

remaining crop was threshed, and sown as improved seed.

This process of selecting seed from the breeding plot each year is the fundamental principle of the Canadian Seed-growers' Association's method, and, I think, cannot but commend itself to all. In this process we develop particular strains, prevent the mixing of grains, as all breeding plots are hand-selected seed. We have found the weight per bushel of measured grain has increased in some cases from fifteen to twenty per cent. in the past seven years.

I find that this system is a paying proposition, not only because of an increased yield, but from the fact that the demand is steadily increasing for seed grown from hand-selected stock. It adds interest to our general farm work, which is in itself a strong argument in favor of this system.

DUNCAN CARMICHAEL.

Elgin Co., Ont.

[Special interest attaches to the foregoing article on seed selection, by reason of the fact that Mr. Carmichael last month, for the third time, won the special Hodson trophy at the Ontario Winter Fair for the most creditable showing of selected seed.—Editor.]

Trees as Fence Posts.

What kind of trees are best to set out to make fence-posts along a road? Does the Agricultural College at Guelph sell any special kind of tree for such purposes?

A. N. B.

Ans.—There are several trees which are used for live fence-posts on permanent fence lines. A common tree used is the sugar maple, but it requires good soil, and is a slow grower. Another tree recommended is the Carolina poplar, which is the best of our poplars, and a rapid grower on almost any soil. In the vicinity of Dutton, whence this inquiry comes, the hardy catalpa would prove satisfactory, if placed in good soil.

The Forestry Department at Guelph does not supply trees suitable for work of this kind. Circulars describing the nature of the forest-tree distribution may be had upon application to the Forestry Department, O. A. C., Guelph, and Bulletin 155, to be had at Agricultural Department, Parliament Buildings, Toronto, describes the use of trees for fence lines as follows:

"The question of securing fence posts at a reasonable rate, and their short life after being placed in the ground, is a problem confronting the agriculturist in Ontario. One solution of the problem may be found in planting trees along permanent fences. In a short time it will be possible to attach the wires to these trees.

"The trees can be planted every sixteen feet, or even every eight feet, as the owner desires. Strong, vigorous plants should be chosen for such work, and in the case of using evergreens, transplants should be used, as the fence lines are frequently filled with dense grass and weeds, which will endanger the young plant. More attention can be given the making of planting holes and the actual planting than in the case of waste-land planting. Where a rail fence now exists, and there is no chance to cultivate, the planting hole should be made by cutting away a large sod, about two feet square. Occasionally it may be practical to cultivate a strip four to six feet wide along a fence which can be moved a few feet after the trees have grown. Preparation of this strip by summer-fallowing will give results in future tree-growth which will repay the effort. Whether planting is done in planting holes or on a prepared strip, future cultivation will give best results. This cultivation should be carried on for two years, at least—longer will pay—until the trees have become well established. It will be an advantage to mulch the trees with grass or old manure. The trees should be inspected during the summer, to see that weeds, etc., do not overshadow them. In case the owner does not want large trees along cultivated fields, the first planting can be done every sixteen feet, and a few years later trees can be planted between. When the first trees become too large, they can be cut off the height of a common fence post, and later the fence can be attached to the younger generation of trees, as the older ones decay.

"The choice of species for this work must be given some consideration. The fastest-growing species will be box elder, hardy catalpa and black locust. In the southern portions of the Province, and in the best classes of fresh, moist soils, hardy catalpa may prove valuable for this purpose. Black locust will grow on the poorest of locations, and will be of more general value than hardy catalpa. Sugar maple may be employed in this work, although the growth will be slower than of the preceding species, and it requires very good soil. Some may desire to plant nut-producing trees, so that a return may be had from nut crops. Black walnut, shagbark hickory and chestnut would be the most valuable in this case. The chestnut would grow on the lighter soils, while the black walnut should be planted in good rich soil. If evergreens are desired, Norway spruce, white spruce, larch and arbor vitae will give best results. The arbor vitae

should be placed in moist soil, while larch will stand dry, poor locations.

