roads would, in some districts of the Province of Quebec, as well as in other Provinces in Canada, seem to be the exception rather than the rule, and, in general, so long as the farming population consent to having their own affairs about noxious weeds badly governed, will noxious weeds continue to flourish on roadsides, in waste places, and in the fields of their careless neighbors.

GEO. H. CLARK,
Seed Commissioner.

Ottawa.

STORING SEED CORN.

Seed corn should be stored in a dry place, and in such a way as to allow of free circulation of air between the ears. A chamber containing any considerable quantity should be ventilated. Until fairly dry the corn should not be exposed to hard frost, and it is safer not to undertake to dry it out rapidly by artificial heat. A good way to store a small quantity is to tie the husks together and throw the ears in pairs over a fence-wire or wire clothes-line, suspended between two posts or from joists. This will, ordinarily, afford pretty good protection from rats and mice, unless the corn hangs close to the joists overhead, in which case the rodents might drop down on it and do more or less damage.

THE DAIRY.

SILAGE, ROOTS, AND CLOVER HAY.

Editor "The Farmer's Advocate":

In reply to your questions with regard to system of winter-feeding cattle, in the first place, I do not depend on buying a lot of feed. There are times when it may be necessary, but a farmer who grows all his feed does not feel it in the same way if selling prices go down. However, I would rather buy grain than sell it, as we calculate to feed everything we grow. Of course our farms in Elma Township are run very largely for dairying, though we have been in the habit of raising quite a lot of young stock, and we feed a certain number of steers. We raise the steers, and sell them when they are about two and one-half years old. We aim to sell them about May, and they should weigh about ten hundred pounds. Of course, to raise these we have been crossing our dairy cows with Shorthorn bulls, and the feeling in this neighborhood is to go entirely into the milking breed of cattle. Before leaving this part of the subject, I might tell you how we raise the calves. We always raise some of them fed with new milk, for, say, three weeks, and then fed on skim milk, with a little oats, clover hay, etc., but we have been in the habit for some time of keeping several cows for nursing calves, and I tell you it is the right way to raise calves. I know it is claimed to be expensive, but we are in the habit of raising three and four calves on each cow—that is, I mean, to raise good large fellows, able to shift on the grass for themselves.

We have grown about seven or eight acres of Flint corn for ensilage on each hundred acres. We usually grow about four acres of Yellow Intermediate mangels. We intend to feed about an acre of mangels and one acre of corn in fall. We grow as much good clover hay as possible, and do not depend very much on feeding straw. Of course, when the cows are dry in winter we might feed some, but we aim to have plenty of straw to bed everything well. Cows milking in winter require to be kept well bedded. We are also in the habit of raising quite a lot of hogs. Our rule is: Keep two brood sows on each hundred acres — that means four litters each year, averaging from eight to nine each litter. They get all the whey, alfalfa (cut) and grain they want in summer, and skim milk, roots and grain in winter.

With regard to your question, what combination of roughage do you find best to economize the meal ration, I do not know anything better than plenty of roots, ensilage and clover hay.

There is another matter in connection with our system of feeding. If one grows, say, eleven or twelve acres of roots and corn, cultivating and manuring them well, and then seeding down the next spring, principally to clover—handling the farm well otherwise—he will find he can grow all the feed he needs, and his land will get richer.

FARMER.

Perth Co., Ont.

DISTRICT DAIRY MEETINGS IN EASTERN ONTARIO.

R. G. Murphy, Secretary of the Eastern Ontario Dairymen's Association, sends us a list of places and dates of a series of special dairy meetings, which are to be held under the auspices of the above association:

Peterboro', November 4th; Lindsay, November 5th; Campbellford, November 6th; Perth, November 17th; Kemptville, November 18th; Vars, November 19th; Vankleek Hill, November 20th; Lancaster, November 23rd; North Williamsburg, November 24th; Avonmore, November 25th; North Gower, November 26th; Cobden, November 27th; Madoc, December 1st; Belleville, December 2nd; Napanee, December 3rd; Gananoque, December 4th; Kingston, December 5th.

RUN THE MACHINE AT FULL CAPACITY.

