

GARDEN ORCHARD.

Pruning the Grape.

By Linus Woolverton.

There is, perhaps, no branch of work in the fruit garden or orchard more important than pruning. Of late very great stress has been laid upon fertilizing, cultivating, spraying and cover crops, but, after thirty years' experience in orcharding, the writer has concluded that judicious pruning is



Fig. 1.—Fuller System.

quite as essential to a first-class crop of fruit as any of them.

The time was when we left the grapevine untouched by the shears, allowing it to spread over its trellis just according to its own sweet will. Sometimes it would climb to the top of one of our oldest apple trees, thirty feet from the ground, and oh! the perilous climbs we boys used to undertake to reach those coveted purple bunches,



Fig. 2.—Fuller System.

with heavy bloom, which hung out in the sunshine. But such neglect soon resulted in thick, tangled masses of vine which produced very little good fruit.

Now this is quite changed on the old homestead, for we have learned some lessons in pruning. No rambling vines are now allowed to climb over fences and trees, but taught, instead, to fol-

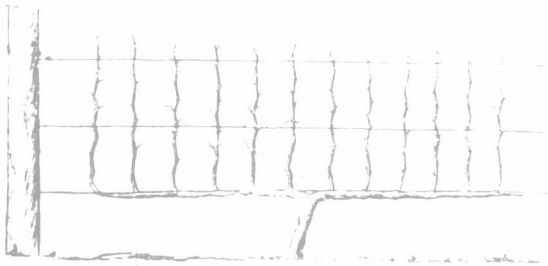


Fig. 3.—Fuller System.

low certain horizontal and perpendicular lines upon rows of wire trellises, with every vine cut back annually to a limited number of buds, producing an annual crop of fine fruit.

GENERAL PRINCIPLES.

One great object to be kept in view in pruning the grape is the limitation of the number of fruit



Fig. 4.—Fuller System.

buds, so that the vine may not become weakened by overbearing, and so that every bunch may be large and fine. Some vigorous growers, like the Concord, will carry more fruit to the foot of wood than others, like the Wilder, and therefore need shorter pruning.

Many people look upon the pruning of a vineyard as a mysterious process, and are easily imposed upon by travelling pruners who talk wisely, but often work injury to the vineyard, and charge extortionate wages. Anybody can prune with intelligence if he understands that all the fruit is borne in a few clusters near the base of the growing shoots of the season, which spring from the wood of last year's growth. Knowing this underlying fact, it is evident that the less of last year's growth that remains after the annual pruning, the fewer fruit clusters will be formed. It is not possible, just here, to give a definite rule as to how many buds should be left on a vine, because, owing to soil conditions and varieties, shorter or longer pruning may be found necessary. A little observation and little experience in the work will lead each grower to prune his own vineyard far more judiciously than any so-called professional can do it for him.

METHODS.

Three systems of pruning the grape are practiced in Ontario, each of which has its advocates, viz., the Fuller, the Fan, and the Kniffen.

1. The Fuller System.—This method was adopted many years ago by the writer, in whose opinion it makes a more uniformly symmetrical and

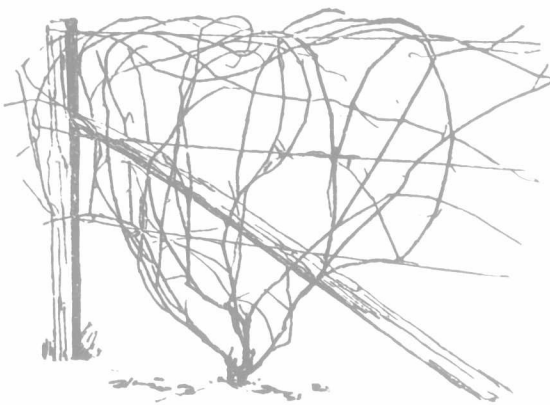


Fig. 5.—Fan-trained Concord.

presentable vineyard, when carefully followed out, than any other. The old wood is low down on the bottom wire, and only the young shoots are tied upon the upper two wires.

The Fuller system of pruning the grape is especially desirable for northern latitudes, where it is necessary to lay down the vines for winter protection. The accompanying illustrations will help the novice in grape pruning to understand the method, so that he can put it in practice during the coming season, if he is planting a vineyard, or even a few vines in his garden.