"In placing wire on trees, care should be taken not to injure the tree more than necessary. The cut shows two methods commonly practiced. Where the strip of wood is used in which to place staples, the tree gradually forces the strip over the head of the nail, and in time it may be necessary to put in new nails. As a rule, large bolts or heavy spikes are used to fasten this strip to the tree. The use of such large fastenings is unnecessary, and usually a much smaller nail will hold just as well. For an inch-and-a-half strip, two-and-a-half-inch nails are sufficiently large."

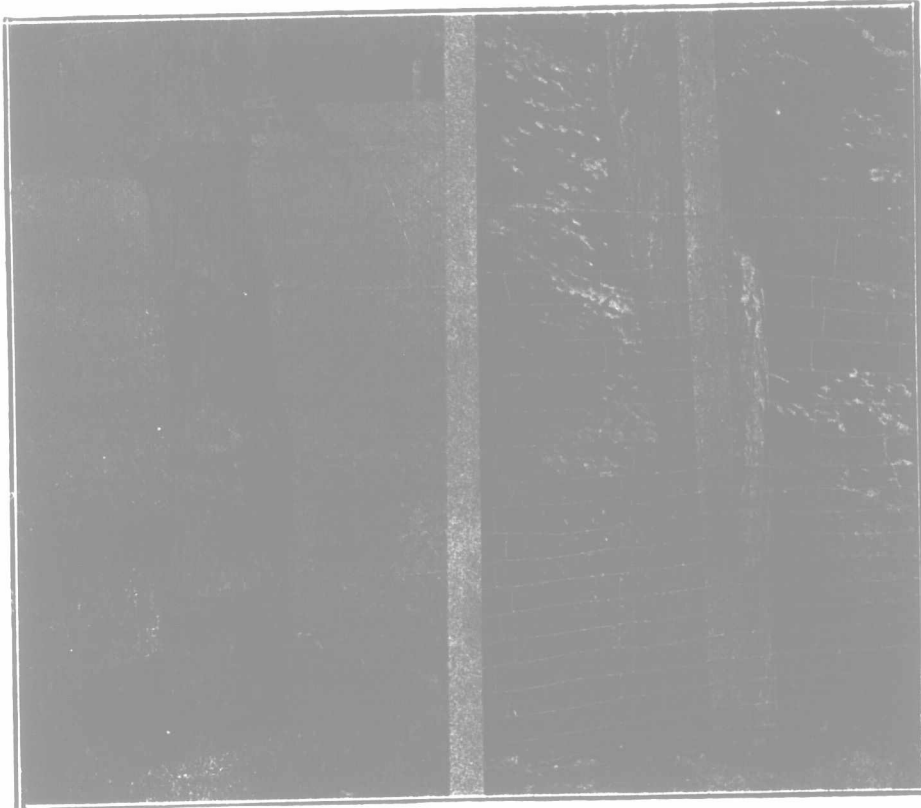
Wheat from Englehart.

If products are reliable testimony to the agricultural excellence of a country, then the pre-eminence of New Ontario as a desirable farming country may be readily established. "The Farmer's Advocate" has just received two excellent samples of hard spring wheat grown near Englehart. The seed was of Manitoba and Manitoba Goose varieties; one lot was sown April 5th, and harvested August 8th; the other was sown April 28th, and harvested August 29th. Wm. Schell, on whose farm the wheat was grown, writes that he had excellent crops of both oats and peas, the peavines growing twelve feet long, and being well podded. Though the far-off fields of the West look green, surely the nearer lands of New Ontario must appeal to those seeking new lands.

THE DAIRY

Succulent Food for Dairy Cows.