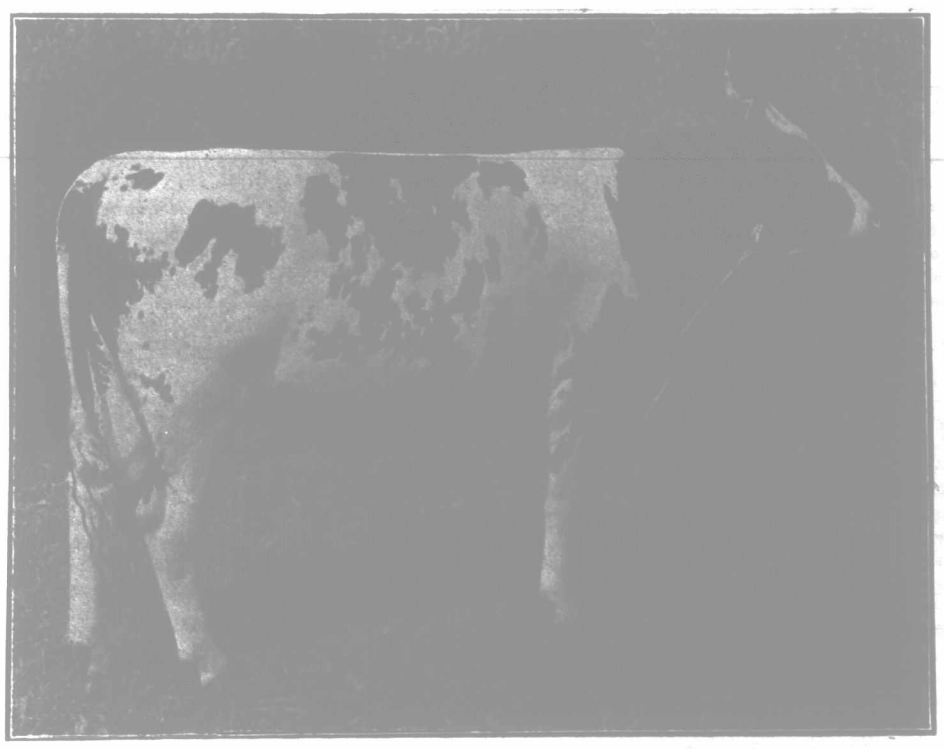
Editor "The Farmer's Advocate":

We will winter our Ayrshire cattle with clover hay, corn silage, turnips, oat straw, bran and oil cake. There may be few minor changes; for instance, we may give crushed oats to some of our cows which are in the Record of Performance test, but, as a general rule, we will give about 30 pounds of silage, 10 pounds of hay, 20 pounds of turnips, 10 pounds chopped oat straw, for roughage, and about one pound of mixture, of ⅔ bran and ⅓ oil cake, per four pounds of milk.

The answer to your question, "At present prices, what do you consider the most profitable grains or meals to purchase for the purpose of supplementing farm-grown fodder and grains," depends upon the kind of roughage one has at hand. The man who has silage from well-matured corn, and a great proportion of timothy in his hay, no doubt should look for a meal rich in protein, as he has too large a percentage of fat and carbohydrates in his roughage; and at present prices, I believe oil meal can furnish a pound of digesible protein much cheaper than bran, oats, or the other grains.

The man who has alfalfa hay or clover is not so far ahead of his less fortunate neighbors as in years past, for corn, usually the cheapest source of carbohydrates and fat, is very high this year.

If prices of meals and grains continues to soar as high as they have for a couple of years past, the only salvation for the dairyman is to cull out the drones, and keep only his best milkers. Most farmers are afraid to pay $100.00 for a good dairy bull, out of well-known ancestry, but will keep on paying large grain bills year in and year out to feed poor stock sired by a poor bull out of poor cows. This will have to change, else most farmers will soon be out of business.



Lessnessock Durward Lely (imp.) —24758—.

Ayrshire bull, two years old. Second at Toronto, first and champion at London, 1908. Imported and owned by R. Hunter & Sons, Maxville, Ont.

To conclude, I may say that once the stock is closely culled, the cows should be well fed all the year round. If you have a good machine, shove through it all the raw material that it can economically take care of. Don't let it run half the year doing only half the work it can handle, for there are certain fixed charges —for buildings, general expenses, etc.—which are always the same, if each of our cows produces only 3,000 lbs. of milk a year instead of 6,000. Fewer cows, and better ones, is a good thing to remember always, but especially when feeds of all kinds are high-priced.

Quebec Co., Ont. GUS. LANGELIER.

NO SICKLY SMELL ABOUT WHEY TANKS.

