

average cost of keeping a cow for a year is \$40. A too common mistake in raising feeders is to try to economize in the food. The best way to raise a calf with the maximum profit is with new milk, or its substitutes—oil cake, ground linseed meal, etc. When the cost of keeping a cow is \$40, it is evident that the calf she should raise should be of the very best, and should be brought to maturity as early as possible.

The Selection, Breeding and Care of Beef Cattle.

By Andrew Graham, Pomeroy, Man.

When we consider that a first-class beef animal has about 35 per cent. of his dressed weight in the three cuts along the back, known as ribs, porterhouse, and sirloin, and that these three cuts represent about 55 per cent. of the value of the entire carcass, we see how important it is that we should have a correct knowledge of what constitutes a good animal. The hair, hide and handling qualities are important, not so much for what they are as for what they indicate. With a good, thick, mossy coat of long, soft hair, growing out of a hide not too thick, and yet not too thin or papery; a hide that you can gather up in handfuls and find it pliable and soft, and at the same time elastic in its touch; overlaying a depth of firm, yet not hard flesh, you have almost invariably a good doer and feeder.

We would emphasize once more the great importance of selection. One animal will feed at a loss, another barely pay for food and care, while still another will return a large margin of profit. Do not be tempted to sell your best heifers because some enterprising breeder offers you a few dollars more than market value for them. Select the choicest for the purpose of improving the standard of your herd, and you will soon find that you are on the right track. If the selection of the female breeding stock is important, the selection of the sires is of incomparably greater importance. The old saying that the bull is one-half the herd is as true and forcible as ever. It is a short-sighted and ruinous policy to use anything but high-class sires. The Dominion of Canada is losing millions annually by using inferior sires in the breeding of farm stock. By the continuous use of high-class sires almost any herd in the land may be brought up to a high standard of excellence. Show me the breeders throughout our Dominion that have gained eminence as breeders and I will show you men that have been very discriminating in the class of sires they used.

While good blood, wise selection and careful breeding is necessary to success, they must be associated with good management, good care and intelligent feeding. It is rather difficult to say much along this line when cattle are kept entirely under range conditions. One thing essential to success would be to keep the bulls separated from the herd until such time as to have the calves come in the spring when grass would be nicely started and danger of heavy storms well past, allowing the calves to run with their dams, say up to the latter part of September or early in October, when they should be placed in a field by themselves, where they could have access to abundant water and plenty of good pasture, or the choicest of hay. This should be supplemented by a little oatmeal or whole oats and pulped roots. Whole roots, such as mangels or sugar beets, make excellent food for young calves at weaning time.

I believe the question of profit or loss in the breeding of cattle depends largely on how the calves are handled from weaning time until reaching grass the following spring. The object should be to retain as far as possible the calf flesh, and keep them moving right along. Succeeding in this, we are well advanced towards success; failing in this, we lose about a year's growth.

Herbivorous Animals Require Salt.

Animals that live on grains and grasses must have salt, in addition to that supplied by their natural food, to maintain normal health. They will travel long distances in search of it, provided they cannot get it by some easier method.

Carnivorous animals do not require salt in excess to that supplied by their natural food. They eat with their food considerable blood, and as blood contains about the right proportion of salt necessary for the system, they have no desire for any in its concentrated form.

Cereals and legumes form the chief food of herbivorous animals. These contain very little salt, but a large proportion of the various salts and combinations of potash, and as these forms of potash tend to drive salt from the body through the action of the kidneys, it naturally follows that considerable quantities of common salt will be required by the system to take the place of that which has been lost. Milk, like flesh and blood, contains comparatively little of the potash salts, hence young animals while living on milk have not the same need for salt which they will as they grow older.

Any food rich in potash calls for a liberal supply of salt.

Our Scottish Letter.

