may cause indigestion and bloating, and the tramping over the meadow punches it full of holes, and destroys much of the sod, to say nothing about the setback it gives the grass. Keep the cattle confined in the barnyard until pastures are ready for use.

Crippled and Uncrippled Hogs.

Editor "The Farmer's Advocate":

You ask for experience with crippled pigs, and as we have had considerable experience with both crippled and uncrippled, we give this to your readers.

Our experience of late years has been almost altogether with the bacon hog. We do not breed our own pigs, for various reasons, but prefer to buy them at five or six weeks of age. Having had experience with many breeds, and no breed, we prefer a Berkshire-Yorkshire cross, or a Tamworth-Berkshire cross; if pure-bred parents are used, all the better. To get strong, healthy pigs, not inclined to cripple, we like to get them from farmers who are good feeders, as starved parents, and especially sires, are almost sure to produce pigs which will not stand heavy feeding.

We may say we never saw a crippled pig while we fed our home-grown grains; but whenever we started to feed mill feeds, and especially the ground bran, called shorts, trouble began. Some of the pigs would get crippled—those with the weak constitutions first, next the greediest pigs; then the uncrippled would attack the crippled, and would soon kill them if they were not removed. Many a pig we have carried out of the pen to save its life and cure it (for they can be cured).

Many years ago, in "The Farmer's Advocate," I read a debate on "Which was more profitable, growing corn or roots?" The champion of the roots had one strong point. He said, "Raw potatoes will cure crippled pigs." At that time I had never seen a crippled pig, but I said to myself, "Put that in one corner of your memory; you may need it some day." And so, when I carried out my cripples, I fed them raw potatoes and buttermilk, and they soon recovered. But prevention is a lot better than cure, and I commenced to experiment with different kinds of feed, so that I would have no cripples. A great deal of nonsense has been written on this subject, writers advocating a lot of exercise, condemning cement floors, cold houses in winter, and so on; but the best pig-feeder I ever knew had a little pen, made of one-ply rough lumber, on the north side of his barn. The pen was for one pig, and was about three feet by eight; and when the pig could not turn around in the pen he knew it was big enough to kill. His secret was he always warmed the feed.

We have now twenty pigs in a pen 22 by 14, with cement floor sloped to the center and also to one end, with an oak plank eight inches wide by two inches thick placed on edge to make a box to hold the straw for a bed in the highest corner; and a healthier lot you never saw, the fat fellows picking the coolest places of the cement on which to lie. Their trough is also cement, 22 feet long, placed outside the pen in the feed passage, so that the feed can be mixed in the trough, and in this way twenty pigs can be fed in less time than two the old way of mixing in pail or barrel. The trough is six inches high, and the partition, 18 inches above this, is hinged so that it swings up to let the pigs to their feed, and is fastened in place by two short boards fitting across the trough. In this way, a man with a white shirt on can feed his pigs, or a boy five years old can feed them, as feed and water are close to the trough, and the next feed can always be mixed as soon as the pigs are fed. This is an invention of which we are very proud, and it is not patented. This device is handier than a set of scales, also, as we know they are about two hundred pounds each when the twenty fill the trough.

Now, to go back to our system of feeding. When we get the little pigs home, we give them milk fresh from the cow, in which is mixed a little barley meal for a few days, so that they do not receive a check at weaning-time; then change to skim milk or buttermilk, if we have it, if not, water, continuing the barley meal, as much as they will eat, till they go to the packer, at about six months old. They are also fed a large chaff-basket of clover leaves daily, which drop off the hay; also, if we have them, about two pounds each small potatoes, raw, as we think the raw potatoes kill the large white worms which sometimes cripple pigs. We use to give the drink first and then dry meal, but get better results by mixing the meal with the drink. We like winter feeding better than summer, as our pig-house is warm, and pork prices are higher and feed cheaper. We have never had a crippled pig when fed barley alone, but this year we could not get barley enough, and three crippled. We put the three in a little pen 5 x 10, with cement floor, stopped the shorts and fed ground oats and potato peelings and waste from the kitchen, when they soon recovered.

