

and early winter shipping is over. It should be put on the British market between that time and the arrival of the Tasmanian apples in the spring. It is less subject to fungus and codling moth than almost any other variety, and taken altogether I regard it as one of our most valuable sorts.

I am satisfied that if farmers would bestow the same care, skill and attention on their orchards as they do upon their stock (I mean, of course, the successful ones especially), cheese production and other kindred branches, they would find it just as profitable and pleasant as any branch of the noble art of agriculture.

#### Co-operative Experiments in Horticulture.

BY H. L. HUTT, B. S. A., SOUTHERND.

In a late issue of the *ADVOCATE* appeared an interesting article by A. M. Smith, St. Catharines, entitled, "Experimenting with New Fruits." Mr. Smith speaks of the great loss to the country annually from the planting of new and worthless varieties of fruits, and, as a remedy, recommends the establishment of experiment stations in the fruit growing districts. We agree with him as to the seriousness of the trouble, but have a remedy to suggest which is less expensive, and, we think, would be more effective. It is this: That the fruit growers of the Province co-operate in carrying on experiments in horticulture in the same way that the farmers are carrying on co-operative experiments in agriculture.

The farmers of the Province are not asking the Government to further assist them by establishing experiment stations, because this system of co-operative experiments is meeting their requirements more effectively than a dozen new experiment stations could do.

The work was first taken up by a few of the graduates of the Agricultural College, who formed what is known as the Ontario Agricultural and Experimental Union. Farmers interested in the work were invited to join them, with the result that last year there were reports received from successful experimenters in every county in the Province, with the single exception of the county of Russell; upwards of 5,000 plots being devoted to these co-operative tests.

This work is under the direction of the committee on agricultural experiments. Co-operative experiments are also being carried on in apiculture and horticulture. The reason why the work in horticulture has not assumed such proportions as that in agriculture, is due to the fact that the committee on horticultural experiments has not been so long in operation, and probably also that there are considerably fewer graduates of the College interested in horticulture compared with those interested in agriculture.

The experiments taken up by the horticultural committee so far have been principally with new varieties of potatoes and different methods of planting these. This year it is intended to extend the work. In addition to the experiments with potatoes, it has been arranged to undertake experiments with a few new varieties of strawberries and raspberries and different methods of cultivating these. To the fruit growers of the Province interested in any of these experiments we extend an invitation to join us. Mr. Elmer Lick, Oshawa, is Secretary of the Horticultural Committee, and will be pleased to receive applications from those wishing to carry on any one or more of the experiments. The plants and potatoes are sent free, postage or expressage paid. The supply being limited, it is furnished in the order in which the applications are received until it is exhausted. The extent to which the demand exceeds the supply will strengthen our request to the Government for an increased grant next year to carry on this work. Thus the fruit growers have it in their power to say to what extent and how soon this system of horticultural experimenting shall be developed, for the Government, appreciating the value of this work, has always shown a willingness to assist by increased grants as soon as the increased application for experiments has required it.

At the beginning I claimed for this system of experimenting that it is a cheaper and more effective way of obtaining the same results which Mr. Smith hopes to obtain by the establishment of experiment stations. I will try and substantiate these claims. That it is cheaper readily appears from the fact that the only cost connected with it is the purchase and distribution of the plants, and the publishing of results of experiments, all the work being done gratuitously. That it is more effective appears in many ways. In the first place, the co-operative system is a reality already in operation, and can easily be developed in a very short time. Experiment stations are merely a possibility over which the Government might deliberate for years before we, as fruit growers, would begin to realize any of our hopes. Nor could we blame the Government, for it would be a long time before public sentiment could be educated to support them in such an outlay. One station would probably have to be established at a time. Then there would probably be a wrangle about which district should have it first, while the others would have to wait for years till their turn came. By the co-operative plan, all districts may receive the benefits at once, and as soon as they apply for them. But, supposing we had an experiment station in each of the principal fruit districts of the Province, by the co-operative plan we might have a hundred, if not several hundred, experimenters in the same district, each experimenting with those fruits in which he is most particularly

interested. And a hundred experiments conducted by individual fruit growers would be of far greater value to any district than the same number of similar experiments conducted at an experiment station. There is that tendency in human nature to profit more by our own experience than by the experience of others. This co-operative system of experiment begets a spirit of experiment in the people instead of leaving such to the Government. And when such a spirit takes hold of a people, we find them discarding unprofitable methods and worthless varieties.

