

case for mutual help, and not a case for war between butchers and farmers. The Scottish Chamber of Agriculture has, in name of the farmers, held out the olive branch to the butchers, but so far without response. Let us hope wiser counsels may prevail during the coming week.

AUTUMN PURE-BRED CATTLE SALES.

The autumn pure-bred sales of cattle are over. It has not been an exciting time, although the Duthie-Marr sale, as usual, furnished some mild sensations. Shorthorns easily lead among the breeds, and among Shorthorns Mr. Duthie got top figure—620 gs. for a red bull calf, named Royal Vanguard, and 550 gs. for a roan bull calf, Collynie Prince. Mr. Duthie's leading sires at present are Vanguard, a home-bred red, and the 1,000 gs. Heatherwick-bred bull, Achilles. The demand for Duthie bull calves was as lively as ever it has been, although there was no foreign competition. For 14 bull calves, Mr. Duthie got an average of £235 13s., and for 10 heifer calves his average was £181 2s. 10d. apiece. Mr. John Marr, who now holds the historical farm of Uppermill, had an average of £68 7s. 1d. for ten bull calves. He got 250 gs. for one, by Prince of Ceremonies, a very fine roan sire, which is breeding well and true. This was the only animal purchased for the Argentine at the sales. Mr. Marr got 140 gs. for another bull calf, also a red. He is named Royal Leader, and belongs to the Rosemary race of cows. In him all Mendelian theories are set at defiance. His dam is a white cow, and his sire a roan bull, yet he himself is as genuine a red as ever stood on hoof. The second sale in Aberdeenshire was held at Newton, Insh; 36 head of mixed ages and both sexes made an average of £75 9s. 1d. On the following day, at a great joint sale, held in the City of Aberdeen itself, 130 head made £40 14s. 4d., and on the Friday, 167 head, at Inverness, made an average of £25 4s. 6d. The Shorthorn men have little reason to complain of trade for their favorites. Aberdeen-Angus men are not so fortunate. With them prices have only been moderate. Nothing at all sensational falls to be reported, and so far as Galloways and Highlanders are concerned, the same remarks apply.

GOOD PRICES FOR CHEESE.

Dairy farmers have had a good season. Milk has been selling well, but on account of the dry summer the bulk of cheese is considerably less than in 1907. In the case of some dairies the reduction totals ten per cent. of the whole produce. The Kilmarnock cheese show is just over. The champion cheese was made by Mr. Andrew Dougan, Straid, Girvan. It sold at 75s. per cwt., of 112 lbs., to Lipton & Co. (Ltd.), and this would be the top price of the market. Scots cheddars scored heavily at the London Dairy Show this year also, Mr. Stevenson, Boghead, Galston, and Mr. Alexander Cross, of Knockdon, coming out on top. The make in Somerset is short this year, and Scots cheese made to suit the English market are in quite good demand. The English market calls for a more moist and more "meaty" cheese than the Scots market. This suits the farmer best, but Scots makers are not quite up to producing a cheese of this kind. One English merchant was buying heavily at Kilmarnock of typical Scots cheddars, which were intended to be kept for twelve months. This is a different class of trade. There can be no doubt that the Scots cheddar is the best cheese to keep, but, when all is said, it is much better to get the market so educated, that it will purchase cheese for rapid consumption. A demand for a meaty, moist cheese is undoubted best for the producer. The prices for good cheese to the farmers at Kilmarnock was from 62s. to 66s. per cwt., of 112 lbs., with, perhaps, 1s. to 2s. more for prize lots. The general trade for cheese this season has been good. Farmers can make cheese at a profit at 56s., consequently when the price goes over 60s. they are doing very well. Fifty-six shillings per cwt. for cheese is about 6d. per gallon for the milk, plus the whey, which goes to feed pigs, in which there is another profit. "SCOTLAND YET!"

RECORDS OF PRODUCTION.

Writing of the London Dairy Show, recently held in England, the Farmer and Stock-breeder says: "The turn-out of dairy cows was the best the Association has yet drawn together, and particularly gratifying must it be to see the pedigree dairy Shorthorn again worthily represented. The non-pedigree Shorthorn is the greatest dairy force in the country, and some of these days we hope to see a movement inaugurated to record the milk yields, and thus furnish a reliable guide to those who are looking for well-bred stock. The non-pedigree Shorthorn is to all intents and purposes pure, and, bred on a basis of recorded milk yields, should make great progress."

