

will naturally droop over the side wires, and the tendrils will fasten themselves to these wires. As soon as the grapes have set the shoots are pinched off about three buds beyond the last bunch of fruit. During the second season the grower must work to get two new shoots to put out as near as possible to the original trunk; these form the bearing wood for the next crop. As soon as these shoots have been secured all others are kept off, and these are induced to make as strong a growth as possible.

At pruning time the canes which bore this year's crop are cut away, leaving the two new canes for the next crop. These are left with more bearing wood the next year, and as the vine becomes stronger two other canes can be left, making four arms to produce the fruit crop, but Mr. Munson believes no more than four canes should be left.

The advantages of this system, as explained by the speaker, are that the grapes are borne high from the ground, with foliage above to protect from the sun; there is no growth next to the ground to interfere with circulation of air, so there is less danger from rot. The width of the growth of the vines is horizontal, rather than perpendicular, as in the case of the old-fashioned trellis, thus offering less resistance to the wind, and the vines will never blow down. The fruit is suspended from the side wires, where it can be sprayed very easily, and it is also accessible at picking time. The labor of tying up the vines is reduced to the minimum; only one tie is made for each of the bearing canes left at pruning time. These canes are stretched along the middle wire, as stated, and are carried around the wire, so that only one tie is made at the end of each cane. No tying is necessary for the side wires; they are simply to support the bearing shoots, and the tendrils from the new growth will hold them very tight. Still another advantage of this method of training and this form of trellis is found in cold climates, where it is necessary to lay vines down in winter. Under this system the old wood is all cut away, except the upright trunk, and the canes to be left are shortened in. It is an easy matter, therefore, with no low wires to interfere, to lay this trunk down and cover with earth.

Fall Pruning of Vines and Bush Fruits.

As soon as the leaves are off in the autumn much of the pruning of vines and bush fruits may be done to better advantage than by leaving it till next spring. Much, of course, depends upon the locality. In southern sections, where no winter protection of vines and bushes is needed, the pruning may be left till some convenient time during the early spring, but in northern sections, where grapevines and berry bushes have to be laid down in the fall and covered with earth or other covering before winter sets in, it is advisable to do the pruning before such covering is necessary.

Currant and gooseberry bushes are so hardy that they need no winter protection, even in the north, and they leaf out so early in the spring that it is well to have them pruned in the fall. The best way to manage these is to grow them in the bush form, allowing about six canes to the bush. And as the best fruit is borne on wood not more than three years old, it is well to adopt a renewal system of pruning whereby one-third of the bush is renewed each year. This can be done by cutting out two of the oldest canes each year, and allowing two of the new canes to take their place. In this way the whole bush is renewed in three years. The ends of the new growth should be shortened in enough to keep the bush symmetrical.

Raspberries and blackberries have perennial roots but biennial canes; that is, the roots live through a number of years, but the canes die after fruiting at the end of the second season. Some kinds have more or less of an annual fruiting habit—that is, they bear fruit and die in one season. With such bushes the annual pruning consists in cutting out all the canes which have borne fruit. The new canes also should be thinned out, so as to leave only six or eight of the best canes to each bush; or, if the bushes are grown in the hedge-row instead of the hill system, the thinning should leave the canes six or eight inches apart in the row.

As to whether the tops of raspberry or blackberry bushes should be headed back in the fall, depends largely upon the locality. In sections where the canes do not kill back in the winter, they may be headed back in the fall; but where the canes have to be laid down and covered, or where they kill back more or less during the winter, it is best to leave the heading back till spring, when they can be cut back to sound wood. The height to which sound canes should be cut back varies from three to five feet, depending upon the vigor of the bush.

There are almost as many systems of training the grapevine as there are kinds of grapes, but for northern sections one of the low-arm renewal systems is best, as this facilitates the laying down and covering of the vines where that is necessary. In southern sections the Kniffen or

one of the high-arm systems is more convenient. Whatever method of training may be adopted, the main object of the annual pruning is to remove all superfluous wood and reduce the vine to just what is sufficient to bear a full crop of fruit. Thirty or forty buds are usually all that is necessary, and these should be evenly distributed over the vine.

H. L. HUTT.

Ontario Agricultural College, Guelph.