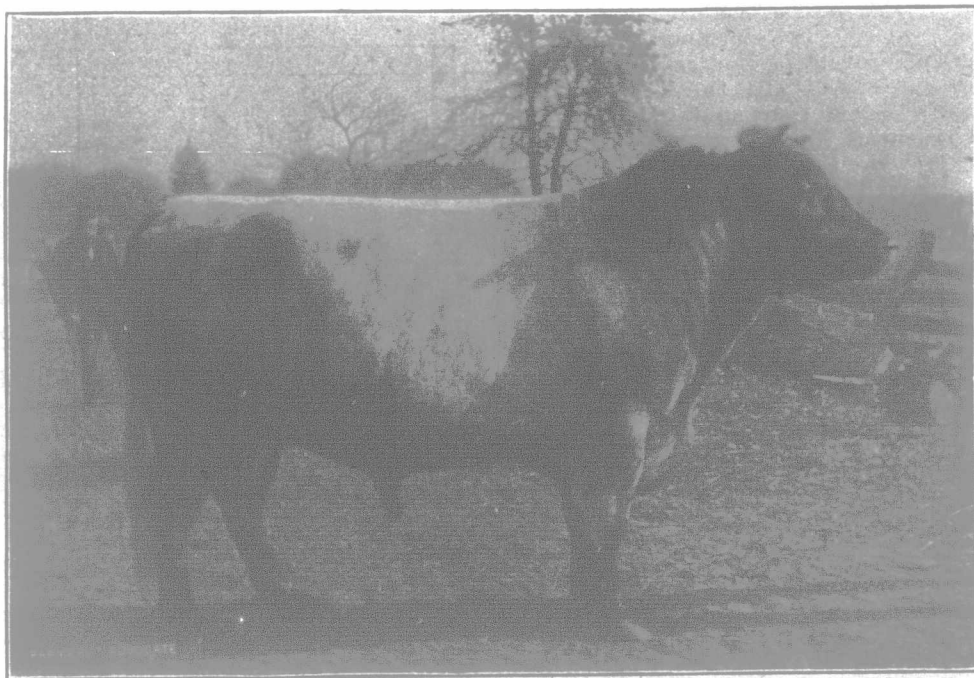
The great fat stock shows of 1903 are over, and on the whole we are thankful. Nearly every town has its event of this kind, but the five outstanding shows are, in order of date, Norwich, Inverness, Birmingham, Edinburgh, and London. At the first the English exhibitors first try conclusions. At Inverness, the north country breeders similarly enter the battle. At Birmingham, which is held on the same day as Inverness, the winners at Norwich face the best from feeders in other parts of England and some parts of Scot-

land, and various classes for pigs, which were divided according to weights. Welsh cattle won two out of the three cattle classes, and the champion plate went to the Welsh runt carcass placed first in the older class of steers. The second best carcass was that of the first-prize heifer—an Aberdeen-Angus-Shorthorn cross. A similarly-bred carcass was second in the younger class of steers, and an Aberdeen-Angus product, out of a cross-bred cow, that is a three-parts bred A.-A. steer carcass, was second in the older class. A Sussex was third in the younger class; a Short-horn fourth; and an A.-A. steer highly commended.

In the older class, the third-prize winner was a Kerry. In the heifer class, the second was a Gallo-way, and good at that; the third a blue-gray (A.-A.-Shorthorn cross); the fourth a Dexter, and the fifth a Welsh. The champion carcass in the sheep section was a Suffolk lamb, and nearly all the prizes in the sheep classes went to Suffolk-Cheviot crosses. Berkshires won first and second in the class for carcasses of pigs not exceeding 100 pounds weight. The third was a Large White. In the medium class, over 100 lbs., and not exceeding 220 lbs., Berkshires were again first and second. The heaviest class, over 220 lbs., a Berkshire being second, and a Large Black third.

The necessity for such competitions was clearly demonstrated by the results. The judges were three prominent butchers. The first-prize carcass in the younger steer class was unplaced on hoof; the one placed first on hoof was put second as a carcass, and the one placed second on hoof was put third as a carcass; the third on hoof was placed fourth. Except for missing the first, the judges appear to have got near the place in their examinations on hoof. In the older steer class they placed an animal first which only got fourth prize as a carcass. This was an A.-A. steer, owned by His Majesty the King. Their second prize on hoof was also second as a carcass. Their third on hoof was not only first as a carcass in his class, but the champion carcass in the show. Their third-prize carcass got no prize at all on hoof. This was the Kerry, a type of animal concerning which a London butcher has apparently no skill. It was in the heifer class that the greatest discrepancies were seen between the awards on hoof and the awards in carcass. On hoof the judges placed an Aberdeen-Angus-Hereford cross first. She was very smooth and level in flesh, but cut up far too fat, and got no prize at all as a carcass. It sold for about 10 cents per pound. The Gallo-way placed second as a carcass was also placed second on hoof. The cross-bred which was classed first and reserve champion carcass, was placed third on hoof. It sold at 20 cents per pound, and the Gallo-way which stood second at 18 cents per pound. The Dexter placed fourth as a carcass was unplaced on hoof; as was also the A.-A.-Shorthorn cross placed third. This was exhibited by His Majesty, and made the biggest price, viz., 21 cents per pound.