A word about the market for bacon hogs. The packers do not care anything about cost of production. They are like a Montreal butcher with a drover, who was offered less than cost for his cattle, and, protesting, the butcher said: "We do not care what you paid; we do not care if you stole them." The only thing that moves the packer is when supplies are so small that butchers need the most of them. Now, most farmers are not business men, and so do not know what their produce costs; but what good would knowledge do them? They are the only manufacturers who have no say about the price of their goods. They should have cost and a fair profit, or let the middleman produce the goods. As to the cost of the bacon hog, with feed a dollar a hundred, little pigs a dollar and a half each, and live hogs five and a half cents, we had two dollars a hog for labor, skim milk, potatoes, etc. This year we have sold at eight cents, and only come out about even, as feed has been so dear. Next fall will see dear pork, as farmers won't buy expensive feed this summer, and the city man who likes breakfast bacon had better buy a little pig now and feed it for himself in the cellar, and then he will cease railing at the farmer about the high cost of living.

J. W. ROSE.

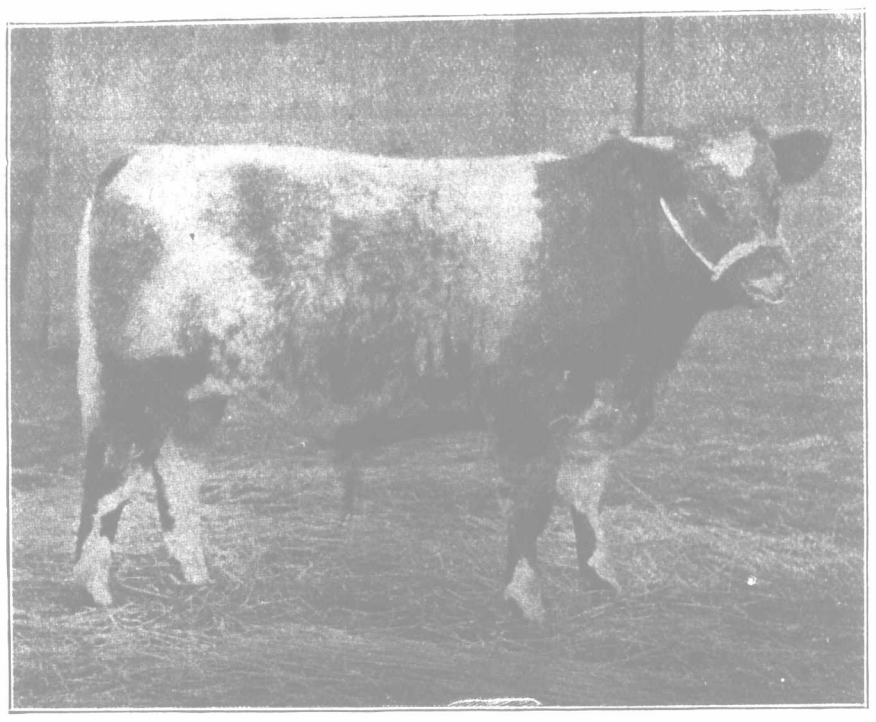
Baby Beef Feeding.

In the Montreal market reports, during the week of Easter trade, we noticed that some calves sold as high as eleven cents per pound. These calves were fed by McDonald Bros., of Ontario County, Ontario, so we wrote to them to give us a short outline of their feeding methods, and received the following letter:

"In reply to your inquiry for information in regard to the calves bred and fed by us, and which sold on the Montreal market for 11 cents per pound, we would say that they were bred from good milking grade Shorthorn cows, and sired by a thick-fleshed, early-ripening Shorthorn bull. They were calved the last of May and the first of June. They received no hothouse treatment, but were run in pasture with their mothers. About the middle of August they were turned into rape, which furnished an abundance of feed until it froze up. On stabling, the calves were run together in a stall loose. They were fed twice a day, the six calves getting about sixty pounds of roots and 18 pounds barley and corn meal, with all the hay they would eat up clean at each feed. They were turned out each day to suckle their mothers, and were allowed to remain out for from one to three hours, according to the weather. These calves made an average of 725 pounds at the shipping point, and, while this is not a heavy weight for the age, they were of that sappy, extra-fleshy kind which is demanded in this particular kind of stuff.