Editor "The Farmer's Advocate":

I am of opinion that the pasteurizing of whey is a step in the right direction—not that I think its feeding value is much improved, except that it can be fed to calves, but it certainly is of great advantage to the cans. They don't take one-half the time to wash that they did before the whey was pasteurized; all the grease seems to leave the can when the whey is emptied out, so no doubt the cans will last longer, but would not like to say for certain, as it will require more time to prove whether it is of any benefit to the cans, as they only commenced pasteurizing at our factory (Burgessville) last April. It also improves the flavor of the whey; you don't notice that sickly, sour smell around the whey tanks as used to be the case before the whey was heated.

I think the scheme is all right, if the price for heating it doesn't go too high. I don't know exactly what it costs, but it is not very much.

Oxford Co., Ont. JOHN E. THOMPSON.

WINTER FEEDING OF DAIRY COWS.

All feed, in the line of grain and mill feed, is likely to be very high again this winter, but for the matter of that, it is likely to be high for all time to come, because consumption has overtaken production, and the coarser grains, such as corn, oats and barley, are being used for food for human beings, especially in the way of breakfast foods. Formerly this was confined pretty much to oats, but now barley and corn are used extensively for human food, and feeders are offered great quantities of mill by-products. While some of it, no doubt, is all right, most of it is what we might call adulterated. The refuse of oat mills, such as oat hulls, are ground up fine and used as a filler. It might be a filler to fill the bags for the miller, but it certainly would not be very nourishing for the stock, nor is there much nutriment for making milk, so that anybody who wishes to supply his stock with a sufficiency of feed, must look elsewhere for a feed if he wants an economical ration.

If an animal is not worth feeding well, it is not worth feeding at all, but to feed an animal well it does not necessarily mean one must feed the most expensive feeds; in fact, the most suitable foods are not expensive when grown on the farm, such as corn silage and mangels.

"In time of peace prepare for war," is an old proverb, and the time to prepare for winter feeding of stock was away last spring. It may serve to emphasize this more fully now that the feed should be at hand.

To feed economically the feeder should have silage and mangels for dairy cows. This, with well-saved straw and a little hay, will make the basis of a very economical and suitable ration, and enormous quantities of silage and roots can be grown to the acre, so that a man thereby can increase the production of his farm manifold. True, harvesting those crops is a little hard on the back, and they mean work, but the reason they mean so much work is because they furnish so much food—suitable food, too.

Whilst these feeds should be the main reliance in feeding stock, some grain or bran should be fed also. At this time possibly bran and oil cake in small quantities are the cheapest foods. Even with silage, roots, hay and straw, the quantity of grain that should be fed will depend upon the production of the cow and her period in lactation.

Although feed is high, milk and its products are also high. Butter is likely to be close to the 30c. per lb. mark, and milk is in great demand from the cities and condensaries during the winter, netting the producer $1.50 per cwt., so that it will pay very well to feed large-producing cows considerable grain at the price now obtainable. For instance, if we have good cows fresh, giving 60, 70 and 80 lbs. milk per day, which means producing daily from 90c., $1.05 to $1.10 per day, one certainly cannot but realize a profit, no matter how dear the feed. In fact, with the cow producing so heavily, it will be necessary to feed her more grain and not such a bulky ration. Cows have large stomachs, and a fairly bulky ration is suitable to them, but when we come to milch cows, giving their 60, 70 or 80 lbs. milk daily, we will at once realize that they should have their feed somewhat more concentrated; that is, if we are to give them more food than those of less production, we must have it in less bulk, because it would be impossible for them to contain enough rough feed to keep up their heavy production, and if they do not get enough feed in one way or another, of course they cannot keep up their production either.

It certainly is a queer state of affairs that farmers should be grumbling about the high price of grain. Nothing shows more clearly what a change has come over the operations of a farm than this. Formerly, about all the grain was sold off the farm, and the money was realized that way, but now things are quite different. In fact, many farmers do not sell off any grain, but make their money out of live-stock products. This is better for the farm, as it sells off much less fertility. However, that system of farming has changed. Farmers need to do considerable thinking on how to grow the crop that will furnish the most economical feed. This end is nearly always to be obtained by growing those crops that will give the largest amount of fodder per acre, and for this reason silage and mangels should be grown largely on the dairy farm.

Oxford Co., Ont. GEO. RICE.