

Feed Lot.

a huge pile of cobs from which in a few days they were fed the savory meat, but it asks for the sappy, ill-fleshed yearling or two-year-old, fed on silage, roots, straw, chop. The steers of years ago got roots but some, we are sorry to record, got it wrong of course, but farmers are silos year after year and some day every-stricken will be without them. An educational campaign to end production of greater quantities of silage. With plenty of these two or either one, store cattle can be exceedingly plain feeds and do well, them fattening animals will put on weight more cheaply than can be in any other way. The element of the growing season enters into the more particularly with roots, but can be solved if plans for the future time.

It is assumed that every stockman of this era has a good supply of either roots or hay. Really speaking there is no excuse for a farmer. Then there is the time-honored oat and barley chopped together, but not inferior comes wheat, and, a great many farmers must feed. I do so without any regret, for it is what the Westerner is getting for his northern even though he sell it as high as he can. In some sections, but in most sections, steers are not fed as elsewhere in Ontario. Throughout the province, Elgin and parts of Middlesex considerable corn is stored in cribs to be used, but elsewhere the greater part of the corn is fed from the shock goes into the silage. In the County, of course, grows corn and there beef takes second place to pork. It may almost be considered as king in the feed runs; it is a standard of efficiency and worth of other feeds. Unless fed with clover hay or other feed probably pay to purchase some meal or oil cake and feed along with the corn. In the United States a profit from the use of cottonseed meal is abundant. We also have a lot of steers that were finished last year in Ontario on silage, hay and corn, getting as much as 6 to 7 lbs. of the concentrate. That is the case on the farm grains were scarce and feed was cheap. The steers did not do a choice lot when finished. We can only suggest that one without the corn, wheat, oats or barley, but, of course, the silage ingredients common to shelled corn.

When that corn, when available, is fed, we might proceed to the usually fed. Oat and barley chop is common and it gives good results, could improve it as a fattening feed. The latter grain by some is considered while others claim that it will not give so much gain. It, like corn, is high in carbohydrates but it has more protein. Consequently it is superior to corn for fattening or growing animals, and in that capacity so far as needed. With oats and barley, wheat is quite good and steer feeders can use it to advantage if they have it on hand. Equal parts of the three grains, or, fed along with about 30 lbs. of roots to each 1,000-lb. steer produce gains as economically as that could be fed. A concentrate made of this mixture would be a good oil cake or cottonseed meal. At "Weldwood" we fed 1 1/2 lbs. of roots to oat and barley chop and gains. Silage and roots were fed as previously mentioned and the gain in the average 235 and two-fifths lbs. or 2.2 lbs. each per day. The steers made an average daily gain of 2 lbs. and gained almost 2 lbs. per day. They did not do well gained 1.6 lbs. per day, as previously stated, young steers, about 1,000 lbs. They probably would do better than older steers would have in a short period, and they were not fed than would be advisable. The feed period is the practice. One of the authorities on the subject, an authority on the subject of roughages, including alfalfa hay, and give the steers all the roughage without wasting any. In addition, 2 lbs. corn per steer per day, in addition until 10 lbs. are fed. After that, 1 lb. daily until 17 lbs. are fed; after that this is increased to 22 lbs. per day. This is quite applicable to our

conditions at the start, the quantity soon mounts up to an allowance that a great many feeders would not care to dole out in this country. Where the cattle are to be fed for 6 months, 6 weeks should elapse before the animals are put upon full feed. In the meantime they should have plenty of roots and silage, clover or alfalfa hay, and failing these some nitrogenous concentrate.

The quantity of grain that should be fed per steer must be decided by the man in charge. He must be able to detect an animal as soon as it is not right. Underfeeding and overfeeding can both be read in the individual steer or heifer if the herdsman knows his business. The steers referred to in a preceding paragraph were getting 9 quarts of chop, 1 1/2 lbs. of oil cake, 30 lbs. silage and 21 lbs. of roots each after the first month, and in addition to this their hay allowance was increased till they received about 10 lbs. per day each in the last month. So long as a steer will consume this amount and keep his appetite keen he is not getting too much; many steers will handle even more grain. Cattle fattened in the Corn Belt of the United States are fed very liberally, but much of the corn passes through them undigested and is later picked up by hogs. Even in Canada in many cases steers are followed by pigs, and where corn is fed it is not a bad practice. Oftentimes the pork alone is a very large part of the profits which accrue from the feeding operation.