The Experimental Union is also one of the most effective means of distributing new varieties. The free distribution of material has always been an inducement to enlist experimenters. The Union has done more towards the introduction of improved varieties of grains, roots and fodders throughout the Province than all the other agencies combined. And what has been done in agriculture can be done in horticulture. Let us, then, avail ourselves of what the Government is already doing for us, then may we, with better grace, ask it to do more.

#### The Farmer's Garden.

BY ROBERT BARCLAY, BALMORAL, MAN.

*Peas.*—There are many varieties of this famous and most delicious vegetable. Every seedsman has what may be called his catalogue specialty, which very often takes the eye of many intending purchasers, and leads them astray as to what kind is most suitable for the climate, soil and seasons in their district. Now, what I want to say is this: Beware of adopting the advice contained in the many catalogues which are distributed all over, as there is not one in a hundred written with reference to this north-west country. After many years' trial of different kinds, I find Bliss' American Wonder beyond all comparison the best for either family or market purposes; it is far ahead of its much praised sister, Bliss' Everbearing; it is a surer and much heavier cropper, and really continues in bearing longer, carrying blossoms and pods right through the season until sharp frost sets in. It has many advantages over other sorts, being strong and thick in the stem, rarely, if ever, exceeding nine or ten inches in height, stools and branches out more than any other, matures, or is ready for the pot, under favorable weather, in six weeks from planting, and produces a fine sized, sweet, wrinkled pea which cannot be beat. The ground should be deeply tilled in the fall, and the best of well-rotted, short manure forked in; use no green or new dung, as it will invariably produce rust on the vines and ruin your crop, and will also encourage depredating insects. If you cannot get this done in the fall, top-dress your land and plow in the manure in the spring, harrow and rake the soil down finely. Sow the seed thinly, that is to say, two to three inches separate in rows one and a-half inches deep, and fifteen inches apart, and keep the Dutch hoe and rake at work between the drills, so as to cultivate and keep down the weeds until the plants meet each other. If the land is prepared in the fall, the first sowing should be done as soon as the thaw will admit of the drills being drawn, and successive ones every fortnight until first week in August; in this way I had magnificent peas in the end of last September, when prices were at their highest. If you must prepare the land in spring, get at it without delay, so soon as the frost leaves it sufficiently to get the plough in.

*Kidney or Wax Beans.*—The best soil for this class is undoubtedly a rich or loamy one, well cultivated and supplied with the oldest of good, short, stable manure, thoroughly dug in and well covered, as this plant suffers more easily from drought than many others. In sowing, cultivation, etc., apply the same treatment as for peas. I have been astonished in my travels to find so many people so totally ignorant as to how to make use of these beans in the green state, and, consequently, sowed their whole stock of seed at once, instead of in succession, and thereby having a continued supply of useful green pods throughout the season. For use, pull the beans when they are about two inches in length, cut in half-inch pieces, boil and pour the water off; then put in a good chunk of butter along with some pepper, stir these in thoroughly, and serve up one of the best vegetables known. Golden Wax is the best variety for using in the green, and White Marrowfat for ripening for winter use.

*Salsify or Vegetable Oyster.*—This is a much neglected article, I presume principally from the fact that its value or worth is little known. It is the best natural blood purifier and antidote there is for dyspepsia, and is very easily grown, if properly cared for, and well worth a place in every garden, even if it does take a little extra work. The land must be ploughed very deep and be of a rich and free nature, well manured, similar to that which produces good parsnips. Sow as early as possible in drills eighteen inches apart, and thin out your plants, leaving nine to ten inches between each. If the season is damp, apply plenty of wash or liquid manure. Keep well cultivated, and lift the roots whenever frost makes its appearance, as they are more susceptible of it than any other garden root. There are two or three different ways of cooking and serving up, but the easiest, simplest and best, in my opinion, is wash and scrape your roots clean, put them on with cold water and boil same as carrots, pour the water off and serve up with butter and milk sauce. See that you get new seed, as old will invariably give you horned roots.

