

Garden, Orchard and Forest.

Hot-Bed Plants.

The difficulty of getting plants of any kind to take root and do well when transplanted from a hot-bed, or even cold frame is well known. Even with the most anxious care with spading and watering, there are many failures. The plants are not hardy enough, and they need to be better rooted.

The following extract from the New England Farmer offers some good suggestions on the subject.

In re-setting plants, especially the tomato, they should be placed with half the length of the stems under ground, when new roots will push out from all that portion which is under the soil, and thus increase the proportion of the roots of the plants, and consequently enable them better to withstand their final transplanting into the open soil. A hot-bed plant which has never been transplanted, is not worth ten per cent. of the price of one which has had its roots broken, and has been re-set two or more times. By breaking roots, we increase the feeding power of the plant may fold, as every broken root throws out many new roots at the end of the old stub, or, as in the case of the tomato and some other plants, pushes out new roots from the stem, if it is set a little deeper, or hilled up by drawing fresh dirt about the stem. After the plants have been transplanted for the last time, in the beds, and have become well rooted, the sash should be open as much as is safe, that the tops may become hardened to the weather. Some ignorant people will buy only plants with large tops, but those who know what a good hot-bed plant is, will look more to the roots and less at the size of the tops. Plants should be as short and stocky as possible, and the foliage should be of a dark-green color, and the stems should be solid and woody. Such plants will produce fruit much earlier than tall, slender, soft ones, which have been forced to a large size by too much heat and too little air. Many fail by crowding the plants too quickly in the beds. A plant needs sunlight on every part of the top at some time during the day, and as a dozen good, well grown, hardy plants are worth more than a hundred poor, sickly things, it is better to aim for the best that can be grown.

A Small Herb Garden.

The *Villa Gardener* has these hints, which, if followed out, in whole or in part, would add greatly to the attractiveness and utility of American gardens:—

There is poesy and savoriness in the very name. There may be likewise order and beauty in it. The most unsatisfactory things in gardens, especially small ones, are the herbs, scattered hither and thither all over the place, and time and patience are exhausted in hunting them up when required. Quite a useful feature might be made in every garden, however small, of the herbs, were they only brought together into one place and arranged in order. The best disposition for herbs is in beds. These may be from two to four feet wide, with foot alleys between them, and the length almost double, or, at the least, one-third more than the width. This arrangement in beds is the very essence of an herb garden. Of course, in small gardens one entire bed will not be needed for any herb. In such cases several kinds may be easily grown together—such, for instance, as common and lemon Thyme, Pennyroyal and Majoram in one; Fennel, Sage and Tarragon in another; and Basil, Summer, and Savory and Golden Purslane in another. Mint should always have a bed for itself, as mint sauce is much in demand. Chervil, again, is much wanted in many families for salads, also Burnet, Hyssop, &c. These three are the semi-cordial herbs: Hoarhound for sore throat, Tansy for tea (not that anybody ever drinks it), Camomile for face-ache and stomach ailments. Rue for the gapes in poultry, Lad's Love, and any curious herbs that the villa gardener may have a fancy for.

A bed should also be reserved for Angelica, used by those who know the luxury of its shoots, candied in sugar, and for the growth of Borage, for flavoring claret cups in hot weather. Again, the herb garden is just the place for the orderly and systematic cultivation of all small salading, such as Mustard and Cress, a constant succession of young Onions, a bed of Chives, the cultivation of Radishes throughout the season, and the growth of Rampion, Lettuces, Endive, &c. All this would

find abundant furniture for a good many beds, and by changing these for the different products a nice succession of cropping might be maintained.

Finally, several beds should be set apart for the high class cultivation of Parsley—a plant sadly neglected in small gardens. Nothing is more useful in a household for flavoring or garnishing, and it is just as easy, on a right system, to have magnificent leaves, exquisitely curled and clean, because raised high above the ground by their strength and stature, as to have and use the small, dirty leaves that have to do duty as parsley in so many houses. Let the parsley have a bed of rich, deep soil—if a yard deep all the better; sow a good curled kind thinly; as soon as fairly up thin the plants to a foot apart, and let them grow away freely. That is the whole art of growing and using Parsley and making it really one of the most beautiful plants in the garden. Sow in March, May and July for succession. If the garden of herbs is too small for the devotion of one or more beds of Parsley, sown at different seasons, then the whole herb garden might be fringed round with Parsley, and the garnishing and flavoring plants themselves be garnished with its beauty. No portion of any garden, large or small, not even excluding that wholly devoted to flowers, will afford more pleasure than an herb garden, well furnished and kept. There will always be something growing and doing in it.

A Propagating Secret.

