

ing out fields have been brought out. All these may be applied on the general farms of the country. There are practical lessons for all in agriculture as it is carried on at our Government farms.

Co-operative Buying of Seeds.

Editor "The Farmer's Advocate":

I have just read with much interest, your article on page 1198 of the Oct. 17th number of "The Farmer's Advocate," in reference to Home Grown Roots, and wish to comment somewhat on it.

I have been for five years, Secretary of the Ottawa Branch of the Ontario Vegetable Growers' Association, and for three years a member of the executive of the Provincial Association, and as all know, our members are dependent for their success or failure, very largely on the quality of the seed they secure. We are aware that the bulk of the root crop seeds are procured from Europe, while the onions, corn, melons, cucumbers are chiefly bought in the U. S.

Now if there is anything we can learn about seeds, we are anxious to hear it, and we have been anxious for many years to get all the information we can get on this subject. Some of the information we have got tells that most of the Canadian seedsmen are reliable and honorable men, and we believe as a rule buy the very best seed they can get. And we believe that there are large old established growers of all kinds of seed, who cannot be tempted to substitute or send out poor quality seed. Then how does it happen that we buy one year, from a certain seedsmen White Belgian Carrot seed, and get one of the finest crops it has ever delighted one's eyes to look upon, while the next year from the same variety, bought from the same seedsmen, sown on the same field, only on a fresh plot, we get almost every variety known to commerce. Now we do not believe any seed grower ever sent that seed out in that form. And we never heard of a seed dealer destroying his old seed, we believe that when the new crop comes in, he simply adds to it, the "left overs" from the previous season, and this done year after year, thus we get some fresh seed, some two years' old, some three, some four and so on. Now I do not say they are to blame for this, for I admit that there has been a great tendency among planters to buy cheap seed, and they can afford to sell cheaper when they have no waste, but I believe this practice is chiefly responsible for the poorly germinated crops throughout the country. I think all will admit that a dollar thus saved, generally means many dollars lost.

However, the members of the Ottawa Branch of the Ontario Vegetable Growers' Association are mostly men who understand the very great importance of good seed, and are willing to pay the price if it would be a guarantee of good quality, but it is not always, and we have been fooled so often that we decided as an Association to buy a few seeds direct from one of the largest growers in Europe, and consequently sent to Denmark for our cabbage, cauliflower, and some of our root seed. The result was a marvel. Cauliflower seed that cost us \$2.00 per ounce before, cost us only 80 cents an ounce, and the other seeds were equally low in price, while the vitality was by long odds the highest we had had for many years.

We were encouraged to try the experiment again, and sent the next season for most of our requirements in the lines usually bought there, and were surprised to hear that our order had been held up by the Canadian seed dealers, from whom we had been buying previously, and paying them big profits, for which often proved very poor seed. They had successfully blocked our order, and it then being too late to order elsewhere in Europe, we bought from a small Canadian Grower. In placing our order we tried to impress on them that we wanted the best obtainable, and that if the seed proved satisfactory we would give them most of our trade, which annually amounted to several hundreds of dollars. But they fell down sadly, and sent us the worst dose we ever had. Some lines were so full of stems and dirt we could not sow them with the drill, others were seed mixtures of nearly everything they ever had, and in several cases not a single seed germinated to tell us what it was. This cost our members several hundreds of dollars in loss of crop.

Last year we found another grower in Europe, whose business is world-wide, and so extensive that they refuse to be held up by any combination of dealers, and we bought from them the Snowball cauliflower at 62 cents per ounce. Canadian dealers' prices were \$2.00 per ounce. We bought

Chantenay carrot seed for \$1.10 per pound, Canadian dealers' prices, \$2.50 and \$2.25. We bought Hollow Crown parsnip seed for 14 cents per pound, Canadian dealers' price \$1.00, other things were equally low, and the only complaint I have heard was that the vitality was too high, and the crop was too thick. One of our growers said that "far more seed grew than what he had planted."

By buying our seed co-operatively, from the growers, direct, our Branch would save fully \$500, and get besides an average, I am sure, of \$1,000 more crop from our land. In other words, the Ottawa Branch, by co-operation will profit in the future, to the extent of about \$1,500 annually.