September Fruit Crop Report.

(Fruit Division, Dominion Department of Agriculture.)

With the exception of very high winds over Western Ontario, from the 21st to 24th, and locally elsewhere, the weather for the month of September was very favorable for the ripening and harvesting of fruit crops. Every kind has yielded to the full extent of the indications of the previous two months. The aggregate of first-class winter apples will be seriously cut down by the effects of the windstorms. Much of the fruit blown off will appear in barrels, graded No. 2. They will be free from scab, but with more wormy specimens than last year. Early varieties have been marketed at good prices, and few losses. Winter fruit is in excellent condition. It cannot be too strongly impressed upon shippers that the fruit should be packed as cold as possible, and never be allowed to touch the ground or remain unprotected in the open air.

The good indications for grapes throughout the season have been maintained. Prices and conditions have been satisfactory, though a few carloads suffered in Winnipeg from the unseasonably warm weather of the last week in September.

Very few pears have been exported, and the local markets have not been well supplied.

The situation in peaches is thus described by one of the largest wholesale dealers in Canadian fruit: "A

SPRAYING.

There are a few reports of apples being somewhat "russeted" as the result of spraying. Fortunately, this is not considered a serious defect by buyers, who appear to look upon "russeting" as an indication of good keeping qualities. A correspondent, writing from Chatham, Ontario, after having examined the orchards of the Chatham Fruit-growers' Association, says: "It is evident that persistent spraying, along with proper pruning, cultivation and fertilization, goes a long way towards insuring an annual crop, as the orchards of this association prove." "The orchards that are sprayed, manured and worked have all the fruit," is the substance of many comments by correspondents.

The apple scab is quite prevalent, but growers are getting more confidence in spraying, and where this operation is properly performed it is no unusual thing to get 80 or 90 per cent. of the fruit clean. Over fifteen different species of insects have been reported damaging the orchards more or less seriously. The codlin moth is much more prevalent than last year, and with the usual winter conditions it may be expected that next year its depredations will be still more marked. Every precaution should be taken, in the way of clearing up rubbish and keeping the rough bark off the trees, and otherwise destroying the winter protection of the larvae of this insect. Four sprayings of Bordeaux mixture and Paris green would have been an effective remedy for the fungous diseases and insects that commit nine-tenths of the ravages in the orchard.

REPORT OF DOMINION FRUIT INSPECTORS AT MONTREAL.

During the month of September a very large quantity of immature fruit was exported, the trade in this class of apples being stimulated, no doubt, by the high prices prevailing in England. This was nearly all marked XX, but a few lots were marked XXX, or No. 1, and as a consequence shippers so making their barrels were prosecuted under the Fruit Marks Act: seven convictions for this crime have been reported. Closely allied to this is the shipping of winter varieties months before they should be placed in the hands of the consumers.

Eight-hoop barrels are coming into common use. The quality of the staves and the finish of the make is better than in former years.

Early in the month many shipments were carefully tested, and showed a temperature in the interior of the barrels from five to twenty degrees above the outside air. Even when shipped in cold storage, such consignments could not be expected to reach the British markets in good order.

FOREIGN CROPS AND MARKETS.

The foreign reports continue to indicate a shortage in apples in France, Belgium and Germany, as well as in Great Britain. The latest reports of the United States Department of Agriculture show no improvement in the apple crop. Everywhere it is reported light.

