

Garden and Orchard.**Farmers as Fruit Growers.**

BY G. W. CLINE, WINONA, ONT.

Why is it that farmers, as a rule, are so careless in the matter of growing enough of small fruits for their own use? There are none that enjoy them better than farmers where they get them, but how few spare the time or take the trouble to grow them on cultivated soil; they may possibly have a few berries in the fence corners or old choppings and pastures, which their wives and children pick, but not enough for the whole summer and winter seasons. Now, I claim, that there is no farm where they can grow potatoes or corn enough for their own use, but can grow plenty of all the small fruits, such as strawberries, raspberries, currants (red and black), gooseberries, and also the blackberry, or, as many call them, thimbleberry, and one-half acre of ground will grow enough for use every day in the year, and some to spare for their less fortunate neighbors. This is the time to prepare the ground for planting next spring. Choose a piece that you think is good for potatoes or corn, and perhaps you can choose one that has some protection from the strong wind and frosts in winter and spring, which are as bad for strawberries as they are on fall wheat or clover by heaving out the plants. Plough the ground deep and manure well, then keep soil well cultivated or ploughed to keep down all weeds, and ridge up in about twelve-foot lands if the soil is very heavy or not drained; or if it is soil that does not dry early in spring a good plan is to ridge up in narrow ridges like for roots, then in spring they will harrow down very fine for planting, which should be done early as possible to insure the plants a good start before dry weather sets in. The proper distance for planting is, for strawberries, rows from three to four feet apart, and plants one to two feet apart in the row. I usually, for market purposes, put my rows four feet apart, and plants two feet in the row. The best running kinds, like Crescent Seedling and the Wilson Albany, require to be nearer together, being poor runners on most soils. The rows of red raspberries, black cap, red and black currants and gooseberries should be from six to seven feet apart, and three feet to four in the row. I also advise, in laying out a small piece for a farmer's fruit garden, to make the rows not less than from ten to fifteen rods in length for convenience of ploughing and cultivating. For the grower who intends doing a market or shipping trade, I advise planting red and black currants and gooseberries five to six feet apart each way, and then cultivate both ways, as being much easier kept clean, and giving better cultivation for dry weather. Planting: I always, on my soil, run out furrows for planting everything in the fruit line from the strawberry to the fruit tree and grape vine, and find it much the best and easiest for all planting on my soil, although on a light sand a spade is, I believe, a little easier on the man, but harder on the boy who has to do the stooping to put in the plants, but, then, some think boys have no backs to hurt. For strawberries we run a furrow about two to three inches in depth, and put the plants along the land side, spread the roots a little, and cover in some with the hands, then come along after and finish filling up with the hoe. With the other

berries and currants we plough rather deep, what we think is deep enough to put in the plants as deep as they were before digging them; put a little earth around them with the hands, then fill up as before with the hoe. This is all very easy to do, for if the ground is in good order two men and a team, and perhaps a boy to drop plants, can plant their half acre mixed up of all the different varieties mentioned in one day, and taking 43,560, the number of square feet in an acre, it is no trouble to figure out the number of plants of the different kinds required, and, as for the kinds to plant, do not run away with the idea that you have to buy all the new varieties to get plenty, for if you do you will likely not get much profit, as there are but few of the new varieties that have come to stay. There are plenty of the older kinds that are good growers and yielders, and cheap to buy, such as Wilson, Crescent and Capt. Jack in strawberries; Marlboro and Cuthbert in red raspberries; Tyler and Gregg in black caps; Raby Castle and Cherry for red currants; Black Naples for black currants; Houghton Seedling and Downing for gooseberries; Snyder, Taylor and Western Triumph for blackberries. The next winter after planting cover over the strawberries with some rather coarse manure as a mulch, if ground is not too rich, as free from weed seeds as possible, or with straw, if ground is very rich, but do not put on enough to smother plants. In the spring rake off between rows and pull out all grass and weeds. After picking cultivate and hoe well, and keep clean for another crop. The raspberries and currants should have a good fork full of manure on each side of plant in the fall and be kept clean every season, if the best results are wished, as the rows will soon become filled with grass and weeds, and of course the fruit will become small and bushes stunted. The whole cost for plants for half an acre should not be over \$20 to \$25 at the present price of plants, and, with the exception of the strawberries, will last for years by proper attention. I wish to add, in conclusion, that for fear that my writings may be taken for those of a novice, that I have grown all kinds of fruit for market for nearly twenty years, and have had considerable experience during that time in the newer varieties of fruits coming out every year, both in small fruits and the larger, having over 10,000 pear and plum trees in orchard, nearly forty varieties of plums, some thirty varieties pears, over forty-five varieties grapes in seventeen acres. I have always tried to give information that would be of benefit to those who are not in fruit growing, and have induced a great number to plant who thought they could not grow fruit at all. Being a grower, and not in the nursery business, I have no axe to grind. I will follow this with other subjects of interest to all who wish to grow fruit in a small or large way. Any person wishing information by mail will please enclose stamps for reply.

