the night is lurid in the track of the fell destroyer. The grass is burned to the roots; haystacks and settlers' homes are destroyed; and many a man finds at night that his wealth of the morning has disappeared in the smoke which still hangs above the horizon.

Self preservation is a law of nature, and a higher civilization bids us guard the rights of our neighbors as closely as we guard our own. Laws may be enacted to prevent wilful carelessness on the part of individuals, or the culpable negligence of the railway companies, but law is only the crystallized expression of the will of the people working toward a higher standard of existence, and it is pretty difficult to enforce a law which does not meet with public approval. The worst class of sinners in this connection is the railway companies. Proper fire guards necessitate the expenditure of money; this interferes with dividends, hence the hesitancy of those in command. Canadian railways have cost, in fires alone the full value of the constructed roads in Canada to-day. By all appearances they intend to keep on adding to the bill, but it is high time to call a halt and see that more stringent measures are enforced to prevent the recurrence of these devastating fires.

Horticulture and Forestry

Pruning Fruit Bushes.

By Linus Woolverton.

THE CURRANT.

The productiveness of the currant largely depends upon judicious annual pruning. The old neglected bushes in the corner of the garden may produce some fruit, but it is inferior in size, slow to pick and meagre in quantity. The fruit is borne on both old and young wood, but chiefly on short spurs near the base of the older canes, and some of the finest from buds near the base of one-year-old shoots. Knowing this habit of fruiting, the gardener will be able to prune his bushes with judgement, seeking always to have plenty of young wood, and a fair proportion of the old.

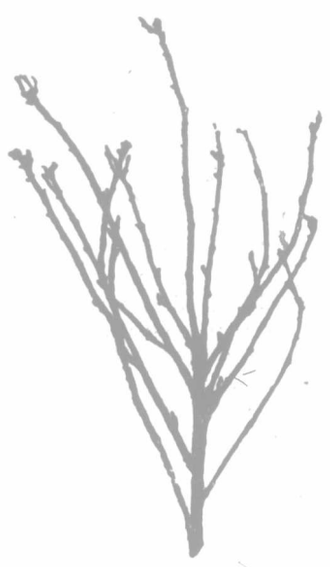

Fig. 1—Natural growth of the currant.

Fig. 2.

The cuttings made in pruning the currant may be utilized in propagation, and that with such ease that any farmer should practice it when he wishes to enlarge his plantation. The writer has used hundreds of cuttings, many of them only eight or ten inches in length, buried them, butts upward in sandy soil until spring, then planted them so as to leave only one or two buds above ground, firmly packing the earth about them, and had nearly every one grow.

The Tree Form.—For the small, highly-cultivated garden, where only a few symmetrical bushes are desired, the tree form is certainly the most ornamental. For this style of bush, cuttings need to be made 12 or 15 inches in length, and planted about six inches deep. These long cuttings need to have their buds removed, excepting three or four at the top. These buds will make a few inches of growth the first summer, and in the fall may be cut back to two buds each. From each of these, two shoots will be produced the next season, thus forming a bush with a clean upright stem and six branches. These shoots should again be cut back each year (at the winter pruning) to five or six inches in length, being careful to cut to an outward bud in order to encourage an outward growth. This method of training will make each bush resemble a pretty little tree, and render cultivation easy.

The objection to the tree form of pruning the currant is the prevalence in Canada of the currant borer. The moth deposits her egg somewhere

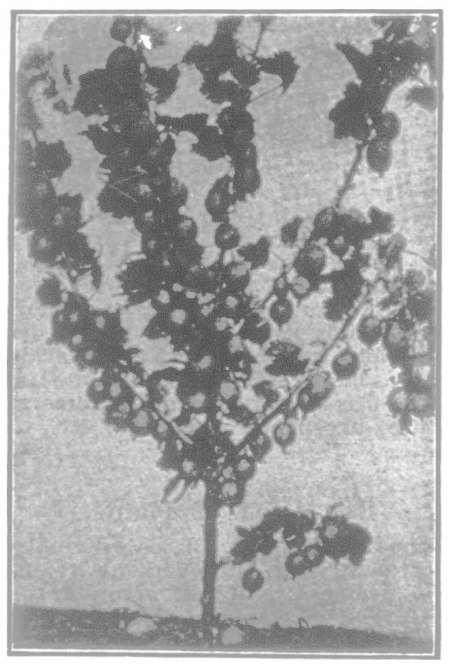

Fig. 3—Gooseberry bush — tree form.

along the stalk, and it soon hatches into a white grub and eats its way into the pith, where it burrows up and down, forming a channel several inches in length. Now, as soon as the gardener detects the presence of this borer, the affected part must be cut out and burned, along with its inhabitant; and, if the bush is tree form and the little trunk is affected, the remedy would be the destruction of the whole plant. Another objection to the tree form especially in western Canada is its greater liability to damage from wind storms, from the weight of snow, and its more exposed position to severe frosts.

Bush Form.—In the commercial plantation where the currant is grown for profit, the bush form of training is preferable. Often an old cane becomes unproductive and needs renewing from a bud near the ground, or is broken, or is affected by the borer. It can then be cut down near to the ground, and a new stalk grown up to take its place. As a rule, it seems best to renew a few canes each year, and to manage so that no cane shall remain longer than three or four years.

