

Steer Feeding in Quebec.

Upon the occasion of a recent visit to Dr. McEachran's Ormsby Grange Stock Farm, in Chateauguay Co., Que., our field man was furnished with some interesting facts about cattle-feeding operations in progress.

Like all the buildings at Ormsby Grange Stock Farm, the cattle byres are new, and fitted with every modern convenience—cement floors, pipe-iron fittings, automatic drinking troughs, chain-ties, numerous sash windows on each side, with pivoted fanlights above to admit pure air and light them by day, while a gasoline engine and electric plant supply the electric light for evening and morning use, a convenience highly appreciated by the employees, who would as soon think of going back to the old buck-saw to cut up the winter fuel as to go back to the smoky old stable lamp.

The ventilation is perfect; the ingress is by the windows, the egress by divided shafts carried up to the ridge of the roof, terminating in slatted cupolas, which are four feet square, and regulated by a swinging shutter—a system extensively used in Montreal and elsewhere in Canada, introduced by Dr. McEachran forty years ago. In this building 19 steers are fed, tied up. These are Short-horn grades, bought in open market, sometimes in Toronto, sometimes in Montreal. The present lot came from Montreal on October 4th, and were allowed to run out for four weeks. Their average weight was 935 pounds when tied up. For three weeks they were fed on oat straw in the morning, corn silage at noon, and hay in the evening, as much as they would consume without waste. They were bedded with pea straw, of which they eat a portion between meals. On December 27th they were found to average in weight 1,108½ pounds.

They were now put on the following ration: Ensilage, rich in corn, 30 pounds; bran, 2 pounds; moulle, 5 pounds; roots (turnips), 4 pounds, for night and morning. The moulle was ground on the premises, and consisted of wheat, 100 pounds; oats, 50 pounds; barley, 40 pounds. The meal was well mixed and salted. It was tried to incorporate the ration the previous evening by mixing in layers, but it was not as well eaten as by serving the ensilage fresh from the silo and placing the salted meal ingredients on top of it in the feeding trough. Hay at noon. On January 20th they weighed 1,133 pounds, a gain, from October 4th, of 198 pounds.

The cost, at \$5.20, was, with commission and freight, \$991. They were sold 22nd January at Montreal, for \$6.40 per 100 pounds, netting, with freight and commission deducted, \$1,317, leaving a balance to credit of \$326.00; that is, 15½¢ per day to pay for hay, grain, roots, corn meal and bran, to say nothing of wages, rent and interest, per head, yet the price is a good one, and expenses reasonable. The result this year is much better than last year.

Can any farmer make feeding steers pay? Dr. McEachran would like to know how. Some friends assure him the difficulty arises by paying too much for the steers to begin with. True, but how can they be bought cheaper?

LOOSE FEEDING.

The loose-feeding buildings are excellent. Two large compartments, 30 x 15 feet, which open into the cattle-yard on the west side, and the horse stable yard on the east. They are fitted with feeding mangers and water troughs. Ten steers coming three years were placed in each. During fine weather they are allowed to go out into the yards at will. During stormy weather they are exercised in the large exercising covered court, using it alternately with the horses.

They were fed: Morning, hay; noon, silage, 30 pounds, and straw at night, as much as they will eat. On December 27th they weighed 920 pounds, average; on the 20th of January, the date of our visit, they were put into the byre, and are now on the same ration as the lot sent to market that morning.

Dr. McEachran would express no opinion as to the relative merits of loose and tied feeding. While he has had thirty years' experience of wholesale beef production under ranching conditions in S. Alberta, he is now but feeling his way in feeding domestic cattle. He is satisfied, however, that the loose cattle should either be all dehorned, or all horned; he favors the former, as he found they were not uniformly fed, the aggressive ones fighting off those of a milder disposition. He believes, however, that a month's loose feeding and outdoor exercise encourages growth and health, and is an admirable preparation for the fattening rations, and they can be immediately started on the fattening process.

