

Time for Pruning Apple Trees.

For several years it has been my custom to record, when pruning, the age and condition of the tree or trees, the quantity of wood removed, the date, and weather at the time. This is convenient, for if a tree falls, or does badly, it is only necessary to turn to the record to settle the question so far as pruning is concerned. I have found September to be a favourable time for the removal of large branches from old trees. When so done I think the wound, though it does not heal, seasons, becoming so durable as to last so long as the tree lives. December is recommended by some as a proper time, and it may be so, but such has not been my experience with reference to the latter part of the month. In 1859, I trimmed some in the early part of this month, and the trees have done well—old, large but thrifty trees from which I took much wood—they having been for years neglected. About Jan. 1st, 1860, I trimmed a part of an old orchard, the trees vigorous, showing few signs of decay. They have done miserably; that spring after, the bark started from the trunk,—in every case on the north side. Two have since died, and the others are not much better than dead. Other trees in the same lots, not trimmed at that time, did not suffer in this respect; consequently, I consider the pruning given them the cause of the harm done. That winter the complaint was general. What makes me the more positive, I pruned two others in another place, and they too have nearly died—these being all thus affected on the farm. The weather at the time was warm, followed by an extremely cold snap. Like others I formed and rejected many theories in relation thereto, not worth laying before the public. In regard to November pruning, or rather from the 20th of Oct. to Nov. 20th, I have never seen any bad results follow. The weather is often favourable at that season, and work is not pressing. Some of the best fruit growers advise this as a proper season. But if the weather is warm I am not sure of its propriety. This fall, during the fine days from the 1st to the 9th of Nov., I trimmed some old trees, and it was noticed that there was quite as full a flow of sap as early in April. It certainly cannot be proper to remove a limb under such circumstances. No doubt June is the most fit time of all seasons for pruning young trees, as Sept. or Oct. is old ones. Some contend that June is the only month. Of one thing there is no question, and that is that April is the worst, or, say from March 20th to June. Above all, never cut a branch of any size in May, or even such as might be taken off with the knife, without applying shellac solution. I have found from Feb. 1st to March 20th a very good time for the work, and have been successful so far.

If people generally took as much care of their fruit trees as they do of their other crops—never letting a branch grow larger than a knife will cut easily, and giving the tree as much manure and labour if no more, as they do a hill of corn, annually, it would matter little at what season pruning was done, as there would be scarce any to do. But so long as trees are neglected for years, and one wants to remedy that neglect at once, care must be used to choose the best time. In my experience it is as above; still, others of larger experience may not see it as I do. As regards June pruning of large trees, I can say nothing growing out of my own experience; from what I have seen, I do not think favorably of it.—A. in Boston Cultivator.

Rotation in the Garden.

In some of the best managed gardens rotation of crops is successfully practiced. The cultivation of crops in drills, which is the ground work of improved agriculture, was first commenced in the garden and afterwards transferred to the field. The potato and turnip, mangel wurzel and all kinds of beet, pea and bean, and every kind of vegetable were for a long time confined within the narrow limits of the garden, and here a miniature rotation was established, the value of which soon became apparent.

Mr. Loudon, in that excellent work, the *Suburban Horticulturist*, lays down the rule that crops or plants belonging to the same natural order, or tribe most nearly allied to them, should not follow each other. Thus turnips should not follow any of the cabbage tribe, sea-kale or horse radish; peas should not follow beans.

Plants which draw their nourishment chiefly from the surface soil, should not follow each other, but should alternate with those which draw their nourishment from a deeper source. Hence carrots should not follow beet, nor onions potatoes. Plants which take much of their nourishment from the soil, should succeed, or be succeeded by those that take less. Hence a crop grown for its seed, such as the pea, or for its roots or bulbs as the potato or onion, should

be followed by such as are grown solely for their leaves, such as bore cole, kale, lettuce, spinach, etc. Those plants which remain for several years in the soil such as the strawberry, rhubarb, asparagus, etc., should be followed by those of short duration. Hence in well managed gardens, the strawberry is changed every third year until it has gone the circuit of all the compartments, and the same treatment is applied to the asparagus and sea kale compartments.

Plants, the produce of which is gathered in summer, should be followed by those the produce of which is collected in winter or spring, so as to prevent two exhausting crops from following each other. Plants which are allowed to ripen their seeds exhaust the soil very much. Two crops of this description should not be permitted to occupy the ground in succession.

Some crops need the application of fresh manure, while others succeed best in soil wherein the manure has been perfectly decomposed, consequently they should be sown after a manured crop. Plants of every kind do better in drills than when sown broadcast, because they can be regularly spaced and the soil between them can be worked with the hoe and kept free from weeds. Vegetables of nearly all kinds may be grown in a young orchard without injuring the trees. Here a regular rotation may be established, every kind of crop being raised in drills and cultivated by horse labour. If the trees have been set far enough apart, it will be some years before they attain a size sufficient to impede operations and low growing vegetables, such as turnips, carrots, parsnips, cabbages, beets, etc., are less likely to damage young trees than corn or any other tall crop. Asparagus is generally raised in deeply tilled beds which have been excavated and filled again with great labour and considerable expense. Yet this vegetable can be successfully grown in drills, if the soil is well manured and tilled sufficiently deep. Melons and cucumbers are generally cultivated in hills, yet some of the most extensive growers of these fruits have abandoned that mode of culture and adopted drills, because they found that hills are the favourite resort of the striped bug and it is almost impossible to dislodge them from their strongholds. It is now considered the best plan to raise them in drills, six feet assunder, the plants from eight to twelve inches apart in the drills, by this means the vines will be distributed evenly over the ground, the soil can be kept free from weeds, and the fruit exposed to the rays of the sun, so as to ensure their ripening in proper season.

