

Best Fruits.—R. W. Starr, the Pomologist of the Association, reported on "the four best varieties of apples, pears, and plums suited for Nova Scotia." Apples—Gravensteins, Ribston, Baldwin, Nonpareil. Pears—Clapp, Bartlett, Great Britain. Plums—Moor's Arctic, Imperial Gage, Bradshaw, Lombard, Washington. The above in order of worth.

Cranberry Culture.—Henry Shaw, of Waterville, N. S., told the Association how he grew cranberries. He said he heard the way to grow cranberries was to plough his land, cut his vines up in a hay-cutter, and harrow them in; he did so, and failed completely. He then tried to do his work nearer right. In 1881 he had a swamp that looked as if it had once been a lake; he cleared it up, and ditched and ploughed it, went to the four-mile lake and got vines, and set them out (and just here, do not get your vines from the United States; they are infested with all kinds of bugs). He got his plantation under way, and has fair crops annually. This year, on one-quarter of an acre, he had twenty-seven barrels, that netted in Montreal \$7.34 per barrel. Mr. Shaw claims, and proved it by facts and figures, that one acre of cranberries will return equal to ten acres of the best dike in N. S. The cranberry business, yet in its infancy, bids fair to be the most profitable industry in Nova Scotia. Thousands of acres of land that is totally worthless, a paradise for bullfrogs and mosquitoes, by the expenditure of from \$50 to \$100 per acre can be turned into bog that will turn from \$100 to \$1,000 per annum. The market is secured. Letters from Montreal say that our cranberries are fully equal to those from Cape Cod, and they have a market there for all N. S. can grow. Letters from Montreal received by Mr. Shaw quote present prices at \$15 per barrel.

Election of Officers.—President, J. W. Bigelow, Wolfville; Secretary, S. C. Parker, Berwick; Vice-Presidents, Dr. H. Chipman, Grand Pre, and C. R. H. Stow, Wolfville. Spring meeting will be held in Annapolis in March.

The Rose Garden.

As spring is almost upon us, a few words on the planting and care of rose bushes are in order. The plants should be put in so that they will be ready to throw their roots into the ground by the time active growth commences. It is well to mulch newly planted roses with half-rotted stable manure a couple of inches deep, to add fertility and retain moisture. In pruning the heads, much more should be taken out than is usually done; thin out all weak sprays, and cut back all shoots that tend to make too thick a head. With young heads, it is essential that the wood should be left sufficiently long to form the head, but when the heads have attained full size, the wood should be pruned back to comparatively few branches. Dwarf roses just being set out should be pruned back to within six or eight inches of the soil, care being taken to have all the buds just below the cut, pointing upwards. If a little care is given as above directed, a yield of grand flowers can be expected during the coming season.

Treatment of Scabby Seed Potatoes.

Ellis F. Augustine, Lambton Co., writes us that he has secured excellent results from treating scabby potatoes with a weak solution of corrosive sublimate. Though his seed was badly affected, the crop was practically free from disease. The directions given are as follows:—Procure an ordinary barrel, and fit into the base a common wooden faucet. Purchase of a druggist two ounces of finely pulverized corrosive sublimate (*mercuric bichloride*). Empty this all into two gallons of hot water, and allow it to stand over night, or until apparently all dissolved. Place in the barrel thirteen gallons of water, then pour in the two-gallon solution. Allow this solution to stand in the barrel four or five hours, during which time it is several times thoroughly agitated to insure equality of solution before using. Select as fair seed potatoes as possible, wash off all the old dirt, and immerse as many as you can or wish to treat at one time in the solution one hour and a quarter. At the end of that time turn off the solution into another vessel. The same solution may thus be used a number of times if wished. After drying, the potatoes may be cut and planted as usual. Plant upon ground that has not previously borne the disease. Remember this chemical is a deadly poison, so exercise becoming caution. The solution should not be put in metallic vessels.

Salt for Fruit Trees.

Sir, I have in my garden a large Bartlett pear-tree that from the very first to the present time has had the best of care in the way of manure and cultivation. When it began to bear, the fruit was all that could be desired, but after a few crops became scabby and cracked around the centre, as though strings had been tied around the pears, and eventually became so bad that they were entirely useless for any purpose. One spring, in emptying out the brine and dry salt off my meat, I dumped it around this pear-tree; and to my great surprise and delight that season it had a beautiful crop of pears, very few faulty ones in the lot. I have kept up the salting ever since, with the same good results.