We know that cows usually give the largest amount of milk when they are in good pasture. Their chief feed is then green grass. This would indicate that such feed is better for milk produc-



Proper and Improper Method of Attaching Wire to Trees.

tion than are the dry feeds fed in winter. Green feed is more easily digested than is dry, coarse fodder, such as hay, fodder corn and corn stover. Moreover, less energy is required to digest it; it tends to keep the body and digestion in better condition, and it stimulates the appetite. We know this from our human experience. In the winter, when fresh vegetables are scarce, and we eat potatoes, bread and meat for a long time, we become tired of them and crave for something succulent, as fruit and green vegetables. In well-regulated homes, such food is supplied by canned or fresh vegetables and fruits. The barrel of apples in the cellar is not exceedingly valuable from the standpoint of amount of nourishment contained. The great value of apples is presumably due to the fact that they aid in toning up the whole system, and satisfy the craving for something succulent. In like manner, it pays to supply the live stock on the farm with something to take the place of the green grass they get in the summer. The whole ration need not be succulent material, but a portion of it is quite essential to best results. Just as an apple each day is good for a boy or girl, so are a few pounds of succulent feed (such as roots or silage) each day for farm animals.—[University Farm Press News, Minnesota.

GARDEN & ORCHARD.

A Successful Orchard.

Editor "The Farmer's Advocate":

In the years 1893 and 1895 I planted out 7½ acres of orchard, of the Spy, Baldwin and Ben Davis varieties (having besides and older one containing 1½ acres), and six years ago an acre of Ontarios were added, making in all about ten acres, containing 70 Spies, 110 Baldwins, 120 Ben Davis, 40 Ontarios, and a few other good varieties. The soil is a clay loam, with a north western slope, and well adapted for growing any kind of crop.

The land was plowed in the fall, and put in good shape the following spring. When planting the trees, the soil was pressed firmly and carefully around the roots, and about three inches of loose soil was left on the surface for a mulch. Only one tree died, and the rest grew vigorously. Root crops and corn were grown for a number of years; then land seeded down, and occasionally broken up as the condition of the trees required. At present the Ontarios and Ben Davis are under cultivation, but the Spies and Baldwins are in sod. The grass is cut with a mower about the end of June, and left on the ground for a mulch. The land is well fed, the trees show vigor, and produce large and handsome fruit.

The trees are pruned in the spring, with few exceptions, and have been sprayed regularly four times each season for many years.

The first spraying is done when the buds begin to swell; the second, just before the bloom appears; the third, immediately after the bloom falls, and the fourth two weeks later.

I use 2½ pounds of arsenate of lead, 4 pounds of bluestone, 8 pounds of fresh lime, to 45 gallons of water. Care is taken not to let the bluestone and lime mixture come together until each is well weakened with water. The lead is added any time, and mixing is done by turning the hose into the barrel and pumping.

In spraying after the bloom falls, I use the lead and water separately for the codling moth, and apply liberally, with a coarse spray and high pressure, and apply the Bordeaux mixture immediately after in a fine misty spray, just as much as sticks on without dripping. By this method I get about 98 to 98½ per cent. free from worms, and pretty free from spot.

In 1909 the fruit set very heavy, and I thinned out one-quarter of the crop. It gives less labor in the fall; the trees are less liable to break; there is a greater tendency to annual bearing, and decidedly more barrels of choice fruit. I also thinned last summer, wherever it was necessary, and I consider that if we are to grow a high percentage of choice fruit and keep in line with our Western American neighbors, this branch of orchard work must not be neglected. As the

fruit is picked it is put into barrels and drawn to the fruit-house—a large cement apartment under the barn, well ventilated and capable of accommodating immense quantities, where later the grading and packing is done. In 1907 this orchard produced 375 barrels; in 1908, 80 barrels; in 1909 over 500; and 1910, the apple crop being the greatest failure known in this district for many years, 460 barrels were taken to the fruit-house, out of which were packed 265 barrels of choice fruit of first and second grade; also 85 barrels of thirds were packed, which sold at a good price.

I pack my own apples, and prices realized are equal to those obtained by many of the best co-operative associations of Ontario.

In conclusion, the question may be asked, Why this crop last fall, when few people have enough for themselves? My own opinion is, the vigorous condition the orchard is in, and the thorough spraying it received.

KENNETH CAMERON.

Bruce Co., Ont.

Turn to our premium announcement on page 79 of this issue.