fillers in a permanent apple orchard; but, of course, the necessities of the individual case would determine this matter.

Pollenizing Spies-Scions-Tender Fruits.

Editor "The Farmer's Advocate":

My curiosity was aroused some years ago by observing the difference in pollenization of apple trees. I found, by observation, that some varieties were better for having been grown under the influence of other varieties. I found that apples may bloom well and produce no fruit, due to the fact, I was told, that the blossoms are imperfectly pollenized. This aroused my curiosity, and a study of the matter has directed my planting and handling young fruit trees different from some people's ideas.

I found Tolman Sweets, planted near Spies, to be beneficial to the Spies. I want some person to show me a Spy tree next to a Tolman that is not a good cropper. The only fault is it does not improve the color. I have seen a Spy a dark red from the influence of the Wagener. I have also seen Twenty-ounce Pippins influenced by the color of the King. The Ben Davis, a poor pollenizer, will be influenced in color by those varieties coming in contact with it. The questions I wish to ask are: Four years ago I planted about seven hundred apple trees. I placed them so that the varieties would be mixed, placing a Mann with a Spy, a Baldwin with an Ontario, and grafted Steel Red on most all Spy trees. This is a good pollenizer, but blooms much earlier than the Spy. Of last year's planting of four hundred trees, onehalf Spies, I intend to graft one limb on each tree with Tolman Sweet; 'also our planting of seven hundred trees of this year, nearly all Spies, with the exception of fillers.

Are we right in our idea of pollenization? Is the bearing of fruit affected by using buds or grafts taken from unbearing trees? Do you think we are too far north to grow cherries and peaches?. I might say we are two miles from Lake Huron. I heard an old settler state that he never saw fruit destroyed by frost here in spring, while, one mile farther from the lake it has been destroyed. This rule works the same in the fall-the farther you get from the lake, the more frost you get. It is very seldom our corn and potatoes are frozen before the first of November, and we get our share of moisture, which is a frost We have over twenty varieties of grapes all maturing well. Several reach orchards are being planted, one of 2,000 trees. more will be planted out this spring, one of 1,000 This belt of land will become valuable for fruit-growers are just beginning to realize its ad-The flavor of our Spies has been tested vantages. by the writer with that of Spies of other fruit districts, including the Western States and British Columbia, without finding a rival. When land here advances from fifty and seventy-five to two and three hundred dollars per acre, farmers will turn their attention to fruit-growing.

farms have changed hands, being sold to horti-

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Thousands of our subscribers have taken advantage of this Special Renewal Offer, but we want to see a great many more take advantage of it, and to this end are making the offer good till JANUARY 31st.

The offer is: For one new yearly subscription and your own renewal for 12 months we will accept \$2.00. For each new name in addition to the first one, we will accept from you \$1,00, the balance of 50c. being retained by you as commission. Or, if preferred, you may send in the new names, accompanied by the full subscription price of \$1.50 each (United States subscriptions \$2.50 per year) and have your choice of some of our splendid premiums.

6^^^^ culturists who are preparing to plant fruit trees in the spring. GEO LAITHWAITE. Huron Co., Ont.

Your observations in regard to the effect of the pollen of one variety of apple on the flowers of another are confirmed by others. Some varieties of apples are self-fertile, and do not require the pollen from other varieties to insure a good crop of fruit, but even with these the crop is probably better where several varieties are grown near one another. In the case of Northern Spy, McIntosh and other varieties of apples which are more or less self-sterile, at least in some parts of Canada, it is very important to have other varieties near which bloom at the same time, for, although bees will doubtless carry the pollen several miles (and it is important to have bees to insure quick pollination in unsettled weather), it is very desirable to have the different varieties comparatively close. Unfortunately, Northern Spy is a very late bloomer, and there are few good commercial varieties blooming at the same time to pollenize it. Tolman is one of the most reliable, but, as there is not a great demand for sweet apples, one cannot plant large quantities of this variety. your plan to be a good one, namely, of grafting a

limb on each Northern Spy tree to Tolman Sweet Cranberry Pippin, Westfield-Seek-no-Further, and Grimes' Golden, bloom at the same time as Northern Spy, also. American Golden Russet is usually a light cropper, but I have seen good crops where planted among other trees; the blooming season of it overlaps Northern Spy.

