## THE FARMER'S ADVOCATE.

## Horticultural Notes.

Cut your scions this month for grafting next

spring. Pack in sawdust, and keep in the cellar. Pruning may be begun this month after hard freezingis past; cut off only small branches at this time.

Large limbs that require removing should be left until June, and the wound covered with grafting wax or gum shellac dissolved in alcohol.

The conditions required to keep winter celery are in brief, to keep the roots wet, the foliage dry and free from frost. If celery does not blanch fast enough give more heat, and if too rapidly a colder atmosphere is required.

Bone dust and wood ashes make the best fertilizers for small fruits and fruit trees we can get, especially on light or sandy soils.

Nitrate of soda will hasten early maturity in vegetables. A teaspoonful dissolved in one quart of water applied to each tomato plant, and that repeated in two weeks, will mature and ripen a larger crop of the fruit about a week earlier. Care should be taken, however, in using nitrate of soda; if ap-plied much stronger than directed above there is

danger of burning the plants. Hybrid Perpetual Roses succeed best in clay loam, and if planted in the lawn in beds that are large enough to contain a number of plants they will not suffer so much from drought. The following dozen sorts will give good satisfaction and variety in color :

color :-- *Alfred Colomb.*-Brilliant carmine crimson. *Baron de Bonstetten.*-Rich velvety maroon. *Baronne Prevost.*-Deep rose. *Caroline de Sansal.*-Clear delicate flesh color. *Coquette des Alps.*-White, slightly shaded car-

mine. Gen. Jacqueminot.-Brilliant crimson.

John Hopper.—Bright rose. La Reine.—Brilliant glossy rose.

La France.-Delicate silvery rose.

Paul Neyron,—Fine rose of the largest size. Prince Carmille de Rohan.—Deep velvety crimson.

Victor Verdier.-Fine bright rose-shaded carmine

Order your garden seeds this month from some reliable seedsman; do not wait until you want them, and then buy just anything you can get at the store. Always remember the best seeds are the cheapest, although you may have to pay more money for them. It is best to depend on varieties that have been well tested for main crop; a few new sorts or novelties may be tested every year, but in such a limited way that should they prove failures no great inconvenience will be felt.

A good kitchen garden next spring will lessen the cost of living very much, and add greatly to the health and enjoyment of the family. A garden, to give best results, should be made very rich with well rotted yard manure. A quick, rapid growth is re-quired to make them crisp, tender and well flavored. One-half the land well enriched and thoroughly cultivated will give better results and a larger yield of better vegetables than the whole plot as usually managed

The following are all good, reliable kinds to plant :-

Beets.—Eclipse and Long Dark Blood. Cabbage.—Early Jersey Wakefield, Winningstadt

and All Seasons.

Cauliflower.-Early Snowball.

Corn. - Corey, Stabler's Early and Stowell's Evergreen. Cucumber.-Early White Spine and Imp. Long

Green. Celery.-White Plume, Dwarf Golden Heart and

New Rose. Lettuce.—Black Seeded Simpson. Melon (Musk).—Emerald Gem and Early Hack-

ing will cause new buds to push forth near the base of the plant, which will grow much stronger and produce a plant of firmer form. It is the natural tendency of all trees and plants to push forth the most vigorous growth at the ends of the limbs or branches, hence the necessity of continual watchfulness and frequent pinching in or cutting back, otherwise the plants cannot be kept in good shape.

Watering correctly is perhaps of more import-ance than any other attention required to be given by those who have the care of plants. We find that all trees and plants growing naturally in the open air succeed best when we get rain just often enough to thoroughly moisten the soil as often as required to prevent drying down more than half an inch. Too much rain or too much dry weather retards growth. The same natural laws govern the growth of most plants and trees, whether grown in the open air, in the garden, or in pots in the house or conservatory. The roots require air as well as water, and if the soil is kept constantly saturated air cannot penetrate in sufficient quantities and the soil soon becomes sour and the plants unhealthy. At the end of each little rootlet there is a little valve or mouth that takes in the food and drink in a quid form, therefore when the soil becomes too wet sufficient air cannot enter to allow those little valves to work and the plant is starved; and when allowed to get too dry, the food contained in the soil is not available, as it can only be used by the plant in a liquid form.

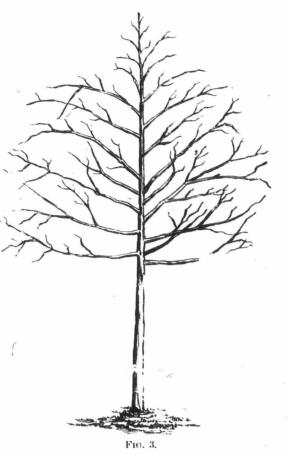
## The Planting and Care of the Orchard. BY G. C. CASTON.

In planting an orchard, the first requisite is a suitable loca-tion. A nice rich sandy loam is the best for apples, although a clay loam, if well drained, will do very well, and indeed is preferable for plums, pears and cherries. But as regards the soil, one of the most important and essential points is, that it must have thorough drainage, and if it has not natural drainage it must be well underdrained before any kind of fruit trees will succeed on it. The land should be in good condition as to cultivation and fertility. Fruittrees should never be planted among grain or grass; it is a good plan to have that intended for fruit trees, either in root crop or summer FIG. 1. FIG. 1. FIG. 1. FIG. 1. Fallow the year previous to planting, as this leaves the soil in the best condition for the reception of the

young trees.