In my apple orchard I have some Wagners (which, by the way, is a very choice apple, but a very poor tree), and they had become half-dead and worthless. The little fruit they produced the past year or three years was scarcely worth harvesting. Last spring it occurred to me to throw

the brine and salt from my meat about them. The result was the finest sample of apples I ever saw them produce—large and smooth, free from blight of any kind, and a worm-eaten one was almost the exception. I have them in my cellar well on in March, sound and fresh as when harvested.

This was only an experiment on a small scale, but, so far as tried, successful; and I would like to hear through the columns of the *Advocate* from any one who has ever tried salt as a fertilizer about fruit trees; or will any of our horticulturists experiment with it this coming season, and report results. I intend throwing salt over my whole orchard this spring.

S. A. OTTON,
"Riverside Farm," Wardsville, Ont.

Transplanting and Care of Young Apple Trees.

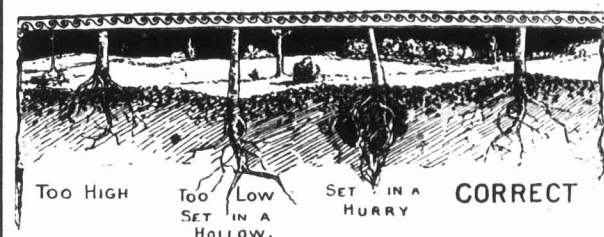
BY ELLIS F. AUGUSTINE.

Among the many readers of the *Advocate* there are no doubt a large number who contemplate setting out young apple orchards this spring.

The fall preparation should have consisted in selecting the site for the proposed orchard, and ploughing the ground to as great a depth as possible (if subsoiled, so much the better), and if the soil is not naturally drained, in thoroughly underdraining with tile. It is worse than useless to set out fruit trees upon a soil that is cold and wet, for although they may manage to sustain life for a few years, they will never thrive under such conditions, for the hearts will soon become decayed and the trees will eventually die. Of course, it is impossible to put in tile now; the planting need not be postponed, as the draining can be done the following fall, and one advantage will in this way be gained, viz.: The drains can be placed exactly in the centre of the rows, thus avoiding all danger of rootlets entering the tile and causing them to become choked up.

I would say by all means procure trees for planting from some reliable home nursery, and if a personal selection can be made, so much the better. In regard to varieties, plant two or three trees each of early harvest, early fall, and late fall, for home consumption, and the remainder entirely of winter fruit. Now here is where the amateur fruit-grower usually makes his greatest mistake. As he examines the pages of the fruit catalogue he finds so many different varieties that are highly recommended and beautifully illustrated that it seems impossible to make a selection, so he finally decides to plant a few trees each of fifteen or twenty different varieties, thinking that amongst so many some will surely prove adaptable to his soil, and if some fail to bear certain years others will make good the deficiency. But he should remember that while buyers are anxious to purchase, and willing to pay extra prices for a large number of barrels of two or three good varieties, they will pass by, almost unnoticed, a job lot of three or four barrels each of fifteen or twenty different sorts. I would not recommend planting more than four different varieties at the outside, while many prominent fruit-growers would draw the line at two.

In choosing varieties, the most advisable plan is to visit all the bearing orchards in your immediate neighborhood, and after taking into consideration the care and cultivation each has received, determine from personal observation which are the most thrifty and prolific varieties. At present a red apple is most eagerly sought for in the British markets, although a first-class green apple will always find ready sale at remunerative prices.

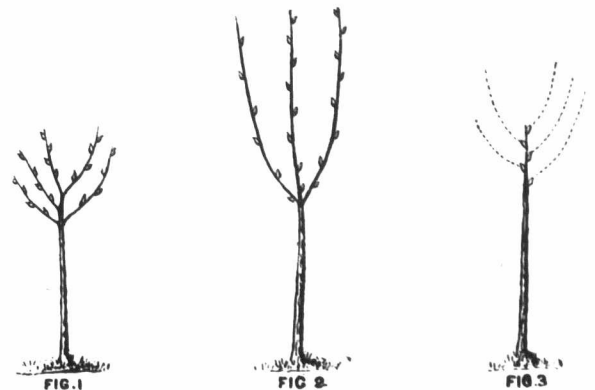


Another mistake that is too commonly made is in setting the trees too close together. They should be set not less than thirty-three feet apart, and even thirty-five feet would be none too far. This may appear quite a distance when the trees are first set out, but it should be taken into consideration what the spread of branches will be when the trees have reached the age of thirty or forty years. Before the trees arrive, the ground should be carefully measured over and a small stake driven in where each tree is to be placed. Be careful to get them exactly the same distance apart each way so that the trees will "row" in every direction, as this will add very much to the appearance of the orchard, and appearances go a great way towards adding value to everything about the farm. After the trees have been removed from the nursery, care should be taken to keep the roots constantly covered with damp straw or blankets, as a few hours' exposure to wind or sunshine may prove fatal to them. When ready to begin the work of planting, take a piece of inch board four feet long, with a notch cut in each end and one in the centre, and place so that the stake where the tree is to set will come exactly in the centre notch; then drive a small stake in each end notch and remove the board, pull up the centre stake and dig the hole exactly where it stood.