Fig. 1 shows a vine at the end of the second season, with two canes grown which are to form

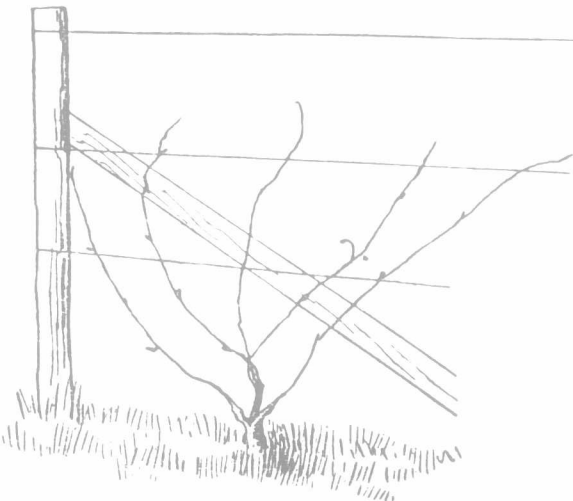


Fig. 6.—Fan System. The Vine Pruned.

the two horizontal arms. It is unnecessary to point out that, during the first season, one cane only had been allowed to grow, that it was cut back in the fall to within a foot or so of the ground, and that only these two canes were allowed to grow the second season.

At the end of the second year the two uprights are cut back, bent over and staked down, as in Fig. 2, ready to be covered for winter protection. In the spring these two canes are tied along the lower trellis wire, and during the growing season a shoot will spring up from each fruit bud.

At the end of the third season the vine will be somewhat as represented in Fig. 3, especially if care is taken to keep the young shoots tied up as they grow, and topped when they reach the upper wire. Then these shoots are each to be cut back to two buds, as shown in Fig. 4. From these, during the fourth season, two upright canes will grow up from every spur, each bearing fruit. At the end of the fourth season one of these canes is cut off close to the arm, and the other one is cut

down to a spur with two buds, and in this way the same process is repeated year after year.

2. The Fan System.—In this method the aim is to renew the wood each year, almost from the ground, thus disposing of all old wood as far as possible. Fig. 5 shows a Concord vine which has been trained in this way, and Fig. 6 the same after pruning and tying up the young shoots in place upon the wires. This system has been



Fig. 7.—Kniffen System. Vine Pruned.

found to bring the fruit so near the ground that it was often sandy, and was inconvenient for tying, so that most of our vineyardists who have adopted it, allow the old wood to climb up a little higher on the wires each year, until very ugly stubs result, which are unsightly, as shown in Fig. 6, which is a photograph of a vine growing in a vineyard in the Niagara district.

3. The Kniffen System.—For southern parts of the Province, where grapevines do not need to be laid down in the fall for winter protection, there is no method so simple, so economical, and consequently so desirable as the Kniffen. It is



Fig. 8.—Kniffen System.

very generally adopted about St. Catharines, where some large vineyards are pruned in this way.

After the details given for shaping the vines and growing the arms in the Fuller system, we need not give details for the Kniffen, because the same principles apply, if we simply point out the chief destructive feature, which is that the horizontal arms are trained along the top wire instead of along the bottom one, and that young shoots from these arms are allowed to hang down as they grow, thus saving much labor in summer tying, which is necessary in training by the Fuller method. In practice, most vineyardists train two additional horizontal arms on the next wire below the top, thus having four arms to each vine instead of two, claiming that they get more fruit in this way. From these four arms the young shoots grow as they please during the summer, as shown in Fig. 8. There is economy in wire, as well as labor, in this method, for two wires only are required, instead of three, as in the Fuller and Fan systems. In many vineyards an improvement in the training is made by growing a separate cane from near the ground to each wire, which ensures a more even distribution of growth and of fruit than where the four arms are all grown from the same upright cane, as is shown in the illustration.

THE TIME TO PRUNE.

The question, "When shall I prune my vineyard?" is a frequent one, and may be fairly well answered with Peter Pruning Knife's old adage, "Prune when your knife is sharp," only, of course, the grape shears must be substituted for the pruning knife.

Much summer pruning of the grape, however, is not advisable, for the foliage is the lungs of the vine, and in them the sap is enriched to sweeten and mature the fruit.

Barring this exception, the rule holds good, and the pruning may be done any time after the grape harvest, until growth begins in the following year.

This winter has been an exceptional one for pruning, and already many vineyards are pruned ready for tying, and the rubbish cleared and burned, which is a great advantage when it comes to the hurry and rush of spring work on a fruit farm.

I beg to acknowledge receipt of premium Knife sent me, and am much pleased with it. Am also much pleased with your excellent paper, and would not be without it. F. A. DORLAND, Northumberland Co., Ont.