Asked what he thought of the balanced rations of the two's and colleges, he remarked: "As the average farmer does not grow the ingredients of such rations, and the prices of corn, corn meal, bran, oil cake, etc., are at present so high as to be beyond his means to buy, he must make the best of what he has and what little he can buy. But I am sorry to say that the high prices paid

for the cattle, and cost of feed of all kinds are scarcely counterbalanced by even the high prices recently ruling for good beef cattle, and too often he has to be contented with the manure pile only to help him to keep up the fertility of his land."

He related some observations he made in Germany, at the Victoria Park Milk Company's establishment in Berlin, where they bought large, in-calf dairy cows. After calving, they were fed full fattening rations, which increased the quantity of milk and butter-fat. As the milk decreased, the fattening went on, and when no longer profitable as milkers, they passed to the butcher at good prices, and were replaced by others. Thus the round of milk and beef production goes on profitably.

The difficulty in finding and keeping the necessary labor, however, discouraged him from adopting this plan. It, however, has much to recommend it. Of course, milking Shorthorns would suit this best.

TOPOGRAPHICAL MAP OF FARM.

In the office of Ormsby Grange Farm we found the proprietor engaged in putting the finishing touches on a map of the farm. This is a very simple and useful convenience which every farmer may provide himself with. Every fence is shown, each field is numbered and the acreage noted. It is for the purpose of keeping the crop rotation ever before the proprietor. It has many uses. For instance, suppose field No. X., containing 20 acres, is to be sown in grain, he knows just how many pounds of seed to provide. The manuring, the cultivation, the returns per acre, can easily be kept count of, being noted on the map.

Steer Feeding at Guelph.

Editor "The Farmer's Advocate":

We are not fattening any cattle this year, owing to the fact that we are short of feed and have a very heavy stock of other cattle, so that I shall answer just a few of the questions you propound, which apply more particularly to our conditions.

In the case of long-keep steers—that is, steers which are to be fed five or six months—we seldom feed any meal during the first month, but supply the steers liberally with roots, silage and hay. We then start with a very light meal ration, say two or three pounds per steer per day, depending upon the condition of the steers. This amount is gradually increased, the increase being at the rate of from one to two pounds per month, depending upon the condition of the steers and also the character of the bulky ration. If the silage and hay are a first-class quality, the smaller increase would probably be abundant, but under other circumstances a larger increase might be deemed advisable. It is rare that we exceed two-thirds of a pound of meal per day per hundred pounds live weight of the steer, even during the last month of feeding. On an average, our meal ration runs in the neighborhood of half a pound of meal per day per hundred pounds live weight of the steers, sometimes even a little higher. Two pounds a day is a very good gain for steers under this method of feeding, but, on a considerable number of steers fifty pounds per steer per month may be regarded as a satisfactory gain.

We have fed cattle both loose and tied. We have secured larger and more economical gains from the loose cattle, but it requires a good deal more straw for bedding if a person wishes to keep them reasonably clean.

The cattle are watered in troughs in the stable, the water being arranged so it can be turned on when required.

We usually feed three times per day, though in a quiet stable twice a day would probably be just as good. The noon feed is usually different from the morning and evening feed, so as to give variety, and the bulk of the feed is given morning and night.

Our system of ventilation is a modification of the Rutherford system. The foul air is carried off from the ceiling through flues which run straight up through the roof of the building, and the fresh air is admitted near the floor through openings in the walls.

Young steers will usually make more economical gains than older steers, though not always more rapid gains. The fact that the young steers are usually lighter than the older steers makes them worth less per pound if put in as feeders. If the weight were the same, the younger steer would be preferable.

We have never fed oil cake or cottonseed meal to our export cattle.

In the case of short-keep steers, that is to say, steers which are fed about three months before ready for market, a spread of from three-quarters to one cent, per pound will usually let the feeder out fairly well. That is to say, it will give him more than market prices for his feed.