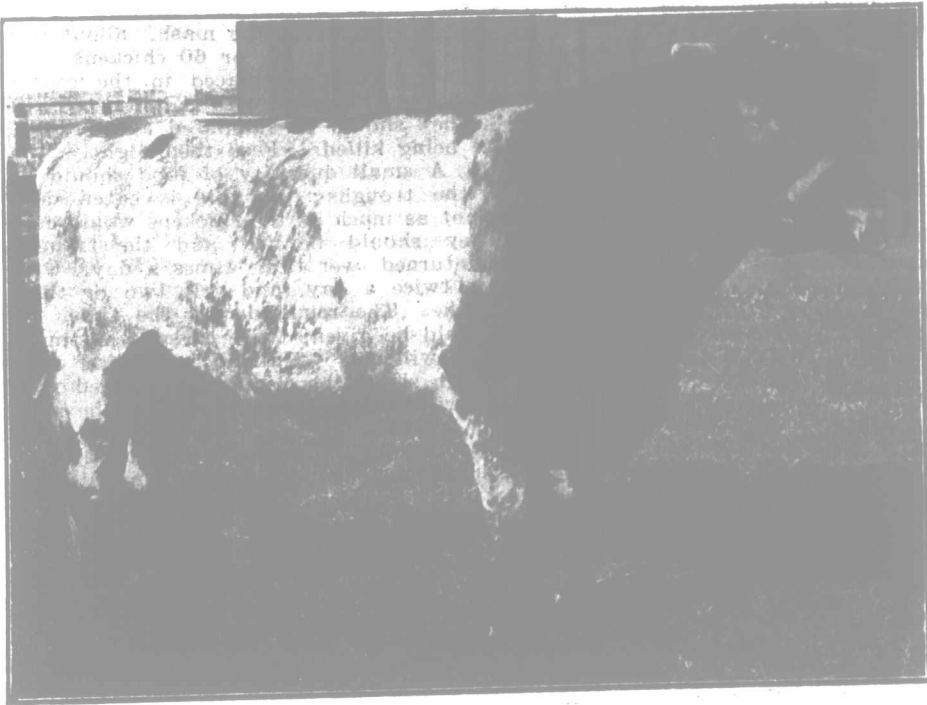
A large quantity of cider apples is going forward from Halifax to French firms, for which a very small price is paid.

WINDSTORMS.

A reference was made in the August fruit-crop report to the probability of September windstorms. These windstorms occurred again this year with unusual severity, and will account probably for a loss of from 10 to 20 per cent. of No. 1 apples. The loss is so serious that the question of protection from windstorms becomes a very pressing one. This protection may be given partly in the form of wind-breaks of evergreen or other suitable trees, and partly in the manner of training and pruning the trees so that the wind has the least possible effect upon the trees. A. McNEILL, Chief, Fruit Division.

Strawberry-runner Cutter.

Mr. Robert Wheeler, Tecumseh, Okla., describes in the Western Fruit-grower a tool he has devised to cut strawberry runners. He says: "I bought a light steel hoe blade, ten inches wide and four inches deep. I had a blacksmith heat the shank and straighten it, so that the hoe blade stands in line with the handle, like a grass edger. I then sharpen the blade and cut the handle off, so as to leave the tool about four and a half feet long. I can cut runners very fast with it and do it well."



Blythorne Ruler = 52236 =.

Yearling Shorthorn bull. A prizewinner at Toronto and London Exhibitions, 1905. Owned by Mr. E. C. Attrill, Goderich, Ont. To be sold at Mr. Attrill's dispersion sale on the Western Fair Grounds, London, Ont., November 2nd.

newspaper report, emanating from Toronto at the beginning of the peach season, asserted that there was an enormous crop of peaches, and, notwithstanding the official reports, this view of the crop conditions was accepted by the general public. The result has been that the public have been waiting for the cheap peaches. Sales have been much smaller than in previous years, and many people, who would have been willing to pay the not exorbitant price now asked for peaches, have waited so long that it is doubtful whether they will be supplied at all. Such reports are detrimental, alike to the producer and consumer. Only a few designing dealers can gain anything by them." The proportion of No. 2 peaches is much larger than usual.

PRICES AND MARKETING.

A very wide range of prices is noticeable. As low as 75c. per barrel for apples on the trees is reported, and as high as \$2.00 per barrel. The average price was about \$1.25 on the trees at the first of the month, and rising until later prices are reported at \$1.50 per barrel. Growers are offered for barrelled apples in Nova Scotia \$2.50 to \$2.75 for Gravensteins, and \$3.00 for Ribstones, Blenheim and Kings.

The need of a better system of marketing fruit is shown by the fact that, notwithstanding the short supply, gluts have been reported in some markets, with a shortage in others equally accessible. A number of correspondents report a surplus of early fruit, for which, however, there was an ample market, unless for want of better distributive methods. The co-operative selling associations in Western Ontario report good sales, and a great increase in the economy and ease of harvesting and selling. The Forest (Ont.) association has sold its entire pack (aggregating some 7,000 barrels) to an English firm.