*Jerusalem Artichokes.*—This is another vegetable which is much ignored through its value not being

known, and also on account of many believing that it is only good for hogs. This is wherein they make a big mistake, as no one can have a finer or more nutritious dish. Clean your roots, boil them like potatoes, and serve them up with butter and milk sauce. No rich soil is required—in fact, you get your roots from the nurserymen and plant them in spring in the shadiest and poorest soiled corner of your garden; scrape out the larger bulbs for use during the season and what you are going to keep over winter, leaving the smaller roots in the ground to supply the following year's crop.

*Tomatoes.*—I would recommend farmers especially not to dabble with too many varieties, but simply go in for two good ones, one large size, viz., Ruby, which is the earliest, heaviest cropper and most easily grown, and one small, viz., Yellow Plum, which really has, as yet, no equal in this country. Sow in seed pans or boxes in light, sandy, loamy soil, without manure, in the end of March or beginning of April, and when the plants throw out their third leaf, remove them to other boxes or a hotbed made up with a richer compost, and, when all fear of frost has gone, put out your plants in a well prepared plot, thoroughly manured, in rows three feet apart, with two feet between each plant. Keep well cultivated through the season, and give a plentiful supply of liquid manure.

#### Pruning Currants.

Is the pruning of the red currants altogether different from that of the black currants? Is spurring or cutting all the last year's growth close off the only true mode with the red currant, and, if so, will these spurs be the permanent basis for fruiting for years to come if the trees continue in good health? Will you kindly answer this in your valuable paper?

PRIVATE GARDEN.

ANSWERED BY W. W. HILBORN.

I think the best method of pruning red currants is to cut out all weak shoots of last season's growth and thin out the bush sufficiently to admit a good circulation of air, and shorten in, or cut back, all of last season's growth one-third to one-half. After the bush has grown for three to five years, begin to cut out the oldest wood and have new wood to take its place. In this way you continue to renew your bushes, and the wood is more healthy and productive of larger fruit. I would not on any account cut off all of last season's growth. The fruit is borne on wood two or more years old. A portion of every season's growth should be left to make the bearing wood of the future.

#### LEGAL QUESTIONS AND ANSWERS.

[Answers to legal questions of subscribers, by a practicing barrister and solicitor, are published for our subscribers free.]

Edward Burdett, St. John's, Winnipeg, asks:—I have a field of land in Kildonan, and at each corner adjoining is a house and premises, the owners keeping poultry and allowing them to run at large, much to my annoyance and loss, for they are continually doing me damage during the summer. As soon as the seed is sown they rove the land and scratch it out; during its growth they trample it down, and when ripe, or as soon as the grain forms again, take it. I want to compel the owners to keep their poultry up. Last year, after considerable damage was done, I gave notice in writing that poultry trespassing on my land would be shot; I shot several, leaving them on the ground untouched. Is this the proper mode and best way for the coming season? Your opinion will much oblige me.

Ans.—You have no right to shoot or destroy your neighbor's poultry. You may seize them while on your land and keep them, setting off the value of the chickens seized against the amount of loss and damage caused you, or you may sue your neighbor for damages.

George Wannacot asks:—If A holds a joint note made and signed by B, C, D; the note ran on three months after due; D then, in order to keep A quiet and content, gives A a note at the bank payable to A's order so many months after date, at so much per cent. per annum; the bank takes it; note is protested at bank and A is held liable for it. Before the note at the bank is due, C makes an assignment. Are B and D released by such joint notes, (A still holds joint notes), they never having been lifted. C gave his own personal note at bank. B is a married woman. Can she be held liable for her signature on joint note?

Ans.—B and D are not released on account of the assignment merely having been made by C. Whether there may not be other matters connected with the transaction which would release them does not appear clearly from your letter. There are several disconnected statements in the letter which we do not understand. Did A take D's note in payment and discharge of the joint note of B, C and D? What do you mean when you say C gave his own personal note in bank after saying that B, C and D gave a joint note? As to whether B, being a married woman, would be bound by the note depends on the nature of the transaction, and it would be necessary for us to have much fuller information on this point than is contained in your letter before saying whether she is liable or not.