Garden, Orchard & Forest.

TREATMENT OF THE TOMATO PLANT.

This delicious, delicately acid, cooling, healthful, and now almost indispensable fruit, whose hygienic qualities have been tested by the human system (that most perfect of laboratories), is, by careful culture, being brought to perfection; and instead of coarse, unsightly, spongy, seedy, ill-flavored tomatoes, the desirable qualities of earliness, productiveness, size, solidity, paucity of seed, evenness of form, richness of flavor, and beauty of color may be secured.

Pruning.

The advantages of pruning have been questioned, but our tomatoes grow best when well pruned. Cut out all suckers and non-bearing branches. Let in light, air, and sunshine. Most of the fruit grows on the lower parts of the vines, and there will be no loss by shortening them; for nutrition will then flow to fruit instead of making fibre.

Supporting the vines—keeping the fruit clean—training.

It is sometimes thought well, in garden culture, to support the vines by brush or other refuse material, or by training, which may be done by setting poles twelve feet apart, the tops five feet out of the ground. Attach wires to them horizontally. Thus the fruit is exposed to the free action of sun and air.

PRUNING EVERGREENS.

The *Country Gentleman* says no evergreen appears well when sheared smooth like a wall, and that it much prefers an uneven surface. It is also true that to a cultivated taste all unnatural shapes of evergreen trees are not pleasing. It is quite possible, with some evergreens, to so prune that the top of the tree shall be a ball resting on the apex of a pyramid, and this on a square base, but we do not know why any one should want such a tree.

APPLES AS FOOD.

It is stated that by a careful analysis it has been found that apples contain a larger amount of phospherous, or brain food, than any other fruit or vegetable, and, on this account, they are very important to sedentary men, who work their brains rather than their muscles. They also contain the acids which are needed every day, especially for sedentary men, the action of whose liver is sluggish, to eliminate effete matter which, if retained in the system, produces inaction of the brain, and, indeed, of the whole system, causing jaundice, sleepiness, scurvy and troublesome disease of the skin.

HOUSE PLANTS IN WINTER.

Jas. Vick says the temperature for house plants should not be above sixty-five in the day time or forty at night. The leaves should be sprinkled every morning, and they should be covered when sweeping or dusting. The main thing is even temperature, moist atmosphere, and freedom from dust. For the green fly or aphis, wash frequently with soap suds and occasionally with tobacco juice. The red spider shows the atmosphere is too dry. Burn a little sulphur under the plants, and afterward keep the stem and leaves well moistened.

ONE WORM DID IT.

One day I was walking with some friends through Sudbrook Park, in Surrey, when Dr. Ellis drew our attention to a large sycamore tree, decayed to the core.

"That fine tree," said he, "was killed by a single worm."

In answer to our inquiries we found that about two years previously the tree was as healthy as any in the park, when a wood-worm, about three inches long, was observed to be forcing its way under the bark of the trunk. It then caught the eye of a naturalist who was studying here, and he remarked, "Let the worm alone and it will kill the tree." This seemed improbable; but it was agreed that the black-hearted worm should not be disturbed. After a time it was discovered that the worm had tunnelled his way a considerable distance under the bark. The next summer the leaves of the tree dropped off very early, and in the succeeding year it was a dead, rotten thing, and the hole made by the worm might be seen in the very heart of the once noble tree.—*Ex.*

SAVING AND PLANTING FOREST TREE SEEDS.

Maple Trees.—There are several varieties of the maple, and their time of ripening varies much. The seeds of the sugar, English and Norway maples ripen in the autumn, and they can be sown at that time, or mixed in a box with sand, and in some latitudes kept until the following spring because the very severe winters of the north might injure the vitality of the seeds, and the young seedlings will come forward more rapidly in a freshly dry soil than in one which has become hardened and baked by the heavy rains of autumn and the snows of winter. Yet in the south and west the seeds should be sown directly. The seeds of the red and silver maple ripen in June, and as they do not improve by age, it is better to sow them as soon as they are ripe. They germinate very quickly, and if sown in a light but fertile soil will frequently grow from two to three feet high in one season.

The Oak.—Acorns can be sown as soon as they fall, in a light soil, and not covered more than two inches in depth, or they can be mixed with dry sand and kept in a cool place until spring, when they can be sown in drills and lightly covered with some friable soil.

The Elm.—This tree ripens its seeds early in June, and they can either be sown directly or preserved in moist sand in a cool place. They are very light and delicate in structure, and an inch of soil is deep enough to cover them. If planted directly after a rain they will sprout in a few days, and make a rapid growth the first season.

