

went to Mr. Geo. Harrison, Darlington, for Welcome, a plain daughter of Champion Cup. Lord Polwarth's Lady Beatrice was reserve number. The three-year-old class was a good one, large, smooth, heavy-fleshed heifers in milk, and showing grand udders. Mr. Leopold de Rothschild was rightly placed first with Mayflower 4th. And Mr. Hoskin secured second place with Wood Rose 2nd, one of much the same type, with a beautiful roan heifer calf about two months old at her side. Third prize went to Signet, a light roan with a grand shaped udder, and very fine quality of flesh, exhibited by Miss de Rothschild. The two-year-old heifers were the strongest class in the show. The 21 entries were all out, and the best seven proved a string I have not seen equalled in one class. The first prize went quite easily to J. Deane Willis for Bapton Pearl, by Count Lavender, dam by Golden Crown. This heifer was reserve number for the championship, but clearly entitled to first place. She is a rich dark roan, with abundance of soft, lean and mellow, yet prime, flesh, as smooth and ripe as a peach from end to end, and lots of size and character. Mr. Heaton, of Bolton, had a very good second in Daisy 4th, by Prince Victor, dam by Crown Prince. Third place was given to Mr. Willis for Bapton Fluff, another daughter of Count Lavender, of the same stamp, and very little behind the ones placed above her.

The yearling heifers were an excellent class also, and had the champion female in the first prize heifer, Cicely, exhibited by H. M. the Queen, and sired by Prince Victor, who was very successful with his progeny at this show, thus giving to the yearling classes both championships. Cicely was grand in foreribs and crops, but not up to the two-year-old heifer in quarters nor on shoulders. Second went to Mr. Thorley for Ringdale Memory 3rd, a very handsome roan; but I would have placed the third prize heifer shown by Mr. Garne, Glore, ahead of her—a very heavy-fleshed, thick heifer, which got no commendation from the judges; the third prize going to Mr. H. Dudding's Lady Eva, three others being highly commended.

A. W. SMITH.

Our Scottish Letter.

Recently Scotchmen have been from home, and at the Royal at Maidstone a week ago the Scot, as represented by his particular brand of Shorthorns, was not so much at home as he has sometimes been. The cause of this was found in the fact that the judges were both South Country men, and not so familiar with (or, shall I say, enamored of) Scottish Shorthorns as the Northern men and some of the Southern men are. Differences of opinion amongst Shorthorn judges are by no means rare, and at Maidstone we had more than an average share of these differences. All the same, the butcher favors the Scottish type. It is not so long as Booth or so gay as Bates, but it is all beef; and, after all, that is the thing wanted. Many are still enamored of the idea that Shorthorns can be made both beef-producers and milk-producers. This is true of the breed as a whole, but it can hardly be predicated of every individual animal in the breed. Of no other breed can it be said with equal accuracy that it produces beef and milk, but the animal to excel alike at the pail and at the block has yet to be produced. Cruickshank cattle are not, as a class, dairy cows; Bates cattle are not, as a rule, beef-producers; and Booth cattle are invaluable for crossing purposes, but they do not, as a class, excel as fat stock or in dairy competitions. This year's Shorthorn champions at the Royal are both yearlings—the male owned by Mr. J. Deane Willis, Bapton Manor, Wilts., and the female by Her Majesty the Queen, Windsor. Mr. Willis came uncommonly near winning both championships. He had first with the male, and stood reserve with the female, a splendid two-year-old heifer which in some points fairly excelled the Queen's champion. No doubt it was all right, and in any case what shall the man do that cometh after the Queen but submit and say it is well?

Maidstone is the county town of Kent, but it has a small population, and is in no wise to be regarded as a first-class center for a show like the Royal. Indeed, we expect the Royal stands to lose heavily on its 1899 show. Next year it hopes to do better, when it visits the great county of York and holds its show beneath the walls of that ancient cathedral city. Its last visit to York was paid in 1883, and a very fine show it was. Few cities are more pleasant to sojourn in than that by the Ouse, and doubtless many pilgrims will resort thither. In spite of its obscurity, Maidstone has been one of the most interesting agricultural meeting-places on record. Exactly 100 years ago King George III. visited Kent and Maidstone to review the trained bands of yeomen and farmers assembled to repel the threatened French invasion. This year his g-grandson visited Kent, and in the name of the agriculturists of England welcomed the numerous representatives of foreign agricultural societies who assembled to view the interesting collection of agricultural products and utensils set out before them there. The leaders of the French and German bands were elected honorary members of the Royal Agricultural Society, and presented with their badges of office by the Prince himself. Many hundreds of visitors were present from across the water, and French was almost as much heard as English in the showyard. The international good feeling displayed will no doubt exert a beneficial influence on the public policy of Europe.