MAKING BABY BEEF.

Whole milk is one prime essential in making baby beef. However, it is usually necessary to relieve the dams of some responsibility and force the calves along with grain and roots or silage. Finely-ground oats and bran are very good at first, and the calves will take to the mixture at a tender age. Oil cake meal will be found useful in this case, but it should not be necessary to continue the bran any length of time, for the young calves will soon learn to eat roots and silage when oat and barley chop with a handful of oil cake will encourage the production of flesh and supply all necessary ingredients. There is no reason why a portion of the ration should not be ground wheat. It is fattening, but at the same time it is very appropriate for growing animals.

Last June on a Middlesex farm we saw a very nice lot of baby beef ready for market. They were about 15 months old and would weigh approximately 900 lbs. each. During their lifetime they got very little hay, silage being the chief roughage. Mixed grains or chop were fed as soon as the calves would take to it. Young steers and heifers in the stalls, at that time about 5 months old were getting 2 lbs. of chop per day, and this would be increased to 6 or 7 lbs. daily during the finishing period. Throughout the lactation period the calves were allowed to suck, and this nourishment combined with chop and silage resulted in economical beef.

WINTERING STORE CATTLE.

Store cattle should not be allowed to stand still as regards growth and gains during the winter, neither should they be fed expensive feeds. Roughages such as silage and roots should form a large part of their daily meals, and with plenty of these they should assist in cleaning up considerable straw or poor-quality hay if it be on hand. We have seen steers and heifers that butchers would not reject in the spring wintered on such a frugal fare as roots and good oat straw. They would have done better no doubt with some chop or good clover hay, but those commodities were not available for that class of stock and they did well without them. With a liberal allowance of silage and some dry fodder steers and heifers will come through the winter quite satisfactorily, but if substantial gains are desired a little chop will give good returns. Wheat in such a case would be very appropriate for it is this class of cattle kind that can utilize it to best advantage. The stock would be making bone and muscle, for which reason, wheat should be one of the best of grains to feed. It should be borne in mind, however, that wheat alone is not so good as when mixed with corn, oats or barley. Alone it is pasty and sticky in the mouth, and when in use in this stable this winter, especially for growing stock, it would be wise to mix it with a small quantity of oats or barley or such grains as can be spared. With fattening cattle it should not form so large a percentage of the ration as is recommended for store cattle.

A newspaper report from Boston, Mass., claims that four-fifths of the milk consumed in that city comes from Canada and the adjacent states in tank cars, and in consequence cows are disappearing from the state hillside to the extent that there are now only 50 cows to every 1,000 of the population of the commonwealth. The problem has got into politics, the republican candidate for governor having promised constructive legislation, if elected, that will be fair to the consumers and encourage the state live-stock industry.

FARM.

The Institute Problem

Editor "The Farmer's Advocate".

In a recent issue of "The Farmer's Advocate" you invite a discussion of the proposed re-organization of the Farmers' Institutes or the forming of the proposed County Boards of Agriculture.

Anything pertaining to Farmers' Institutes, which have contributed so much to the prosperity of the rural community in the past, should be of interest to all agriculturists. That interest in Institute meetings is waning seems, on the surface, to be a fact. In many cases this is so, and yet in others, much interest is yet manifested; at any rate it seems so to me, although having had but limited experience in Institute work I find that in the older, more thickly-populated districts interest has waned, but not so in the more remote and comparatively thinly-populated districts. In these places interest is shown by the numbers attending, and by the many questions asked.

It seems to me that there are several reasons for the lack of interest in these former districts, among which might be mentioned the following: 1, the influence of the press; 2, lack of numbers owing to rural depopulation; 3, lack of ample rewards in farming.

In the first place we find our agricultural papers, in ever increasing numbers, being placed in the homes of most of our farmers by a persistent number of canvassers and otherwise. These papers contain all the up-to-date literature and findings in science in regard to agriculture, so that it is very difficult for institute lecturers to bring anything new before an audience.

Then perhaps we forget that there are not so many rural dwellers now as there used to be.



Our Lady of the Snows.

A Canadian stream wrapped in its winter cloak.

The number of discarded churches and schools are sad reminders of this fact. Therefore, there are not so many to attend our Institute meetings. In this township can be counted block after block of one thousand acres being worked by from ten to twelve men.