The Ash.—These seeds ripen in the autumn, and can be sown directly in a rather moist soil, and about an inch in depth. They grow most easily and can be preserved for months in moist sand.

The Chestnut.—Every one knows that this tree ripens its nuts after the first frost. But if they are sown in the autumn the field mice may destroy them; so it is better to mix them with sand in a box and bury them in the ground, and in the early spring sow them in drills. If allowed to become dry they will not sprout.

Butternuts and Black Walnuts.—Should be gathered in piles and allowed to decay so that their thick coats can be removed easily. Then plant them either in the ground or mix them with soil and keep them in a box in the open air all winter, They will germinate as easily as chestnuts if not permitted to dry up and become shrivelled. Beech nuts should be treated like chestnuts. Hickory nuts will grow if the husks are removed and they are planted in the autumn, or preserved in sand and allowed to freeze.

The buttonwood, red cedar, tulip-tree, magnolia, horse-chestnut, Judas-tree, spindle-tree, coffee-tree, bladder-nut, hop-tree, and the yellow and honey locust all ripen their seeds in the autumn, which should be sown at that time. The seeds of the catalpa and paulownia ripen so late in the fall that they can be kept in a dry state until spring.

In transplanting forest trees one must do it with care to ensure success. The tiny roots must not be injured, as they are the feeders, and if cut off or bruised it hurts the tree.

In digging up a tree always turn the side of the spade to the stem of the tree, and lift out the earth carefully, and the small rootlets will thus be loosened and preserved uninjured. The chestnut and the hickory send down one long tap root, and are much harder to transplant than those trees where the roots spread nearer the surface like those of the maple and oak. In the nurseries they often dig up a chestnut or hickory tree when one year old, and cut off a small portion of the tap roots. This makes the tree send out a bunch of fibrous roots at the point cut off, and in two or three years more it can be transplanted with more hopes of success.

In planting the seeds of forest trees one needs to keep the young plants free from weeds, by running a cultivator through the drills, or hoeing them every little while. It is useless to plant the seeds and then permit them to be choked to death with weeds.

Such trees as the aspen, willow, cotton-wood, Balm of Gilead and Abele can be as easily raised from cuttings as currants and gooseberries; and as they grow very rapidly, in from six to ten years they will yield good fencing material, and also fuel.

Pine seeds can be planted from the cones in the autumn, and in fifteen years will supply a good sized grove.

There are many sandy, barren wastes throughout New England and the Middle States which would grow pines to great advantage, and prove very remunerative to their owners. I know of a merchant who planted several bushels of white pine cones some fifteen years ago, on the sandiest barren that the banks of the Connecticut River can show, and to-day they are from sixteen to eighteen feet high, and their stems as large as a fat man's wrist.

The fall is the best time for transplanting all trees. Commence the work as soon as their leaves fall, and they will have time to become used to their new homes before the ground freezes.

In November and December you can move trees from thirty to forty feet high, by digging about them, and allowing the ball of earth to freeze solid, and then remove them to the desired location.—*S. O. J., Country Gentleman.*

HOW TO GET AN ORCHARD.

After selecting the ground for an orchard go to work and dig and haul all the stones and stumps from it. Plough deep and level the land off, and you are ready for the fence. Put on a good substantial fence that will not admit any creature, only by the way of the gate or bars, and suffer no cattle to enter the enclosure, only for the purpose of labor. This fence built, you will plough your ground again, and harrow and work in manure to your liking. Sow your ground and seed down the same. Pick up all the stones and sticks that lie on the ground, so that it will leave a smooth surface. Select the best trees you can find—those that are young, straight and sound. When you take them up be careful and do not break any of the roots, for they have none to part with. When set they want to be so near each other that they will shade the ground well. When it is necessary to cut limbs, cut them when small. Let the lower limbs be so high from the ground that a tall man can pass under them and not hit his beaver. When you prune, be careful and let no two limbs in the top chafe each other; cut off one of the two.—*Prescott Tribune.*

WAY AND TIME TO PLANT PEACHES.

The stones of the peach, plum, apricot, and other drupes, may be spread thinly over the surface of the ground, in autumn, and covered with an inch or two of earth so that they may be kept moist, and in that condition subjected to frequent freezings and thawings. Or if a few inches of half rotten leaves, straw, or other litter be strewn over them instead of dirt, they will be more likely to be preserved in a moist state.

1. Another way, when many are to be planted, is to put them in boxes, in alternate layers of earth and stones, and placing the boxes where the stones may be kept moist, and exposed to the extremes of the weather. The object in exposing them to the frost is that they may be cracked open, so that the meats can be easily removed in the spring. A few days before the time of planting arrives the stones should be overhauled, the meats removed from the open shells, and if any are not open they should be cracked. There are nut-crackers adapted to the business. The meats should be mixed with moist dirt a few days, and allowed to sprout before being sown in nursery rows, and then nearly every one will come.

