

trated food. I consider I do well when I sell my farm products to my cattle at a good market value, pay labor of feeding and drawing out manure, interest, insurance, wear and tear, and have the manure to the good, which amounts to about 1,200 to 1,500 tons.

The hogs were allowed to run loose among the cattle. At first the latter seemed to object, but soon they became accustomed to the hogs and paid no attention to them. The hogs were rooting all the time, picking off any grain left on the straw used for bedding, and were on the alert for any meal dropped by the cattle when eating. Occasionally they got a turnip which the animals pushed out of their boxes. The hogs slept and were fed in a separate place, the opening into which was only large enough for them to pass through. They were fed on an average of 2 lbs of meal each per day. They were kept 150 days, and gained in that time 100 lbs. each, the average weight going in being 100 lbs. They cost 4 cents per lb., and sold for 4 cents, making a profit of about \$2.25 per head.

One man attended to the 121 head of cattle and 100 hogs. The labor may seem small, but if the buildings are properly constructed and convenient, one man can do the work without any trouble.

I have not grown any corn for ensilage for the last two years. I find roots better adapted for fattening cattle. I can grow from 900 to 1,200 bushels of turnips per acre, according to the season, and at a cost of from \$12 to \$15 per acre.

As successful farming and gardening depend in a very large measure upon proper fertilization, in purchasing my concentrated feed I always keep in view not only the fattening elements and value of this feed, but also its manurial value; hence, the feed that produces the most fat, if lacking the manurial elements, does not in the long run turn out to be the best.

A. S. McBEAN.
Thorn Hill Farm, Glengarry Co., Ont., Nov. 10, '99.

[EDITORIAL NOTE.—For a complete description of Mr. McBean's admirable system of stabling and arrangements for feeding, fully illustrated, we would refer the reader to the FARMER'S ADVOCATE of July 1st last, which all would do well to study in connection with the above letter.]

Stall Feeding of Fattening Cattle.

To the Editor FARMER'S ADVOCATE:

SIR,—I fear that the giving of my little experience as to fattening cattle may not prove of much benefit to your many readers, for we have only finished two or three bunches of cattle in our stables, our line being more in feeding stockers and finishing them on grass. We aim to feed them in the stable, so as to give them a good "send-off" to finish early on the grass, in order to be away or well advanced in flesh before the usual midsummer drought or fly season, and then filling the late grass with stockers ready for the following winter and summer. As to the best way of attaining all this, we can only express our opinion, acknowledging that perhaps we do not practice all we preach. As to the feed, we never have roots. Our succulent food is corn ensilage. This, with cut straw, timothy hay and meal, is all the food we use. We try to have good silage. The cut feed is made when we thresh, being done all in one operation, as fully described in a former article. We aim to stable the cattle before they fail in flesh in the fall. With what little experience we have of stabling cattle loose, we would much prefer tying them up, being a saving of food as well as bedding, which means food in most cases.

As soon as possible after stabling the cattle, give them a good application of some insecticide. Kerosine emulsion is preferred, as it clears the skin of scurf as well. The emulsion is easily applied with a corn scrub brush on the end of a 6-foot handle. Two or three applications during the winter is all that is necessary generally. Two-year-old steers of about 1,050 or 1,100 lbs. weight, and of a growthy, well-built kind, are the best stockers. More matured steers, weighing about 1,200 or 1,300, are good to fatten. They, instead of growing so much, lay on flesh, which is all-important. We feed about 40 lbs. silage, 10 lbs. cut feed, and 6 or 8 lbs. meal to each stocker per day, dividing into two feeds, having always a feed mixed ahead so as to all taste alike. To fatten cattle we feed 45 or 50 lbs. silage, 10 or 12 lbs. cut feed, and from 10 to 14 lbs. meal, giving all the cattle one feed of hay in the day, as much as they will eat. For stockers we prefer corn meal and oatmeal (or bran), 2 to 1; and to fatten we prefer peas and oats (or bran) 2 to 1. The prices of the different kinds of grain rule us somewhat. It is best to commence mealing cattle as soon as they are put in, so as to not let them lose any on the start, being careful to not overdose them with that or silage. As cattle are not all built constitutionally alike, you must be ruled by judgment a great deal as to what each steer requires or can stand. We like to put about half the meal in the silage mixture and give the other half in the manger. By hydraulic rams water is forced to the stables, and having water troughs in front of the cattle, they are never turned out to water, which is indeed a pleasure, especially on a stormy day.