The suggestion is good, but from the standpoint of the Canadian farmer and breeder, it would be much more to the purpose were the Dominion Shorthorn Breeders' Association to establish in connection with its herdbook a Record of Dairy Performance of registered Shorthorn cows, the record to be based on officially supervised yearly tests for milk and butter-fat production, such as those to which breeders of the special-purpose dairy breeds submit their cattle, in order to qualify them for the Records of Performance maintained in connection with their herdbooks.

BUILDING A SHEEP BARN.

In building a house for the shelter of sheep, no heavy timber is needed, and a plank frame may be used to advantage to economize expense. It is important, if practicable, to select a dry location or make it dry by drainage, or raising the earth floor, which is the best for sheep, by carting in clay or gravel. The building should be placed on a stone or concrete foundation about two feet above the ground, and may be of any dimensions to suit the size of flock intended to be kept. It is desirable to have the width not less than 24 feet, as the front doors should be left open, for the healthfulness of the flock, except in very stormy weather. Sheep do not need to be kept warm, as their fleeces provide for protection from the cold, but they must be kept dry, and are better kept free from direct draughts. Dry yards—that is, sloping ground for yards—preferably on the south side of the barn, are almost a necessity, as the sheep prefer to lie on the ground, even in cold weather, so long as the ground is dry. The yards should be enclosed by a woven-wire fence, high enough to exclude dogs. The building may be any length required, and, as clover hay is the principal fodder used in their feeding, should be two stories high, in order to provide ample storage-room. It is well, also, to have the loft tolerably free from cross-beams, in order that a hay-carrier may work without hindrance, the hay being taken in at one end of the building. Doors should be double, and wide enough for a wagon to be used in removing the manure; and, it may be well to have the doors in two parts, so that, in stormy weather, the lower half may be closed, and the upper remain open for ventilation. Plenty of good-sized windows, to admit light and sunshine, should be provided, and principally on the south or sunny side.

"Care should be taken to make the feed floor overhead perfectly tight, in order to keep the seeds and chaff from falling on the sheep and getting in the wool, and I would prefer ventilators at the top of the feed chutes."

Feed racks, firmly braced, may serve as partitions to divide the different sections of the flock, as the ewe lambs and ram lambs carried through the winter should have separate enclosures, as also should the breeding ewes.

ECONOMIZING THE MEAL RATION.

Editor "The Farmer's Advocate":

With concentrates so high in price, it is clear that they must be fed with judgment in order to obtain in the return from meat or milk a reasonable market price for grain grown on the farm, or to realize a fair degree of profit from the money invested in such as may be purchased on the market. I take it that it will be wise this season to let the number of cattle wintered be governed by the supply of roughage fodder in the barn; and, by roughage fodder, reference is more particularly made to silage and roots. By careful management, there is no doubt that a mixture of these feeds, in the proportion of, say, three to two, by weight, if fed in conjunction with one part of good clover hay, or even of clover hay and good oat straw, will yield almost unexpected returns, either in fattening beef cattle or in producing milk. This proportion has worked very well when a moderate meal ration is fed. When very little meal was given, we have found that the roots could be increased in the ration, with advantage, to an equal weight with the silage. It may be doubted if the feeding value of this succulent fodder is yet correctly estimated or realized. With the price of grain as high as at present, I would even raise the question whether cattle can

be fed with any fair degree of profit when roots or ensilage, or both do not constitute the main substance of ration.