The last reason is the chief one, however, and is the cause of the second one. The rural problem is purely economic. There is an important work ahead of the new Government Commission, viz., to find out what is the matter with Canadian agriculture. If they find out, as many of us are convinced, that farmers are seriously handicapped by our economic laws, and can induce the powers that be to remedy the matter, then the Institute problem will also be solved.

Perhaps there will be a difference of opinion regarding the third reason, viz., that farming does not yield sufficient returns. The majority of us are engaged in mixed farming, and must of necessity continue so. How many men on the average farm are making any more wages than a good hired man? A good man receives by the year three hundred dollars, with his board and washing thrown in, if living with the family, thus costing the farmer about five hundred dollars. Now, how many farmers can show an increase in ten years of five thousand dollars. Perhaps in some cases we may, if we count the increased value of land. The fact remains that if our children and women folk received wages for the work they do the farmer in many cases would have nothing.

Now, in view of this fact, is it any wonder that interest in farming itself is waning, and if interest in farming wanes, how can it be maintained in Institute work? The question then naturally arises: Are farmers being exhorted to

get busy and increase production, while our Federal Government is allowing injustices and burdens to be placed upon them? Are we being asked to swim with mill-stones about our necks?

My opinion is that so long as these unjust economic laws remain, so long will farmers lack interest in agriculture and in Institutes, but let these be removed, then will people flock to the land, interest will be revived, and there would not need to be much of a change in Institute work, unless it would be to employ more demonstration work and have lantern-slide talks.

With regard to the new scheme, it no doubt is advisable in many districts. But why not have the territory covered by these Boards coincide with the territory covered by the District Representatives rather than according to the political ridings. For instance, my own township is in Russell Riding, but is included in the territory covered by the Carleton County Representative. One of the objects of the new scheme is to develop local talent, which would be a good thing. It should also result in the discussion of and the remedying of difficulties, which may be purely local, and of which an outside delegate might know little.

Carleton Co., Ont. JAS. F. FERGUSON.

About a Corn Experiment.

Editor "The Farmer's Advocate".

In your issue of Nov. 11 you gave an account of a test with corn grown for silage purposes. It is not my desire to criticize I. B. Whale, who conducted the experiment, nor to boom one variety of corn more than another, but I believe it is important to look at such a test from as many viewpoints as may affect its bearing and value.

It is inferred that all the varieties were planted on the same date, or thereabouts; also that they were all harvested on the same date and in an impartial manner. If the climatic conditions would have permitted you to have delayed harvesting the Dent varieties, your test was very unfair and could not but prove fatal to the later-maturing varieties. I consider this part of the test to be the basis of merit.

It is needless to note that had Quebec Yellow been in the test, it would have caught Longfellow napping, to say nothing of the Dent varieties. In the seed corn belt we find that Longfellow matures about ten days earlier than some of the Dent varieties. The writer saw last season some Golden Glow, which was grown at Huntingdon, Quebec, and which was quite well

matured. I would think that almost invariably Dents would be grown well up to maturity in Middlesex county.

I am glad to note that the test was made in a field. Too many tests have been conducted with one or two rows of each variety, as it is generally conceded that a narrow strip of corn never does well.

This test should induce growers of Dent seed corn to select the earliest maturing strains of each variety. I do not wish to be misunderstood, as I have always advised the growing of such varieties as will properly mature, whether it be in the seed corn or silage belt. Government reports confirm the value of well-matured corn for silage purposes. Tests and scales are very important factors in determining results.

Essex Co., Ont. ROBT. W. KNISTER.

[Note.—It was unnecessary to "infer" anything as the corn was grown on our own farm "Weldwood," and it stated explicitly in the article describing the experiment that all varieties got exactly the same treatment. They were all planted on the same day side by side in the center of our corn field and they were all cut the same day, Sept. 28, at the time our corn was being cut for silage purposes, and surely as late as one could safely leave corn on heavy land in Middlesex county. We simply gave the results of the tests as we found them, and think that our article was fair to the varieties as they showed up this year on our particular type of soil. The experiment was carefully conducted and the results carefully compiled. It is only one test. Others another year might not agree with it. All varieties had as many days to mature as we could give them. Dents could not have been left ten days longer.—Editor.]