Economy of labor and of resources is the first great requisite in running a farm as though it had a business head. Let us have renewed efforts to make the farm profitable, and not stop here, for we should not be contented till we have made it beautiful, and a healthful place in which to live.

When a horse is taken from the stable he should not be allowed to go at a fast pace for the first mile or so. The horse's stomach is generally full then, and driving may injure his wind and bring on heaves.

Why Some Apple Orchards do not Bear.

BY F. G. H. PATTISON.

There are a good many apple orchards throughout Ontario which have attained full bearing age and which appear healthy, and yet either do not bear at all, or, at all events, do not produce the crops they should. To enumerate some of the causes of this non-production is the object of this article. And first of all, we may take it as a general rule that if the climate and soil be suitable, and the tree of a good variety, it must bear if rightly treated, just as grass or grain must grow under favorable conditions; if it does not, it is the treatment that is at fault, and this, by means of a little patient experimenting, combined with observation, can generally be amended without resorting to the heroic treatment of tearing the trees out by the roots, a practice which, I am very sorry to say, has been adopted to some extent in this locality.

Undoubtedly the leading cause for the non-productiveness of apple orchards is starvation. The land on which they are grown is cropped to death, and in addition, little or no manure is applied to it. It is not too much to say that the average farmer who plants out an apple orchard treats the land afterwards precisely as if that orchard did not exist, and from the beginning to the end of its unhappy life takes wheat, rye, oat and other crops off the land, till the wonder is, not that the trees do not bear, but that they live at all. Now, the fruit crop ought to be the main thing to be looked for from an orchard, and to that all other crops should be subservient.

The land cannot produce fruit and in addition wheat, oats, or rye; consequently, if a crop of these be taken off, it is simply done at the expense of the trees. A leading American horticulturist has given it out as his opinion that three crops of rye will ruin any orchard. This is undoubtedly true; but more than that, it ought to be understood by farmers and others possessing apple orchards, that *never*, from the time of planting till the trees are past bearing age, should a *single* crop of either wheat, oats or rye be taken off the land under any circumstances.

Are we then to lose the use of the land for any other crop from the time of planting till the trees become old? By no means. There are several crops that can be taken off the land, not only without a bad, but actually with a good effect, particularly if manure be freely applied as well. For example, roots of any kind, corn, peas, buckwheat and hay may be grown in rotation. Barley may also be used as a crop to seed down with, and after the trees have attained some size the orchard may be laid down to pasture for a year or two, probably for hogs or sheep. But this treatment must be accompanied with plenty of manure, which should be applied every year in moderate quantities; if not that, then every second year in large quantities, sometimes as a top dressing, and sometimes to be ploughed under. With this, as with most other farm crops, little or no manure means few or no apples, plenty manure, plenty apples. If manure is not available, then by all means give clean cultivation, and do not attempt to take any other crop off the land, otherwise I think a rotation is best.

There are some orchards, however, which are not overcropped and which are well manured and which still do not bear as they should.