In the case of long-keep steers, which have to

be fed in the neighborhood of six months, the feeder should have one and a quarter to one and a half cents spread in price.

I do not know what prices are being offered or accepted for fat cattle in this locality, but I know that, compared with other years, there are few steers being fed in the neighborhood of Guelph.

O. A. C., Guelph.

G. E. DAY.

Beef Production.

Editor "The Farmer's Advocate":

As the result of the unusually narrow margin obtained by those who bought and finished beef cattle during the winter of 1910-11, there is a decided shortage of beef animals being fed in this locality at the present time.

With prices soaring, and prospects such that seven cents per pound and better is being offered for April and May delivery, the truism that, in agricultural, as in other lines of industrial life, we should decide what lines we are going to follow and stick to those lines, regardless of the untoward influence of a passing blast, is being forcibly driven home.

Since we began to adopt the business of buying and finishing beef cattle, now more than thirty years ago, only once did we hesitate, with the thought of deserting the business and turning into some other line of live-stock keeping, and the profits of the following year were such as to strikingly reveal the folly of a "never-ending change in agricultural, as in other operations." The season of 1912 seems to promise another such lesson.

The experience of civilized life seems to prove that those who can afford it are bound to eat beef, and, so far as I am concerned, I intend to try to produce some of it. With that as one of the objects in view, the great endeavor from year to year is to so perfect the general system of farm operation that the great percentage of the most desirable feeding material is obtained at first cost, which makes the contingency of high-priced feedstuffs a consideration of very secondary concern.

In this way, the business of feeding cattle fits in nicely, and forms a part of the whole system of farm operation. It renders the system a most desirable one in which to engage. During the summer season the land can be tilled and the crops grown and harvested, without the trouble and annoyance of a full stock of animals on hand during the whole summer season, and more particularly during the hot, dry period, when the fly pest is at its worst, and when animals (to secure the best returns) must be partly fed in the stable.

At the outset, I make bold to say (and every additional year's experience is but emphasizing this fact) that the Ontario farmer who engages in the keeping and feeding of cattle, either for beefing or dairying (from a dollar-and-cent point of view), is simply not in the game unless he has provided himself with sufficient silo capacity in which to store a good acreage of fodder corn, in well-matured condition.

This is one of the essentials to success, not only in feeding the animals cheaply, but in the adoption of such a system of rotation as will maintain the soil in a clean and suitable condition.

On the farm of three hundred and fifty acres, of which nearly one-half is in woodland and permanent pasture, the aim is to feed each year at least a hundred steers, apart from the few cows and other young cattle which are kept.

The great bulk of these animals are bought during the fall of each year.

In the last six years, the price paid has ranged from \$4.10 per cwt. in 1907, to \$5.23 per cwt. in 1910. The animals in the stable at present cost, when stabled, just \$5.03 per cwt. The weights of the animals when stabled, from the 10th to the 15th of November, have ranged from an average of 1,094 to 1,260 pounds. This year the average is 1,128 pounds.

During these years, some of the animals have been finished in the stable and sent to market during the month of May, and some have been finished on grass.

Success in the business demands the exercise of care and judgment in every particular. The right kind of animals must be handled—those that have the ability and disposition to lay on flesh properly, and respond to the most gentle and considerate treatment.

Any ration which may be indicated is only an approximation. No man can tell another just what amount of food an animal should have; therefore, the herdsman must have brains and use them; otherwise, he is useless in the cattle stable.

With these observations, the following is an indication of the ration given to each animal:

Those that are finished in the stable receive an average daily ration during the whole feeding period of about 30 to 35 pounds silage, 5 to 7 pounds cut straw, 6 pounds meal, and from 6 to 8 pounds clover hay. Those to be fed on grass are fed somewhat similarly, with an average daily meal ration of about three pounds during the whole feeding period. In both cases very little meal is fed during the first month of the feeding