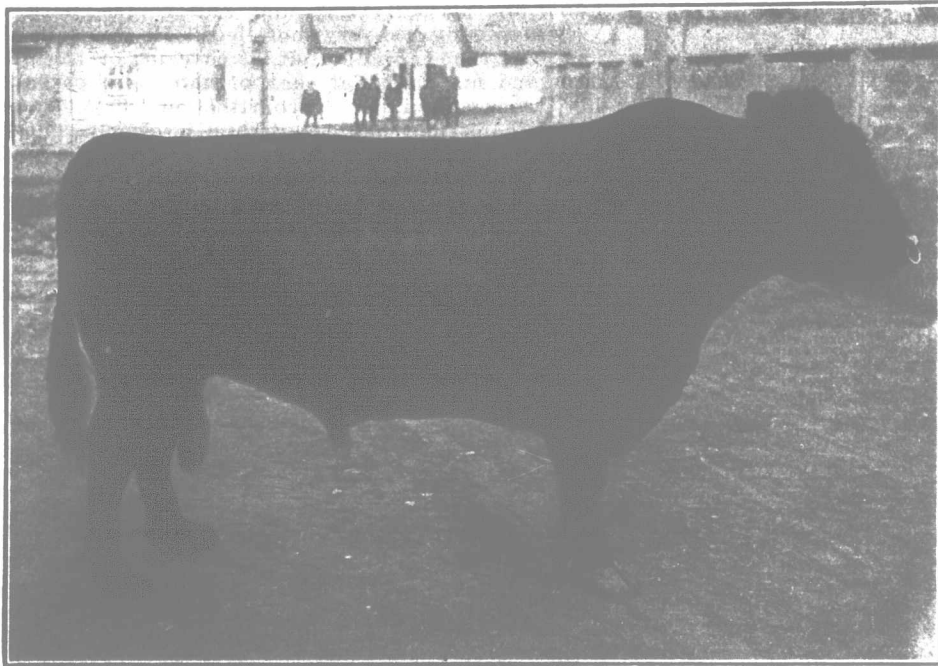


upon his great policy of blood concentration, through which he finally attained his long-cherished desire to perpetuate a fixed type of rent-paying, beef-producing, hardy-constituted cattle. But Champion of England was by no means as highly thought of in outside circles, and when Amos Cruickshank first resorted to the use of home-bred bulls, the whole tide of public opinion was against him. Men who were considered leaders in the Shorthorn world scoffed, and even his brother breeders in Aberdeenshire turned against him, and betook themselves elsewhere for bulls wherewith to head their herds. The pedigree craze, which had been gaining in strength, was now at its height, and fashionable breeding had become the watchword of the Northern as well as the Southern breeders. But Amos Cruickshank held on the even tenor of his way, turning neither to the right hand nor to the left, and allowing none of these things to interfere with what had been his steadfast purpose through all his operations—as a breeder. The Sittyton bull calves continued in demand among farmers who believed in a first-class bull for commercial-purpose breeding, and when it is remembered that many hundred were thus dispersed throughout the Northern district, the enormous influence exerted by Sittyton blood, not on the pure herds alone, but on the whole cattle population, cannot be overestimated. To this potent factor, in conjunction with the polled breeds, many attribute the position to which “prime Scots” attained in the world's markets.