It is a great mistake to plant too many varieties. Those suitable to the climate of the locality, and that have the highest market value, and that are freest from fungus diseases, should be selected-the most profitable being the sound, hard, clean skinned winter varieties, though some of the summer and fall varieties, on account of their early bearing and great productiveness, will pay where a suitable market can be got for them. For most localities the following list will be suitable:—For summer and early fall—Yellow Transparent and Duchess. Late fall— Alexander, Culvert, St. Lawrence. Winter—King, Spy, Greening, Wealthy, Pewankee, Seek no Further, Baxter, Winter Red, Ben Davis.

In the colder sections the King, Spy and Green-ing must be top-grafted on some hardy stock, and for this purpose it is well to plant a number of Tal-man Sweets, or other hardy varieties, to work this on. This plan will bring the Spy into bearing much earlier than if grown on its stock, and will improve the quality and productiveness of any variety worked in this way.



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In selecting young trees for planting, it is advisable to visit a nursery, wherever practicable, and select the trees, even if one has to pay a little higher price for them. Choose nice, healthy, straight, symmetrical trees. Crotchy and low spreading trees should be avoided, as they will split and fall to pieces should be avoided, as they will split and the pieces when they come into bearing. True some varieties have more of a spreading habit than others, and it is impossible to get them all up to the ideal, but we should get as near it as possible. Fig. 1 shows a rough sketch of what a young tree should be when a provide the price of what a split the should get as near it as possible. be like when properly trained and pruned, with the centre stem running straight to the top, and the limbs branching out at regular intervals. I prefer standard trees, as the young trees require constant cultivation. It is much easier to get close to them with the plow. There is much to be said, however, in favor of half standards. There is less exposure of the trunk, and also to high winds, and the family is a said and the standards. the fruit is easier picked. But, on the whole, these advantages are more than counterbalanced by the difficulties in cultivating them. Young trees should have plenty of small fibrous roots, and any that are deficient in this respect should be rejected. In planting, the surface soil should be well worked in about the roots and made firm around them, having the roots placed in their natural position, and the soil kept moist by constant cultivation. The trees should be staked for the first few years to keep them straight. They should be planted at least thirty feet apart each way; for apples, plums and pears will do a little closer, say twenty feet. No grain or grass should be allowed in a young orchard, and whether the land is fallowed or planted with roots it should be kept rich enough to insure a healthy growth in the trees. There is no manure so valuable for the orchard as good hardwood ashes, and if roots are grown an occasional dressing of well rotted stable or barnyard manure will be required.

ensack; Water-Phinney's Early and Peerless.

Onion.-Yellow Globe Danvers, Red Wethers field and Giant Rocca.

Peas.-Alaska, Premium Gem, Champion of England.

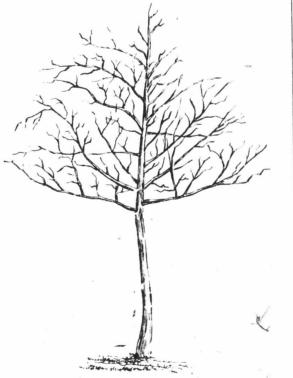
Radish.-Rosy Gem, Long Scarlet Short Top China Rose Winter.

Tomato.--Livingston's Favorite, Atlantic Prize and Golden Queen.

*Chrysanthemums* that have been put away in the cellar should not be allowed to get too dry—give just enough water to prevent the roots from drying out; if given too much, a soft growth is started that is not desirable. Early in spring the roots should be separated and planted out singly. Give good culture and a little liquid manure about twice a month during the early part of the growing season. Keep them pinched back to any desired form. This pinching in must be done, however, during the early part of their growth, and discontinued sometime before the blossom buds make their appearance. They should be taken up quite early, or when the buds are well formed and before they begin to open out. Give them a pot or box large enough to hold a large ball of earth, for the less the roots are disturbed the greater will be the crop of bloom. Give plenty of water ; if they are allowed to become dry at this time they suffer very much.

House plants require careful attention this month. The darkest days and longest nights when plants sleep are now past. As the days get longer, with more sunshine, the plants start into growth, and should be pruned back closely.

Geraniums especially are apt to run up tall and without much foliage except at the top of the branches. Do not be afraid to cut them back onehalf or even more in some cases. This severe prun-



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With regard to pruning some varieu very little. The tree should be pruned as it grows, and should never require the removal of large limbs. Starting with a young tree of proper shape and symmetry, as shown at Fig. 1, about the only pruning that will be required is an annual thinning out of the small shoots sufficient to keep the top open to sun and air, and at the same time preserve the symmetry of the tree, the pyramidal form being the neatest and most desirable. Fig. 2 shows a tree originally of good shape, but in which the pruning has been neglected till the limbs cross each other in every direction, and the whole top is a tangled mass, as we too often see. Fig. 3 shows the same type of a tree that has been moderately though regularly pruned. Young trees should never be forced, but should make a steady, healthy growth. But when they begin to bear they should be liberally manured and well cultivated as well, bearing in mind that they have to provide for the growth of the leaves and the growth of the wood as well as the fruit. To sum up:

1st. Have proper soil. 2nd. Select the proper varieties. 3rd. Get healthy, well formed trees. 4th. Exercise good judgment and care in planting. 5th. Prune regularly and moderately, never removing large limbs. 6th. Keep the soil mellow and moist by cultivation. 7th. Manure liberally, especially after they begin to bear. 8th. Keep a sharp eye on insect pests and promptly destroy them. 9th. Where some varieties are inclined to overbear it will pay to thin. out the fruit while small. 10th. Remember that in producing the best varieties, and in careful handling, culling and packing, that a good name is better than riches.

If these rules are observed and faithfully adhered to, the orchard will prove one of the most profitable departments of the farm.