Then why not the farmers all co-operate through their clubs and if they would only stand together, they could dictate to those who supply them, and get a share of the profits made on the sale of seeds, as well as be reasonably sure of getting a good quality.

The above are not the only advantages we derive from our organization. We meet every month during summer in two or three of our gardens, where we see the various varieties bought from various sources, as they grow, and we also learn many most valuable lessons in variety, cultivation, labor-saving methods and machinery, etc., but most important of all, we are cultivating the most important crop—brotherly love and respect for and confidence in each other, and we have one of the most harmonious organizations in Canada, whose members work together for each other's good, thus reaping for themselves the rich harvest of satisfaction, and confidence and respect of our fellow members.

But I agree with the article in your paper, that it is a good idea (in some cases) for the farmer to grow his own seed, but in this age of high cost and poor quality of hired help, most farmers will find no time to spend growing the few dollars worth of seed they require, if they can buy good quality from the large growers at such prices as we are able to buy at, especially when we get such high quality. But there are cases where the boys may be given an interest in agriculture, by having them grow enough seed to supply the farmer, and some to sell for pocket money. But if properly grown and cleaned so as to run through the drill properly, it means work, more than there is much money in.

The co-operative purchasing of such important commodities as seed is in my opinion of very great importance, in the production of good crops, and in cementing the farmers together in a spirit of good-fellowship, and brotherly love, if the proper course has been followed.

Carleton Co., Ontario.

W. J. KERR.

All agriculture rests upon soil fertility. The plant food in most soils is not inexhaustible. That which is year after year taken away in crop production must be returned or future crops will not be so abundant.

Make a record of needed repairs to machinery as it is being stored for the winter, and see that the repairs are made before the next cultivating and reaping season is upon us.

THE DAIRY.

Cost of Producing Milk in Ohio.

The people of cities who complain about the high price of milk may be interested in knowing what it costs to produce good marketable milk. An investigation made last year by the Dairy Department, the College of Agriculture, Ohio State University, shows that the average cost of producing a gallon of milk in Ohio is about 25 cents, or 6.25 cents per quart, allowing 3,200 pounds per cow per year as the average milk production. This takes into consideration the cost of feeds, labor, interest on investment, maintenance, insurance, taxes, etc. When the average milk production per cow is increased the cost is decreased. The average cost of distribution is 3½ cents per quart, making a total of 9.75 cents per quart as the cost of producing milk and delivering it to the consumer. This means that when milk retails at 10 cents a quart, the average producer and distributor is making little or no profit in the transaction. Where high producing cows are kept, and economic methods of handling and distributing on a large scale are employed, the above figures are greatly reduced, and there is a fair profit in the dairy business. However, it is the average producer, who keeps average cows, the increasing cost of feeds and labor, and the greater demand for sanitary conditions that are contributing to the high price of milk.

Fat Content and Milk Price.

Editor "The Farmer's Advocate":

The proposal of a new milk-products factory being established is to pay prospective patrons for their whole milk at the rate of 40 cents per pound butter-fat. As I understand the patrons are to pay for or draw their own milk to the factory, it will be advisable for us to consider carefully, in view of the high standard quality of milk necessarily required, what would be a fair rate in these days, when the cost of production has risen so high, and the cheese factories on which we have depended mainly for so many years are giving us such satisfactory returns. It might be well to have some discussion on this subject in The Farmer's Advocate, and also on the home use of the Babcock test. We must remember that 40 cents per pound of fat rate will mean for three per cent. milk only \$1.20 per 100 lbs.; for three and one-half per cent. milk \$1.40 per 100 lbs.; and for four per cent. milk, which I fear few herds will nowadays reach, \$1.60 per 100 lbs. And then the patrons receive no by-product, like skim milk or whey for feeding, which means less valuable manure for the fields which will then have to be procured by purchase if the fertility of the soil is to be kept up. Returns for the whole milk must be larger to provide for this. The taking of samples and making the fat test will become important factors in determining the returns the patrons will receive.

Middlesex Co., Ont.

LACTA.

Note.—For a change, why should not the patrons, by concerted action, decide what they should receive for their milk, and then stand together?—Editor.



Three English Dairy Maids

To one dairy Shorthorn cow. Photo by "Sports and General," at London Dairy Show.