An idea seems to have got abroad that, towards the end of its existence, the quality of the herd had begun to deteriorate, and that Mr. Cruickshank may have disposed of the cattle because he had exhausted the material for carrying it on with animals reared in the herd. The facts are that Mr. Cruickshank's sole reason for disposing of the herd was that, after a very serious illness in the winter of 1887-88, he no longer felt able to undertake such an onerous task as the management of such a herd, and that he parted with his beloved animals very reluctantly indeed. Robert Bruce has told us how the old man's face lighted with pleasure when he told him that their new owners wished to have the animals accommodated at Sittyton for a few months after their purchase. As to the falling off in merit, all the animals bred by Messrs. Duthie and Willis (and these are practically the only sources in the female line in the country) have been reared from the oldest cows at Sittyton in Mr. Duthie's case, and the last crop of heifers in Mr. Willis's case. When these heifers were yearlings at Sittyton, they were admitted by everyone who saw them to be as good as any Amos Cruickshank had ever reared, and any one who saw them at Bapton Manor when they had grown into cows of maturity, would have seen that they had quite fulfilled their early promise. At the Royal English Shows, held at Warwick and Newcastle, after the sale of the herd, quite a number of the prize animals were bred at Sittyton, and Scottish Archer (59893), Captain of the Guard (58596), Wanderer (60138), and Leonidas (59260), amongst the most successful sires bred by Amos Cruickshank, were all the produce of the last year of the herd's existence. At the time of the sale there were three or four very good sires to carry on the herd with: Gondolier (52956), Gondomar (55821), and Commodore (54118), were all three considerably over the usual merit. Mr. Cruickshank certainly felt no doubt in his own mind, and, under ordinary circumstances, would on no account have parted with the cattle. In the hands of a less complete master of his art, the suggested result would, in all probability, have been the actual result. Referring recently to the mistaken and almost universal misconception of the nature of pedigree, a writer said that no herd had ever been so closely bred as that at Sittyton, and but for the fact that it was in the hands of a born breeder, weakness and degeneration must have been the result. One cannot but feel glad that, at the end of his days, “the sage of Sittyton” had the satisfaction of knowing that his work was appreciated, not only in his native land, but far across the seas; but he could have had no idea that before another 20 years had passed it would be almost impossible to find a Shorthorn herd of standing into which Sittyton blood had not been introduced, or that Cruickshank blood would be as highly prized in England as Booth or Bates had been in Scotland in the infancy of his own operations as a breeder. At the recent Birmingham Show, every one of the 46 bulls sold at or over 100 gs. had more or less Cruickshank blood in their veins, and the best group of five yearling bulls was declared to be “One more triumph to that excellent infusion of blood—the Bates with the Cruickshank.” As has been said, mated with the less thrifty but more stylish Southern cattle, the Cruickshank animals are doing a great and good work. And the unparalleled dual triumph of Deane-Willis at the Royal, in Derby, a month or two ago, is one more lasting laurel laid on the life-work of the king of Scotch breeders. B.

Farm and Range Stock Compared.

Frequent inspection of the cattle that come into the stock-yards at Winnipeg convinces us that greater improvement has been made in the type of cattle raised on the ranges than in those grown on the smaller farms farther east. This is not what we would have expected, since the general average of the bulls used in the grain belt is better than upon the ranges. The circumstance may be accounted for upon two reasons: the calves on the range make a better start upon their mothers' milk than their pail-fed brothers of the grain belt, and the range grass is more plentiful and luxuriant. These are things that make cattle. Improvement in the range stock is particularly noticeable in the carload lots of cows that are marketed. Dry cows, of course, have every opportunity to look well in the fall, but, in addition to this, there are a lot of cows coming forward that have very superior conformation for beef production. Most of them have two or three crosses of Shorthorn or Hereford blood, and the extent to which the characteristics of these breeds are stamped upon them is really remarkable. It raises the conjecture, why, apart from the feed these cattle receive, should there be so



Viceroy of Castlemilk (imp.)—1394—, (7062).

First and sweepstakes aged Galloway bull, Toronto, Ottawa and Dominion Exhibition, Halifax, 1906. Property of Robt. Shaw, Brantford, Ont. Bred by Sir Robt. Jardine, Castlemilk, Scotland.

much more evidence of breeding in the range cattle, with only two or three crosses, than in lots of other stock with perhaps four or five crosses? The theoretical answer is that the original stock upon which the pure-bred bulls were used was of such mixed breeding that the prepotency of the pure blood had ample opportunity to assert itself. The question then arises, will the continued use of pure-bred bulls have a proportionately beneficial effect upon the stock? Both experience and theory teach that it does not, and this is the great stumbling-block in breeding. In all lines of endeavor it is much easier to attain to the average than to rise above it. In stock-breeding, the explanation lies in the fact that, as the females become purer in blood, their characteristics become more fixed, and are consequently less easily modified by the use of pure-bred bulls. This is not an argument against the continued use of well-bred bulls, but a reason why, as a herd becomes of higher grade, greater care should be exercised in selecting bulls that have good pedigrees, that are nearer perfection as individuals, and that have lots of character and prepotency about them.