In planting cuttings for this method, no buds need removing, because the idea is to grow all shoots from the ground. Six or eight stems are allowed to grow up, and these will bear numerous fruit spurs. There is some difference of opinion over the shortening in of the young wood. Our practice has been to cut back about one half of it every year in the summer time, in order to encourage a better development of fruit spurs, but ordinarily a judicious thinning of the superfluous canes may be sufficient. The cultivation may be a little more troublesome, on account of the spreading habit of eight or ten sprawling stalks, but the loads of beautiful fruit repay the added labor.

Fig. 1 shows the natural growth upon one of the stalks of a currant bush, and Fig. 2 the same spur pruned, leaving the principal fruit buds near the base of each, so as to encourage young wood for the succeeding year. These directions apply to the white and red currants.

The black currants need a little different treatment, because the fruit is borne on one-year-old wood. Spurring, therefore, would remove the season's crop. Instead, the old wood that has produced fruit needs to be thinned out, and the new growth allowed to remain.

In this method five or six main branches only are permitted to grow, and shortened in to produce branchlets. These are annually cut back to two or three buds each. This method is much practiced in Old Country gardens, and some bushes trained in this way have reached a height of sixteen feet, and lived to nearly fifty years of age.

For the commercial plantations, however, the bush form is the one commonly adopted in Canada with from six to eight main stalks growing from the ground.

THE GOOSEBERRY.

There is no bush fruit which more needs the pruning shears than the gooseberry. Everybody knows, to his cost, the difficulty of gathering the fruit off a bush that has not been pruned, and which has become, in consequence, a tangled thicket.

The fruit is borne on all parts of the bush, except upon the very old wood, and the one-year shoots. The latter must be preserved to take the place of the former, which needs to be removed after two or three years fruiting. The bush must be well thinned of this old wood each year, and if room for branching remains, the vigorous young shoots may be cut back with judgement.

The tree form is often practiced in training the gooseberry, as shown in our illustration, Fig. 3.

Some Information re Native Plants, Fruits and Shrubs.

EDITOR FARMER'S ADVOCATE:

I have been interested in reading the letter from R. T. Rowley Noyes on fruit raising in Sask., also the answers by Prof. N. E. Hansen of Dakota. Perhaps some record of our experience along that line during twenty three years of residence in Sask. will be of some use to Mr. Rowley.

As to his first paragraphs: we have the same kinds of wild fruits here which Mr. Rowley mentions, also a few others which were in small quantities when we first came, but were not very important. The "high bush cranberry" with which you confounded the "Saskatoon" is an altogether different plant It belongs to the same plant as the honeysuckle, the Viburnum species. It usually grows on low grounds, has bright red fruit about the size of a red currant, has a flat, large seed, is sour, and of no use in the raw state; when cooked till soft and then strained the juice makes a fine jelly and even quite an edible preserve providing sugar is plentiful.

For a number of our first years, before cattle destroyed our valley bushes, the Saskatoon was our most useful fruit. It is a food in itself and requires so little sugar whether used in a raw state or as table sauce or for pies. They are so easily canned in self seelers for winter use, or, as we did before we had many jars, just dried and cooked as required. It is easily transplanted and if set in ground well prepared, quickly repays all the trouble. The better one works and prepares ground for fruit, and the more it is cultivated afterwards, the better are the results. As for the birds, plant enough of every kind of fruit so you can spare some for the birds who are your best friends in destroying the pestilent insects.

No. 2. Raspberries: Our wild raspberries are certainly good and fruit well in ravines along our valleys. We tried cultivating them but so far without much success. The bushes grow fairly well but the fruit does not come to perfection, having only, as it were, half the berry formed. Our soil is light and it may be, we have not discovered the right treatment. Our garden raspberry we succeed with without much trouble. We have both the Cuthbert and the Turner. They bear fruit both early and late and quantities of it.

No. 3. Strawberries: Our wild strawberries are delicious as to flavor and in some seasons pretty plentiful. I must say though that one requires a good stock of patience and endurance to gather many. The average woman who does her own work in the forepart of the day and then for recreation walks half a mile or more to a strawberry patch, gets down on her knees and fights with sun and mosquitoes for enough for a family tea, earns them without the least doubt. Very few children can or will stand it at all, and I think it is a species of cruelty to ask them to stand it. Much better, buy a few plants, and spend two days preparing a piece of ground say, about six feet wide and two rods in length. Send to some good horticulturist for a hundred plants of either Clyde, Senator Dunlop or Lovett's Early. Get them early in the spring, plant at once and keep them well cultivated, then see if your time and strength are not well rewarded. As for Mr. Hansen's ideal of a strawberry which will stand 40° below zero without cover, his ideal may be well enough when he materializes it. My idea is to mulch well. It is very little trouble to cover with straw in the fall and rake it off in the spring, to find your plants all looking so nice and green without having lost apparently one leaf all winter.

No. 4. Cherries: The small red (pin) cherry is a pretty tree if transplanted, full of bright green leaves and lovely white blossoms in the spring, and the fruit when cooked well and strained makes good jelly, otherwise is no use. The choke-cherry grows readily from seed, and if planted pretty thickly along a furrow, makes in five or six years a beautiful hedge; not a hedge which will answer for a fence but ornamental and a thing of rare beauty when covered with its clusters of spring blossoms and afterwards with its rich clusters of fruit. We used the fruit quite a lot during our first years here, rubbing the pulp through a colander and making a sort of jam with sugar but I could not recommend it as