While it is more reasonable to take wood from bearing, rather than from young trees, for grafting, there is not sufficient evidence yet to show that there is a marked advantage in using wood from bearing trees, so far as time of fruiting is concerned, but there is a great advantage in using scions from bearing wood, in that one can take scions from trees which bear good crops of highlycolored apples, as there is a great difference in the yield of individual trees of the same variety.

Sour cherries should succeed well near Goderich, but we should advise planting peaches with caution far from the lake.

> W. T. MACOUN, Dominion Horticulturist.

THE FARM BULLETIN

Thousands of tons of potatoes from Ireland and Scotland have been imported to supply the shortage of last season's United States crop. come in burlap sacks containing 2 4-5 bushels each, and pay a duty of 25 cents per bushel.

To Prevent Lantern Glass Breaking.

Editor "The Farmer's Advocate"

In the December 14th issue of "The Farmer's Advocate," a subscriber asks about his lanternglass breaking. If you would kindly publish this letter, I am sure it would be a benefit to a good many readers. Lantern-glasses are generally broken by the intense heat being held in through improper ventilation. The heat from the blaze rising in the glass causes a circulation of air to pass upwards, entering through the perforated piece at the bottom, and passing out at the top By rimming out a row or two of the lantern. of the holes a little around the outside of the perforated base on which the glass rests, and also a row or two at the top of the lantern, just above the glass, it will allow a greater circulation of air to pass through the glass, which will keep it from becoming too warm. A little judgment must be used in drilling out the hole, for too much air circulation will cause the lantern to blow out in a W. J. LYCETT.

Durham Co., Ont.

Profit Is Not All.

Editor "The Farmer's Advocate"

I am a subscriber of your admirable paper, and gather many valuable hints from it re farming, but it strikes me at times that your statements are rather "couleur de rose," on the condition of the farmer and his family.

To come to business, where, may I ask you, is the profit to the farmer on feeding hogs, to be sold at the present price of \$5.75 per hundred on the hoof. What feed can he use to put a pound s ribs for be handled by the hired man?

In the matter of sweet corn for the canning factory, where is the profit, at \$7.00 per ton, after deducting the price for the preparation of the land, looking after the crop, pickling, and teaming the produce to the factory?

With regard to dairying, what can you say does the average cow yield in profit, when you have to feed her from five to six months under cover ?

Of course, we have big profits in hens whe eggs are 35 cents a dozen, but that is when the hens do not lay eggs.

From a business man's standpoint, taking the principal invested in 100 acres of good land, with barns and dwelling, which would usually be seven or eight thousand dollars, a hardworking farmer, with his horses, hired man, or men, his machinery or his stock in trade, should have a much larger percentage of profit than he does, for in nine cases out of ten he does not make more than decent wages, to say nothing of the profit he should make on the work done by his machinery, horses and men, besides the dividend that a business man would expect on his capital invested.

It galls me, sir, to read af the canner's and meat-packer's profits on watered stock, when I think of the drudgery the farmer has to submit to to fill the coffers of these gentlemen; but nevertheless, the stupidity of my brother farmer prevents him from taking any steps to make himself inderendent of the corporations who would make him

work for less than nothing. Pors the farmer ever stop to think what it costs him to produce his crop, that he could get six or seven per cent. on the capital he has invested in his farm, which would amount, in the majority of cases, to four or five hundred dollars a year, and does he realize that, in comparison



Several

Macdonald College Judging Team.

The first team to represent this College at the International Stock-judging Competition at Chicago, succeeding in winning the highest honors in competition with nine other colleges, including Manitoba and Ontario. Prof. Barton, trainer of the team, stands at the right.