The greatest example of the immediate effects of using pure-bred bulls upon common mixed stock, is in the operations of the Argentines. So great has been the improvement of their cattle by the first and second cross of pure-bred bulls, that the value to that country of pure-bred blood is far and away beyond what it is to countries which have considerable breeding in their herds. Consequently we see the Argentine buyers paying what looks to us as fabulous prices for bulls, but, at the same time, it is a good investment, for the good these bulls are doing is in proportion to their cost.

Different conditions, however, are in store for the Argentine and the British feeders. When the average cow of the Argentine ranches becomes half or three-quarters pure-bred, there will not be the proportionate improvement in her offspring that there is to-day, and pure-bred bulls will not command the prices they do at present. Not but what they should, but because there will not be the same apparent obvious value in them. (The Farmer's Advocate, Winnipeg.)

Stabling the Cattle.

The mistake of deferring the stabling and feeding of beef cattle, and even of milking cows, at night, when the weather turns cold at this season, is too common. Nothing will shrink the milk flow quicker than to leave the cows out on cold, frosty nights, or in chilling winds, and even though grass may be fairly plentiful, as a result of recent rains, it is soft in its nature, and much less nutritious, owing to the effect of the frost, than is early spring grass, and needs to be supplemented by something more substantial, such as a little good hay, or meal and bran, ensilage or cured cornstalks, if available. In the case of cattle intended to be stall-fed for early spring sale as beef, it is a mistake to allow them to fail in flesh by keeping them out on the grass till winter sets in severely, as the weight they lose under such conditions must all be made up by good feeding before they are brought to the weight they had attained, and before they can begin to make substantial new gains. It is, therefore, not only time lost, but weight and feed lost, to allow them to shrink, with the idea that feed is being saved by leaving them out as long as they can find a living. And it is also bad for the pastures to have them eaten off short in the fall, the ill effect being clearly noticeable in the spring by their slow growth, as compared with pastures which have been spared and allowed to go into winter with some roughness to protect the grass from the severe frosts. This roughness is also very helpful to cattle turned on pasture early in spring, as, mixed with the young and tender growth, it serves to prevent scouring, and keeps the animals in better condition to make steady improvement.

Care and judgment needs to be exercised in changing cattle from grass to dry feed at this season, in order to avoid constipation of the bowels, or impaction of the stomach, ills that are liable to occur when the change is too sudden or extreme. The feeding of a moderate ration of roots or ensilage or bran with a liberal allowance of salt at this juncture may save trouble, and will certainly be helpful to the health of

the animals. The fear of trenching upon the winter supply of feed is a common apprehension at this season, but it may prove a false economy to be too saving if thereby the stock is allowed to fail in milk or flesh and strength. A check in the flow of milk at any time is scarcely possible of being wholly regained, and, as before mentioned, flesh lost must be regained before progress can be effected.

Maintenance Ration for Beef Breeding Cows.

In Bulletin No. 111, Herbert W. Mumford, of the Illinois Experiment Station, presents some facts, summarized below, on the subject which forms the heading of this article. The object of the experiments was to compare feeds readily available on Illinois farms for maintaining beef-breeding cows during the winter season.

Silage, shock corn, and corn stover, respectively, proved to be economical feeds for the maintenance of cows when fed in connection with clover hay and oat straw.

The average daily gain per cow in lot 1 was 1.07 pounds. The average daily ration per cow consisted of corn silage, 16.64 pounds; clover hay, 3.5 pounds; and oat straw, 9.56 pounds.

The average daily gain per cow in lot 2 was .758 of a pound. The average daily ration per cow was, shock corn, 8.7 pounds; clover hay, 3.5 pounds; and oat straw, 10.83 pounds.

The average daily gain per cow in lot 3 was .41 of a pound. The average daily ration per cow in this lot during the time the cows were confined to stover and oat straw, was, corn stover, 21.67 pounds; oat straw, 5.15 pounds; and when clover hay was used, stover, 10.28 pounds; clover hay 1.56 pounds; and oat straw, 8.19 pounds.

Under the conditions of this experiment, silage produced 41 per cent. greater gain in live weight than an equal acreage of shock corn.

The cows in this test would not eat as much shredded stover as unshredded, and clearly preferred the latter.

The yield of crops used in this test was 57.9 bushels corn and two tons stover per acre; and