to the tips, the rest ripening in time, owing to its earlier growth. I think it matters little by what means the rapid growth is secured, whether by stirring the soil, manure applied, or the natural fertility of the land, so that it continues the growth too late to harden.

There was a small elm on my premises on very poor soil that made but two inches growth annually, varying a little with the seasons, and it formed its terminal bud the fore part of July. Two years ago I removed the soil and found a couple of slight thread-like roots with almost invisible rootlets arranged along them, which was the only support of the tree, which till recently had other support, being an offshoot from another tree. I mixed a little manure, ashes, and some broken bits of bone with the soil and returned it to its place. A new growth put out at the terminal buds and other places in a few weeks and pushed on quite rapidly, making some eight inches' growth, then forming its second terminal bud in time to secure it against the frost. It had exausted the manure. Had the quantity been greater it would have run its growth, beyond doubt, into the face of the frost.

In cultivating young trees I am very careful not to allow the growth to extend beyond the prescribed limit, though sometimes the season gets the better of me, as is the case now, the rains and the warm weather combined for a number of weeks rushing the growth beyond its usual bounds, carrying terminal buds and all; and only a favorable fall will save from harm. Generally, however, there is no danger, having the ground rich enough for average growth, and relying upon surface work for the desired increase, such as cultivating, mulching (in a drouth) and manuring—liquid manure the most prompt—thus having the growth in hand to be checked or increased as desired. The great advantage here is with young trees, which admit of being pushed, fruit bearing trees less. I thus get an orchard sooner, and the trees are finer. But care must be taken to lessen the growth at the proper time in the season, about the middle, and this is done by stopping the surface work. But it cannot be done with all kinds of soil—only the shallow, where the roots are near the surface, as is the case usually with clay. In deep soil, manured and improved by drainage, the roots lie too deep to be readily reached.—[F. G., in N. Y. Tribune.

Small Evergreens for Transplanting.

The growth of small as compared with large evergreens, transplanted at the same time, produces some very curious results, which might puzzle those not sufficiently familiar with horticultural science. We have a good example at hand. An experienced horticulturist says :—"About twelve years ago a large evergreen was transplanted by a friend of ours into his garden. It was about twelve feet high and great care was taken of it. At the same time we set out a small one about eighteen inches in height. Now what do you think was the difference between the two trees at the present time? The large tree has grown about four feet. The small one is twenty feet high. The large one has become the small, and the small the large.

It is a good illustration of the imprudence of selecting too large trees. If we could plant seeds of the trees we desired in the place where we wanted them to form an orchard, such trees would be more healthy and much longer lived than transplanted trees can be; but this is a condition of things not easily attained. We should therefore adopt the nearest approach to it, and set out young thrifty plants, with all their fibrous roots untrimmed, that will, in the course of time, adapt themselves to the condition in which they are placed, and form a valuable orchard. Could we take up large trees with their roots, and a ball of earth with each tree, then such trees would not meet with a check, and a gain of time would be the result; but this is seldom the case, and the better course is to plant out small specimens."

Why Pruning is Needed for Young Trees.

The first advantage is that you can form just such a top on your own trees as you wish, by cutting away such limbs as you don't want and shortening those that are getting too long, making them spread more and thinning out where they grow too thick and training up those that are inclined to droop and hang too low. But in order to do this successfully, you want to study the nature of the tree. To illustrate, I will give some examples of familiar trees.

Take a yellow Newton Pippin apple tree. When it is young and thrifty it is inclined to shoot up very tall, with the branches close together, and, when the tree gets in full bearing, the top will be bent and twisted all out of shape by the weight of the fruit and frequently the tree will be broken down and spoiled. Or if it be not broken, the long limbs will remain bent over and throw out a great many shoots from the upper sides of the limbs, and thus make a thick and very ugly top. Now, by proper pruning at the right time, we may avoid this, and this is the way to do it :—Cut off all your limbs and top of your trees when setting out, and then prune every year, so as to keep the top in good shape, by cutting back those shoots that are growing too tall and thus make them spread out more, and thin out where they get too thick, and never suffer a tree to fork. When you see two or more branches of equal size growing out from the main stem, cut off all but one and that from the main tree. Let the branches grow up out from the sides, at proper distances from each other, so they will have plenty of room to bear and mature fruit, and, if properly shortened in, they will bear their crop of fruit well without breaking or bending out of shape.

The yellow Bellefleur is of the opposite class of trees, and needs a different treatment in some respects. Such trees are inclined to form a very thick top, which grows low and spreading, and hangs too low if not trained upward. Such trees need a good deal of thinning out among small branches, and in such a way as to encourage the branches to grow upward.

Now, if you commence pruning your trees while young and follow it up every year (as you should), in a proper way, you can form just such a top as you want. If your tree needs spreading out, cut the young shoots off just above a bud on the outside of the shoot, and if you want to train the tree upward, leave a bud on the upper side of the limb where you cut it off. These rules will apply to all kinds of fruit and ornamental trees and shrubbery.

Protecting by Fresh Straw-manure.

Many persons have remarked, that after having, as they supposed, protected roses and other tender plants with straw for the winter, that they have come out from under the cover in many cases worse than those entirely exposed; and it is common to hear people with this experience say that protection is an injury. But in many cases the injury is not from the protection, but from the salt it contains. Fresh strawy matter from stable-yards is one thing, and fresh straw from the barn another; and while straw is a benefit, rank fresh manure is an evil. For small things dry leaves with a little earth thrown over is excellent. Where the crowns of the plants are hard and woody, the earth itself drawn over a few inches is good; for larger things straw or even corn-fodder protects admirably, but should not be too bulky or twined round to tightly, or it may smother. But always beware of fresh strawy litter from the barnyard. Thousands of young plants, especially young evergreens have been destroyed by it.—[Germantown Telegraph.

New Life for Old Pear Trees.

That the pear is a long-lived tree is shown by the cases of the famous Endicott and Stuyvesant pear trees, which lived to be more than two hundred years old, and experiments show that many of the mossy and fruitless trees, which at thirty or forty years of age are apparently worthless, may be given new life and vigor, and made productive again by stirring the soil around them as far as the roots extend, manuring them liberally, cutting out the dead limbs, and grafting a new top. Three seasons should be taken in which to put on a new top. Grafting the top limbs the first year, and working down wood ashes, is one of the best fertilizers. Old bones well buried are good, and the contents of cess-pools and privy vaults exceedingly so. In stirring the soil do not break the roots. [New Bedford Mercury.