We have given sulphur to cattle. A teaspoonful a week in their salt is about enough. It keeps the blood in good order, and aids to keep them clear of lice. Our programme for the day in a stable of 50 head of cattle is as follows: At daybreak feed the silage mixture, and while they are standing forward is a good time to clean out the stables. When you

are through, perhaps some of the hearty eaters need a little more ensilage. We have the water taps open while we are going over them. Meal them, and get out of the stable, so as not to disturb them, letting them lie down quietly. Some winters we practice feeding hay at noon, but find they do as well by not being disturbed till 4 o'clock in the afternoon. We feed them their ensilage again, filling water trough as well, and then, after mixing the feed for the next day, we give them plenty of hay, which they will eat at off and on through the night. We never use a lantern unless to see that they are all right at bedtime. Every farmer has his own way of feeding, and, of course, likes it. This is our way, and we like it.

Middlesex Co., Ont.

Cattle Feeding.

BY J. W. M'KENZIE, MIDDLESEX COUNTY, ONT.

Feeding cattle is an important part of the winter's work, which must be attended to at intervals every day regularly in order to attain best results. To this end the farmer must take an interest and pride in the work.

As a rule, feeding begins in November and con-



EVA OF BARCHESKIE 2505 (Imported).

Second-prize Ayrshire cow at Toronto Industrial, 1899.

OWNED BY ALEX. HUME & CO., MENIE, ONT.

tinues till in May. Seeing, therefore, it requires a large share of the six winter months for this work, it is important that we consider which is the best mode of performing it.

In the first place repair the stables, making them warm and comfortable; the floor even and close; fit in stalls, mangers, feed-boxes, ties, etc., doors to swing freely, and windows to light and ventilate.

Some prefer the following plan: To inclose the sheds, have the feed overhead, and place racks at the sides where the feed is thrown down; dehorn the cattle and bunch them together like so many sheep, where they shall feed and quietly rest. We prefer the stall-feeding plan, although it involves more work; still, each animal receives the share allotted more satisfactorily.

We begin the feeding season as follows: Feed ensilage, or straw and turnips, in the morning;



PIET VAN VORAN, TWO-YEAR-OLD HOLSTEIN BULL.

Winner of first prize and the male championship of the breed at the New Brunswick Provincial Exhibition, 1899.

(See "Gossip," page 641).

PROPERTY OF LOGAN BROS., AMHERST, N. S.

towards noon turn them out (the weather being fine) in the yard for three or four hours to water, and to the straw-stack or straw in cribs. Then prepare the stables; straw in mangers, and a quart or less chop grain, according to age, size, etc., in feed-boxes. To this they rush in speedily; tie and leave till six o'clock, when they are fed again and bedded for the night.

For two or three months during the severe weather we discontinue turnip feeding and increase the quantity of chop, and feed some hay. About the first of March we return to the turnip feeding, and feed moderately for the first ten days, increasing the quantity according to time and bulk to be fed.

We feed hay, chop, or both, more liberally as we near spring. Allow free access to salt or feed it once or twice a week. We think turnips the best

feed by all odds to keep cattle thrifty and healthy, and to fit them for the change to grass in spring.

To provide for cases of emergency, it is wise to keep a bottle of turpentine in the stable, as it often affords ready relief of ailments among stock.

We would be pleased to see this subject taken up by others of your readers—giving their experience and suggesting any new methods.

[NOTE.—The feeding described by Mr. McKenzie is evidently intended for cattle that are to be finished on grass in spring, in which case it is not necessary to feed heavily during the winter months. Cattle intended for early spring shipment would require heavier rations of more fattening foods.—Ed.]