"NEIL McDONALD."

It will be seen that these calves were only about ten months of age, and at the weight and price given would bring the dealer $79.75 each, which is more than many three-year-old cattle will sell for. We note, also, that these calves were from milking Shorthorn cows, which proves again that, with the right class of bull, the beef type can to a very considerable extent be combined with milking qualities. This is a good illustration of the fact that it pays to produce the best, and also, that there is still profit in beef properly handled.



Broadhooks Cardinal.

Shorthorn bull; born February, 1911. Second in class at Birmingham Spring Show, March, 1912, bred by Lord Lovat, sold at auction for $4,400, to D. Maclennan.

Feeding Cattle in Brant County.

Commenting on the cattle-feeding situation during the past winter, Robert Cochrane, of Brant County, Ontario, placed the number of cattle fed on the farms in his section of country at four for every hundred acres. These cattle, as the small numbers would imply, were nearly all raised on the farms. The few that were bought cost from 4½ to 5 cents per pound when placed in the stables last fall. A large proportion of the cattle were very light, weighing only from 600 to 700 pounds, and of very poor quality. A few lots of export cattle were fed, but were turned off in a half-finished condition at from 5½ to 6 cents per pound. Most of the lighter cattle were for local trade, and were sold before being finished at from 5½ to 6 cents per pound. One stable of export cattle which were bought last fall for about 5 cents per pound, were sold for spring delivery at 7 cents per pound, leaving a 2-cent spread. Ordinarily, Mr. Cochrane considered 1½ cents per pound a fair spread, but, to make a satisfactory profit, with feed as high in price as it has been this season, he believes 2½ cents margin is necessary. From his own experience, he thought that greater gains could be made with young cattle, citing a case of two pure-bred calves eight months old, which he bought and fed 4½ months, along with one of his own raising, during which time they made an average gain of three hundred pounds. They were then turned on grass and received no feed until corn was fit for fodder, when they were again stall-fed. The meal fed was two-thirds barley and one-third wheat. Each calf got a gallon at a feed, together with one-half gallon of bran. As soon as mangels were ready to feed, each calf received a scoop-shovel full of these at a feed. At the end of twelve months their weights were 1,290 pounds, 1,330 pounds, and 1,380 pounds, respectively. Nine cents per pound was refused for these cattle for last Christmas trade, as they were kept for a short course in stock-judging. The calves made the best gains the first winter, according to meal fed. The cattle were sold in March at 8 cents per pound, two of them weighing 3,000 pounds.

Very little oilcake or cottonseed meal is fed in this district. These calves did not receive any. Good ventilation he believes necessary. He has a pipe arranged on the outside of the basement wall, starting within a foot of the ground, and extending up over the wall into the stable, the end covered with cheesecloth to prevent draft. Outlets were constructed up through the roof.

We wonder if all the cattle-raising districts of Canada marketed four beef cattle per 100 acres during the past season? Even if they did—and we have every reason to believe that such was not the case—it seems a very small number to be turning off. Nine steers were fed off "The Farmer's Advocate" farm of 112 acres this winter, besides some veals and the manitenance of a herd of twelve to fifteen dairy cows. Such results as Mr. Cochrane obtained with his young feeders can be duplicated on thousands upon thousands of farms in Canada, and, where such prime quality is produced, beef pays.

Rations from Single Plants.

In experimenting on young heifers in feeding chemically-balanced rations from single plant sources, the Agricultural Chemistry and Animal Husbandry Departments of Wisconsin University, found that animals so fed reached physiological maturity and underwent the strain of reproduction, but mothers fed solely with wheat nutrients produced weak, undersized calves and maintained a low milk production; while those receiving rations made from corn produced large, vigorous calves and maintained a high milk flow. Rations from oats did not prove so effective in maintaining the vigor of the young as those from corn, but were more satisfactory than those from wheat. A mixture of all three types of nutrients gave results nearer those obtained with wheat, contrary to the popular opinion that a varied ration produces best results. It was proven impossible to change an animal matured