2. Cuttings of hardy shrubs should be made in autumn, before hard freezing weather, put in boxes in layers with dirt, and buried in a pit below the reach of frost. The pit should be filled and rounded up on top to shed the water, and it is not a bad plan to scatter some coarse manure over the pit, to more effectually exclude the frost. The cuttings will very probably be calloused over by spring, and little rootlets started or just ready to start and grow when planted in trenches.

LAWN GRASS.

We have found simple green grass—*Poa pratense*, make excellent lawns without any other mixture, or in some sections rye grass—*Lolium perenne*. Mr. Saunders, in a recent *Horticulturalist*, gives the following which he has found to make a good mixture:

1 Bush. *Agrostis vulgaris*,
2 Bush. *Poa pratense*,
1 Qu't. *Phleum pratense*,
2 Lbs. White Clover.

This is for an acre.—*Gardener's Monthly.*

PRUNING INJURED TREES AND VINES.

Mr. M. B. Bateham, in the *Northern Ohio Journal*, referred to the extent of the damage done to fruit during the winter and the propriety of subsequent pruning, says:

We find a much greater amount of injury than we at first supposed, done to fruit trees and the grape vines by the freezing (or thawing?) last month. It is probable that many peach and cherry trees are entirely killed, and still more will have to be cut back very severely. But we advise the owners to let them alone a month or two longer, till the extent of the damage can be more clearly seen. We have known peach trees to recover when they seemed almost hopelessly ruined. All the varieties of grapes in this region are injured somewhat, the Concord least of any; but most of them will no doubt recover, with only the loss of part or all of the season's crop, according to the extent of the killing of the buds and young wood. Where these are a good deal injured it is best to prune quite severely, especially old vines and such as have made large growth, cutting out a good share of the old wood, and leaving the best new shoots that come out nearest the ground, and shortening these to a foot or two in length, or even less if the buds seem mostly dead. Then after the new shoots have come out in June any remaining dead wood can be cut away.

Prof. Holmes, of Michigan, on the "yellows" in peach trees, made a very lengthy report, principally of correspondence from all the peach growing sections of the States, which were in some sense conflicting regarding the presence of the disease at certain points. It was strongly contended by some that the dread disease has not been on the east shore of the lake, but that the symptoms and appearance of the trees is directly attributable to the fact that the trees planted on naturally thin and quick soil matured rapidly and bore heavily until they exhausted the soil (which was not fed) of its nutriment to the tree, hence it had to succumb, after a short, fruitful period. There seems but little doubt but the failing condition of many of the peach trees in the older districts is attributable to this cause primarily, while actual disease may have followed.

HOW TO WATER A GARDEN.

Get a vessel made of suitable size, or take a water-tight barrel and put it on a platform six feet or more high, and at the bottom of this affix a common faucet. Now procure rubber hose long enough for the purpose, and at one end of the hose have a fine spray nozzle that can be taken off or put on. At the other end have a burr with a thread cut to fit one that must be cut on the faucet. Now you are ready. Fill your vessel with water in the morning, and let it stand exposed to the sun all day. In the evening fasten on your hose, turn on your faucet, and water the plants. Evening is the proper time to do the watering. Into this vessel you may put ammonia, iron, or any chemical that you desire, and when it is mixed with the water it may be applied without further trouble. Iron scraps may be left in the vessel all the time. The cost will be but a trifle, which it will trebly repay in one season.

SHELTER OF FRUIT TREES.

The shelter of a timber lot on the farm of H. B. Norton, of Genesee County, N. Y., caused the adjoining four-acre pear orchard to ripen its fruit earlier and to give pears of better quality, his pears usually bringing from $5 to $7 per barrel at Batavia and $8 to $14 in New York. We often hear doubts as to the distance which the protection of the tree belts extend, but this experiment would show it to be several times as far as the height of the trees. Some years ago the late Isaac Pullen, of New Jersey, informed us that his evergreen belts, then about twenty-five to thirty feet high, benefitted both fruit and farm crops to a distance of at least twenty rods; and we have known other instances where spaces abroad have been protected when planted with farm crops.—*Rochester, N. Y., Rural Home.*

A tract of pine land in Lapeer Co., Mich., comprising 2,400 acres, two years ago sold for $72,000. It was estimated at the time to cut 40,000,000 feet of lumber. A careful estimate lately showed there was 80,000,000 upon it, and the undivided one-half sold for the amount originally paid.