A month or two ago we alluded to an alleged extraordinary secret for propagating trees and grafting roses, whereby much time could be saved, offered for a small sum by an American nurseryman. This gentleman has since communicated an article on the subject to the *Wiener Gartenfreund*. Briefly, his method is as follows: Cuttings of shrubs and trees are taken off at the beginning of July, from 6 in. to 12 in. long, according to the kind. The leaves are removed from the lower portion which is to enter the ground, but those which will come above ground are left. Beds are prepared for them in the open air by thorough digging and levelling, and afterwards applying a superficial layer, about 2 in. thick, of rotten manure from a spent hot-bed. The cuttings are then stuck in about 2 in. apart and in a somewhat oblique direction. Each bed when filled is surrounded by a lath fence, so that shade may be given when the sun is very hot, and the cuttings are well watered with a rose-spouted can. This completes the operation. The only further care necessary is a sprinkling overhead three or four times a day during the first week, if the weather be very hot, and once a day afterwards. In the course of five or six weeks, treated in the manner indicated, the cuttings of most plants will have formed a callus, and further shading will be unnecessary. Late in the autumn a layer of rough manure, 2 or 3 in. thick, is spread over for winter protection. It also serves as manure when the cuttings start growing in the spring; and cuttings treated thus make extraordinary progress—forming plants equal to two-year-old plants from winter or spring cuttings. Very few, it is asserted, fail. The new method of grafting roses is the insertion of growing eyes early in spring, instead of dormant eyes in the summer. They are inserted in the main stem, one on each side, to form symmetrical heads. These make, it is said, as much growth the first season as the dormant eyes the second season. — *London Gardener's Chronicle*.

An occasional change of soil is highly beneficial to flowers in pots. There is nothing better than surface soil from an old pasture, taken off about two inches deep, and thrown into a heap with about one-sixth part old hot-bed manure to partially decay. In addition to this staple item, smaller quantities of different matters should be gathered together for peculiar cases or particular plants. Peat, for instance, will be found very useful for many kinds of plants. This is not, as is often supposed, mere black sand, but a spongy, fibrous substance from the surface of bogs and boggy wastes. Sand should be collected sharp and clean; the washings from turnpike ditches are as good as anything. Leaf mould is best got already well decayed from the woods. That one makes for himself from rotten leaves is seldom good for anything; it is always sour, and seems indigestible to vegetation. A load or so of well decayed cow manure is a good thing for the gardener to have by him, as those plants that want cool soil prefer it to any other manure. — *Gardener's Monthly*.

Artichokes.

I have grown the unjustly abused Jerusalem artichoke for years, and do not know of another crop that gives as large and as sure a return for the amount of labor and land expended. Last spring, when planting potatoes, the soil at one end of the field was considered too poor for them, and I decided to drop Jerusalem artichokes in the eight remaining furrows in exactly the same manner as the potatoes. They were plowed and hilled simultaneously with the latter, but received no hoeing and required no bug killing. The yield of the artichokes, covering 3,500 square feet, or about one-twelfth of an acre, was 20 bushels of fine, large tubers, while the adjoining 60 rows of potatoes, covering 30,000 square feet, yielded but 18 barrels of medium-sized potatoes. Had the entire farm been planted with artichokes, the return at this rate would have been 185 barrels. I have heard it recommended to top the stalks so as to prevent their blossoming, agreeable to the theory, I presume, that the sap which would otherwise be expended in developing the flowers and ripening the seed, would add to the growth of the tubers. To satisfy myself as to the correctness of this theory, I topped two rows just at the time when the first flowers appeared. These two rows were dug and measured separately, and the result was that each of the two rows yielded one-half a bushel less than either of the adjoining six rows, which were allowed to develop their flowers and seeds. — *Moore's Rural*.

The Cherry.

BY F. R. E., IN THE OHIO FARMER.

Cultivation.—In nursery rows the earth, in spring, should be first turned away from the trees; in about ten days it should again be stirred with a fine reversed-toothed harrow, and left nearly level, and so kept throughout the growing season. In October it should be turned up toward the trees. The plants budded the year before, and of course, having the stalk cut back in early spring to within six inches of the bud, as soon as it commences to swell strongly, should have the bud growth secured to the stalk by a soft band, until it reaches a height of eight inches; then the stalk should be cut away just level with the inside base of the bud shoot, and sloping downward. The shoot should then have the end pinched down to a bud likely again to make the leading shoot; sometimes this bud is found at the terminus of the shoot, again it will take away two or more buds; but it is the first formation of a true head to a future healthy cherry tree. The second year, if there is a desire to have trees with the first tier of branches two or three feet from the ground, the lower branches should be cut away close to the main body as early as the buds begin to swell. No tree should remain in the nursery row after two years' growth from bud. Once transplanted into the orchard or garden for future growth, they should have the ground, six feet in diameter around the tree, lightly mulched with cut straw, chip dirt, half decayed leaves, or small stones, and often stirred with an iron-toothed rake. This same course should be pursued the second year, when it will be well to let orchard grass take the ground surface; cut it when four inches high, and leave it on the ground. If trees do not make eight to ten inches growth upon leading shoots yearly, then some manure should be applied to the surface early in autumn, and thoroughly forked or raked into the ground in early spring, and the same practice continued until the terminal buds of the year's growth have formed. This period, of course, will depend upon the latitude, situation, soil and season.

Pruning and Training.—Under the heads of cultivation and transplanting I have attempted to show how the heads of the trees should be formed, but there is much more that comes to the knowledge of a careful and profitable cherry tree grower.

The sweet cherry, grown as a standard or dwarf, needs little pruning except when neglect has permitted one limb to grow and cross another when it could have been readily rubbed out in the bud, or pinched back and made to create spurs. If this has to be done upon trees that have been neglected, then the best time to do it is just as the terminal bud of the year's growth has ripened. If the tree has been placed in too rich a soil, and is disposed to grow too rapidly, dig around a tree of say four inches in diameter a circular trench three feet distant from the body of the tree, and two feet deep, cutting off with a sharp spade every root and fibre outside that space. And to every inch of diameter, up to a tree twelve inches through,