If the trees are so far advanced in growth in the orchard that vegetables cannot be raised between them, a small field near the house should be made available for a vegetable garden, and by the proper economy of manure, excellent crops can be raised without encroaching on the manure that is required for other parts of the farm. Here early potatoes, tomatoes, cabbages, onions, parsnips, carrots, corn, etc., may be raised without trespassing on the roots of fruit trees or being overshadowed by their branches. If a liquid manure tank is in operation, any quantity of muck can be saturated and be thus converted into very valuable manure.—*Western Rural*.

How to Raise Peaches Every Year.

By the following method peaches can be raised in Iowa as well as in New Jersey. I raised this season one bushel of choice peaches on one tree four years old. By the same method I have seen one tree in Iowa bearing fruit every year for the last ten years. Any one can do the same by strictly following these directions, viz:—When quite young, set the tree in the ground with all the roots running north and south, and thin the tree to a fan shape, with edge in the same direction as the roots. When the tree is past three years old, after the leaves are off in the fall, lean it towards the west till the branches nearly touch the ground. This can be done easily, as the roots which run north and south will be only slightly twisted. This should be the permanent position of the tree, never should it be righted up. The suckers or water sprouts should be kept stripped off during the summer, or the vitality of the tree will run to sprouts.

The end of all the branches should be clipped about the first of August, to force the sap into the fruit buds.

Every fall, before cold weather sets in, cover the tree with brush to keep the tree close to the ground, and with straw over the brush to protect fruit buds from the cold—and uncover in the spring about the 10th of May.

Thus by a little care and labour, every year, an abundance of that delicious fruit can be raised at home, affording a great pleasure, and saving expense of exporting from a distance.—H. B. S., in the *Home-stead*.

The Crocus.

As one of the earliest ornaments of the flower garden, it is a universal favourite, being neat, dwarf, and compact in growth, and varied in all the essential shades of colour for producing harmony of effect, either separately or blended together. The principal adaptation of this bulb consists in its suitability for planting sufficiently near to the margin or edge of flower-borders, beds, &c., as not to require removal, or in forming lines or edges entirely of such, in their relative colours, which, after blooming, may be removed as the leaves show maturity of growth by fading in colour (the bulbs being stowed away dry and cool until the following autumn,) and the same spaces being again occupied by summer flowering plants.

The principal months for planting are October, November and December, in ordinary rich garden soil, placing the bulbs about two inches deep, and four to six inches from the margin or edge, each group of six to eight or more bulbs being planted in its own relative colour, or otherwise in blended varieties, as taste may prefer. These all improve in beauty for some years, if not disturbed.

To secure a succession of blooms in pots commence early in the first-named month, with six or eight bulbs in each well-drained pot, using the same rich soil about an inch deep; and thus planted, place the pots upon a surface of ashes, covering them over one inch deep with soil, tan, dry leaf-mould, or sand, until the leaves appear through the soil, when they may be removed to the house.—H. A. Dreer, *Philadelphia*.

The proper way to deal with Bulbs.

As soon as any bulb shows signs of growth, the sap has begun its seasonal movements, and it needs the support of nutriment obtained by the roots. Therefore the first act of the sap, when its autumnal movement commences, should be the formation of roots; therefore, also, it should be in contact with moist earth, before the movement of the sap commences, in order that when the roots begin to protrude from the base of the bulb, they may be in contact with the soil, which is the only natural medium for their growth and usefulness. What should we say of a propagator of roses who should put in cuttings, and at once drive them into growth by atmospheric heat and moisture, without waiting till they had callused and began to form root fibres? We should say he had adopted a killing process, and had better buy roses ready rooted than attempt to obtain them in such a ridiculous fashion. But this is the way the greater part of autumn-planted bulbs are dealt with. They arrive in this country in fine condition of ripeness, and begin to sprout in the warehouses and seedmen's windows long before the public think of making purchases. They form incipient roots at the base, and plump green shoots at the crown, and these succulent growths are elaborated at the expense of the sap in the bulb, and, by the process of transpiration, the atmosphere sucks the life out of them, through the tissues of incipient roots and plump green shoots. When planted, they have to make roots at the expense of the already exhausted bulb, and then have to recover from those roots sap to sustain the growth above the bulb, which is already in advance of the roots in its stage of development, and thus the balance between supply below and exhaustion above is never restored, and the second season after purchase the bulbs are fit only for the muck-heap.

The laws of vegetable physiology plainly point out that all the hardy bulbs which sprout in autumn should be in the ground before that effort is begun. The equable temperature of the soil, and its moist condition at 6 inches below the surface, provide the very best conditions possible for promoting immediate root action, and retarding the growth of the foliage—two desirable results both for the bloom in the spring following, and for the preservation and increase of the stock.—*Hibberd's Gardener's Magazine*.

AN ARABIAN LAUGHING PLANT.—For the first time I met with a narcotic plant, very common further south, and gifted with curious qualities. Its seeds, in which the deleterious principle seems chiefly to reside, when pounded, and administered in a small dose, produce effects much like those ascribed to Sir Humphry Davy's laughing gas; the patient dances, sings, and performs a thousand extravagances, till after an hour of great excitement to himself, and amusement to the bystanders, he falls asleep, and on awaking has lost all memory of what he did or said while under the influence of the drug. To put a pinch of this powder into the coffee of some unsuspecting individual is not an uncommon joke.—*Palgrave's Central and Eastern Arabia*.