When ready to set the tree, place the board where it formerly lay (which is readily done, as the end stakes have not been removed), and set the tree so that the stem comes in the centre notch. This will insure straight rows, and save all trouble of sighting. The hole should be made considerably

larger than the spread of roots, so that none will be crowded, and the rootlets will have a fine mellow, though compact, soil in which to take hold. A few shovelfuls of loose surface soil should be thrown in the bottom of the hole in such a manner as to have it crowning in the centre, so that the roots will spread over it with a downward tendency.

All broken or bruised roots should be cut off smoothly with a sharp knife, making the cut from the bottom of the root slanting towards the top. This will cause new rootlets to start out much more readily. The tree should be set a little deeper than it formerly stood in the nursery, and leaned slightly to the west, and if it is crooked, the bend should be set toward the west. The soil should be well worked in among the roots, and when the hole is about half full, a pailful of water may be thrown in, and the remainder of the soil replaced, tramping it firmly about the body of the tree. A mulch of strawy manure should then be given, taking care that no manure comes in contact with the trunk.



In forming the head of the tree, four to six branches should be left. These should be cut back to within four buds of the last season's growth. In cutting back always leave the last bud on the lower side of the limb, as this is the bud from which the new growth will start, and if left on the upper side, the shoots will all grow toward the centre of the tree. If the limbs are in such a shape as to be undesirable for forming a head, or if there is simply a crotch, cut away all the limbs except the straightest one, leaving simply one straight stem. From this a number of shoots will start, from which a satisfactory head can then be formed. The accompanying sketch illustrates the right and wrong ways of forming a young apple-tree head. Fig. 1 shows a properly formed head, cut back correctly at time of planting, with last bud left on outer side of branch. Fig. 2 shows an improperly formed head. Fig. 3 shows how a correct head may be formed from Fig. 2, by cutting off side branches and top of centre one.

And now, after the orchard has been carefully set out, it should not be neglected, as is too often the case, for it is only by the most diligent and careful attention that satisfactory results are obtained.

The trees should be carefully protected from mice and rabbits, and for this purpose a piece of sheet iron, rolled in the form of a tube, twelve inches long, and four inches in diameter, placed around the stem of the tree, is an excellent arrangement. In nearly every orchard which has reached a bearing age, the trees will be found to lean more or less in an easterly direction, often presenting a very unsightly appearance. This has been caused by the heavy westerly winds, which prevail during the fall and winter; and to prevent it—every spring for the first few years, after the frost is out, and the ground is loose and mellow, the trees should again be leaned slightly to the west, and the ground tramped firmly around the base. By following this advice, the trees will be kept perfectly straight, and the orchard will present such an attractive appearance that it will invariably elicit praise and commendation from every passer-by.

For the first six or eight years the ground should be kept perfectly clean by shallow cultivation, although a hoed crop may be grown each year, if care be taken to replace as much plant food as is removed from the soil. After this period the orchard may be seeded to grass, if it is not allowed to form a tough sod. And now the ground will require a greater amount of fertilizer than before, as there will be three different crops drawing upon the soil: the trees for increasing growth, the harvest of fruit, and the crop of grass. Failure to recognize this fact is the greatest cause of so many orchards failing to produce satisfactory results.

The trimming of the trees should commence soon after they have been set out. They should be gone over two or three times each season, and every branch that intersects another, or is inclined to grow toward the centre of the tree, should be cut out, as this will save the lopping off of large branches in after years, and will keep the centre of the tree well open, thereby facilitating the work of spraying and gathering of fruit.

In conclusion, I would add that if time cannot be had for giving the orchard the care and attention it demands, the work of setting it out had better never be begun, for, although a well-cared-for orchard will return a large dividend for the amount invested, there are already too many neglected orchards that do not pay for the land they occupy.

[NOTE.—Mr. A. H. Pettit, of Grimsby, speaking at several Western Ontario Institute meetings, said he was growing Northern Spys, Baldwins, R. I. Greenings, and Golden Russets for winter fruit, and if he discarded one it would be the Russet. Editor.]