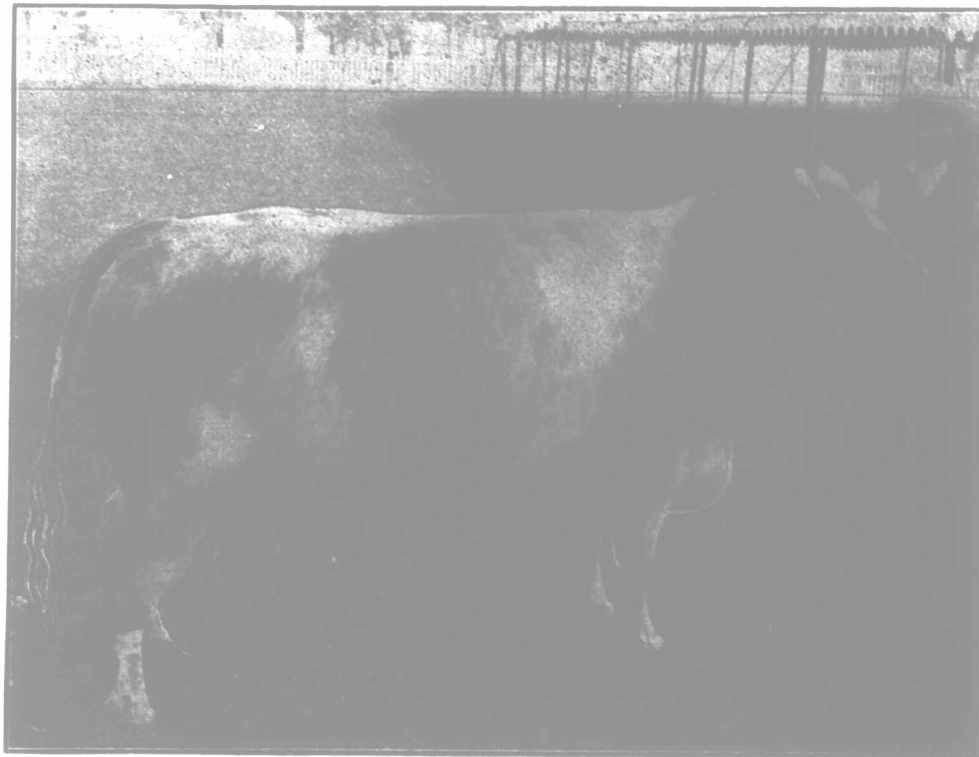
With the roughage ration well provided for, a very moderate meal feed serves to complete whatever requirements may be left unmet by the former. It stimulates appetite, gives body to the whole, and balances well the excess of carbohydrates in the roughage. The lighter concentrates, as oats and bran, are almost indispensable, particularly for dairy cattle, but can still be had under \$26.00 per ton. Of the heavier concentrates, peas and barley are almost out of range. Last winter, however, Western wheat could be bought at from \$23 to \$25 per ton, and it is

probable that it can be had for nearly the same price this season. It has been fed here with marked advantage, no grain or millfeed giving a better report of itself in the ration. Of course, the grains were always fed in mixture. If wheat can be bought at the price stated, it will be found, perhaps, the most profitable of the heavier grains and millfeeds for both beef and dairy cattle. It may be added that we have had good results in feeding about two pounds of nutted oil cake to cows in full milk.

In reference to the amount of the meal ration, perhaps the feeder may be his own best judge, but, taking the old standard of a pound of meal to one hundred pounds body weight, it may be questioned whether this amount may not be cut down with advantage to three-quarters or even one-half (except, perhaps, just at the finishing period) when roughage fodder is well and liberally fed, and with an encouraging showing in daily gains. With average dairy cattle, also, the flow of milk may be made to depend rather upon the supply of roots and silage than upon the feed of meal, and profitably so. Cows in full milk, however, and yielding largely, need, and will always need, a sufficient supply of concentrates to meet and counterbalance the enormous drain upon the system.

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Queen Ideal =64221=.

Shorthorn cow; calved Sept., 1903. First in class, Canadian National Exhibition, Toronto, and Central Canada Exhibition, Ottawa, 1908. Owned and exhibited by Sir George Drummond, Beaconsfield, Que.

The following plan, recommended by J. E. Wing, in his book, entitled, "The Winter Lamb," with such necessary changes as would suit the circumstances, might be adopted, care being taken to have the upper floor well supported, in order to safely carry the weight of hay stored.

"The building is 20 feet wide, as long as desired, 16 feet high at the eaves, with a lower story 8 feet in the clear, and an upper story with half-pitch roof, and 15 feet in height at the peak. There are no obstructing cross-ties, and the hay carrier works on the track in the peak without hindrance. The floor joists are put in lengthways of the building, and are 2 x 8 or 2 x 10, while the joist-bearers are 2 x 16, and the manner of spiking through the joist-bearers into the ends of the floor joists, making the upper edges flush, saves quite a good deal of head room. The floor joists are spiked to the joist-bearers before it is let down to place. Then all is firmly spiked together. No floor is used but the hard earth, which is better if rounded up a little, so that water will run away from all sides, and a generous projection of rafters helps the appearance and the usefulness materially. There are no divisions to the house except such as are made by the placing of racks or panels across. Hay is thrown down at convenient places through chutes reaching up to the rafters, and at the bottom a pen of hurdles should restrain the sheep from getting on the hay as it is thrown down.