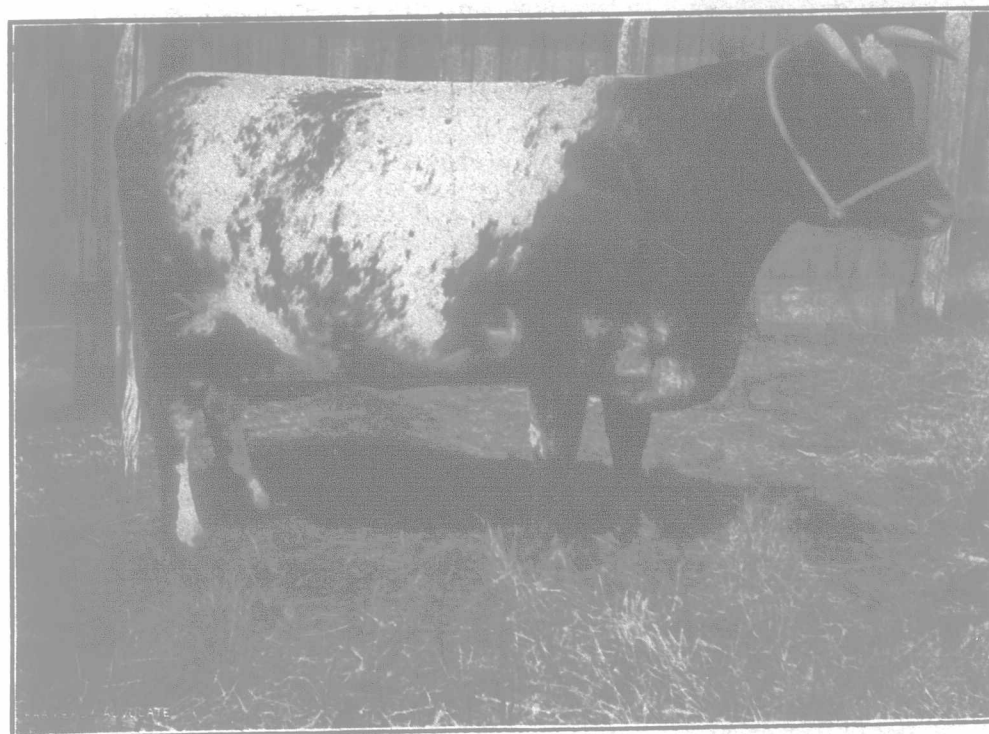
The butchers were hardly more successful in dealing with the sheep. They seemed to be looking for very lean mutton, and overdid the thing.



Prince of the Forest = 40409 =.

Imported Shorthorn bull at head of herd of J. & E. Chinnick, Chatham, Ont.

land. At Edinburgh the Scots and north of England feeders have their innings, and the grand round-up takes place at London, under the auspices of the Smithfield Club. The London event is also unique in that it is the only show of the lot at which there is a carcass competition for cattle, sheep, pigs and poultry. This is by far the most interesting and useful part of the show. The animals are inspected and judged on hoof on the Monday; they are killed on the Monday evening; by Wednesday morning their carcasses are suspended where they stood alive two days before. These are then judged, and have positions assigned to them, while complete details of the constituent results in each case are published and in circulation by two o'clock on



Laura.

By Topsman, out of Lauretta 3rd. Winner of second prize in the aged cow class at Winnipeg Industrial, 1903. The property of J. G. Barron, Carberry, Man.

the afternoon of that day. The classes this year were very well filled. There were two classes for steers, one for animals under two years old, the other for animals two years old and under three. There was one class for heifers under three years old. Similarly, there were classes for longwool and shortwool lambs and wethers over one year