The Cruickshank Shorthorn.

The remarkable sales of Shorthorns held in Aberdeenshire during the past month plainly set forth an object lesson, so that he who runs may read. It must be tolerably patent to one and all that the barrier of prejudice cannot be permitted to bar the way in Shorthorn breeding. There was a time when supporters of other types of the Shorthorn made light of the "little red Cruickshank bulls," but that spirit of persiflage is fast becoming as extinct as the dodo. Let any intelligent breeder, approaching the matter without prejudice, compare the composition of the leading Shorthorn herds in England to-day with ten or fifteen years ago. We find the Cruickshank Shorthorn at home in places it would have been heresy, years ago, to have regarded as their ultimate destination. This steady onward march has been accomplished chiefly by the foreigner's appreciation of the merits of the modern beef-making type of Shorthorn. It was to foreign appreciation, first of all, that Amos Cruickshank owed the popularity of the type he evolved. It was on behalf of the foreigner that the flower of his herd was sold, to be rescued by the enterprise of two or three of our leading breeders.

But what is really at the bottom of this perpetual strife for Aberdeenshire Shorthorns? They cannot compare with the English types for beauty or majesty of character, and on this score serious fault has been found with them. After all, however desirable it is to have beauty wedded to utility, it is not a point upon which the practical breeder will be inclined to haggle. The perfect type of Shorthorn has yet to be evolved, and although what is regarded as the Scotch type is frequently weak in character, it has something which is infinitely more preferable—it satisfies the butcher. That is pre-eminently the function of the Scotch Shorthorn, but it has been subjected to rather unwarranted criticism over its presumed inability to fill the pail. It was very far from Cruickshank's idea to produce a Shorthorn that did not maintain the cosmopolitan character of the breed, and Aberdeenshire breeders are still convinced that the cry of pedigreeing the milk away has no foundation in fact, so far as their type of cattle is concerned, although they claim pre-eminently to have satisfied aspirations with what must first be regarded as a butcher's beast.

It is clear that even those from whom we might almost expect the bitterest opposition are gradually seeing the fallacy of refusing to unite with their milking Bates cows the Scotch sires. In the end it is a matter of £ s. d. vs. either prejudice or policy. It is the most popular cross nowadays, and reflects advantageously upon both parents. It is essential, of course, that the milking capacity of the Shorthorn be maintained, and too much attention can scarcely be given to that function of the breed. But it is a mistake to suppose that flesh-bearing cows are necessarily devoid of pail-filling ability.—Farmer and Stock-breeder.

The Ideal Ayrshire.

Only those who have been on the spot, and who have had an opportunity of actually seeing it, can form any idea of the care and attention devoted by Ayrshire cattle breeders to the "cultivation" of the various fancy points sought for in this breed. The characteristic turn of the horn, the fineness of the shoulder points, the shape and placement of the udder, and a number of other points are all bred for with a care that is really remarkable. Though (as in the case of most other breeds) different judges favor somewhat different types, the general characteristics of the breed are well defined, and are now as well established as in any other breed. One of the most graphic descriptions of the ideal Ayrshire penned for some time was given by Mr. MacNeilage, of Glasgow, in the course of a paper which he read at a recent meeting of one of the Scottish Agricultural Discussion Societies. Taking as his type a five-year-old cow, at the time just freshly calved, in one of the leading herds of the breed in Scotland, Mr. MacNeilage thus went on to describe her:

This cow, a fortnight after calving, weighs 10 cwt. She measures round the chest, behind the shoulder-blades, 6 feet 1 1/2 inch; and across the chest, from point of shoulder-blade to point of shoulder-blade, 22 inches. She yields an average of from 30-31 lbs. milk in the morning, and 26-28 lbs. milk in the evening. She stands on moderately short legs, widely set, and fine in the bone, with a clean neck and shoulder, wedge shaped at top—that is, with no superfluous beef and muscle; well arched in the ribs, and plenty of room in the chest. A flat-ribbed animal is never a good feeder, and consequently, never a good milker. The cow should have a straight back, wide at the loins, with strong