Farming in Kent is quite different from farming in Scotland. The leading article is hops, and the first idea which asserts itself is that farming must be a very expensive occupation in this county. What is the cost of cultivating an acre of hops is unknown to the writer, but he should imagine that hop-cultivation will be as big a gamble as there is in British agriculture. The average Briton dearly loves a gamble, provided it is not dignified by that name, and in hop-growing he gets it. Some Scotchmen have left Essex and gone to Kent. Life is not so slow in the latter as in the former, and if you do not spoil a horn you certainly make a spoon. The Scottish farmer sometimes emits a growl about the expense of raising turnips, but turnip-growing is tame business when compared with hop-growing. This season appears to be a favorable one for the hops, but in many parts of Scotland turnips threaten to be a failure, and in spite of maledictions, that is a bad business, because the swede and turnip are still the mainstay of the Scottish feeder. The weather has been unusually warm for some time, but recently more rain has fallen, consequently there is some hope now of saving the turnip braird, but hay is a poor crop, and it is too early to say much about any of the grain crops.

Beef and mutton are dearer here at present than they have been for many years, and these down-trodden gentlemen, the butchers, have consequently been compelled to increase their prices. Not for four years at least have the market quotations per cwt. live weight published in the *Scottish Farmer* appeared so high as they do this year, and over 40s. per 112 lbs. is freely being quoted. This is all right for the man who has beeves to sell, but the numbers of such are few, and unless something unexpected happens beef will be scarce. One risk attending a scarcity of fresh beef is that the public will take to buying tinned meats and frozen mutton, and once having acquired a taste for such and finding prices low, there is no saying how matters may end. The public may continue to buy these kinds of meat, and that in the end of the day will not help the farmer much. Good steady trade at a remunerative price is best for all parties, and the experience of the late boom in wheat is not calculated to make the Scottish farmer think much of "booms." The net result of that has been to lead sanguine farmers in not a few cases to pay absurd rents for good farms in the hope that the boom would continue. It has not continued, and a few of these men—it may be many—will get the "baby to hold."

AN AGRICULTURAL COLLEGE FOR WESTERN SCOTLAND.

The project to establish an agricultural college in the West of Scotland, on the lines of your notable institution at Guelph, is approaching completion, and very soon we will have a well-equipped teaching center in Glasgow and Kilmarnock worthy of the enterprise of the Western shires. This scheme has been taken up by the county councils, and the teaching staff includes Professor Wright and the whole of the equipment of the Glasgow Technical College in its agricultural department, as well as the staff and equipment of the Scottish Dairy Institute, presided over by your countryman, Mr. R. J. Drummond, one of the most efficient teachers of dairying ever seen in Scotland or England. Mr. Drummond is, indeed, too able a man for some folks, and they cannot abide him, but he is a splendid teacher, and makes everybody toe the mark. Some objection has been taken to a farm being run along with the college, and one gentleman has gone so far as to declare that a farm attached to an agricultural college is like a millstone around its neck, or a white elephant. I would like to know whether this is the view taken of the matter in Canada. The governors of the school at Guelph should be able to throw light on the question, and I would be pleased to hear what they say about it. Agricultural education in the West of Scotland under Professor Wright has made rapid progress in the past six years, and as a separate college the agricultural department should secure additional renown. "SCOTLAND YET."

Feeding Steers Loose Satisfactory.

To the Editor FARMER'S ADVOCATE:

SIR,—In regard to the steers I fed loose last winter I can only reply in general terms, as they were not weighed either before or after feeding. I sold the bunch in January for a lump sum, to be delivered April 10th. The steers were good and the price was satisfactory, and I intend to feed loose again next winter, as I consider that cattle do as well or better loose than tied up. They walked in to the railroad station (seven miles) almost as well as grass-fed cattle. Steers I have fed tied up I always had more or less trouble to take in. They keep cleaner and the manure is in better condition for spreading, and the steers seem more comfortable. They fed very peaceably together and none of them ever refused their chop. For the first month of feeding they received about four pounds per day each of crushed oats and barley in one feed, which was gradually increased to twelve pounds per day in two feeds. They had two small feeds of hay per day and as much good straw as would bed them well after they had picked it over. They were let out to water every morning before feeding chop.

Wallace Municipality, Man.

CHAS. E. IVENS.

Selection of Rams.

BY J. M. M'CAIG.

The cultivation of the animal form in both beef and mutton stock, for the best feeding and most profitable and desirable type, has resulted in a pretty definite and well-understood outline of animal as the meat ideal. Roughly speaking, the meat form approaches that of a solid figure as wide as it is deep, and with a length equal to about twice the depth. A figure of equal width and depth contains more of solid contents to a given external area than one that is either narrow or shallow, and the most profitable investment of feed is in a frame of this shape. Of course, in the animal frame we cannot have the figure of an absolute oblong square, as the ribs and body are more or less circular, but we may have a uniformly straight upper and under line, and pretty uniform thickness from front to rear. It involves considerable critical judgment to fully appreciate in detail the points that constitute this fullness and completeness of figure. In a meat-producing country like Canada an appreciation of these points among breeders and feeders is pretty general.

Among breeders, however, something more than this is necessary. The business of coupling is the arranging of mutually dependent, complementary and suitable parts, and, though unnatural and very broad contrasts are opposed to the production of suitable and symmetrical offspring, there are still characteristic differences between male and female that every breeder should try to appreciate. Nature relieves her similarities by well-defined contrasts, and generously endows man and beast alike with a separate and distinct individuality. It will be wise for us to observe this constant law, and not allow our fidelity to the symmetry of the meat form to force us into a dead level of uniformity with regard to males and females alike.

Contrasted with the female, the male is larger; in most breeds fully a third larger than the female. This difference may be either the result of the exercise of the special duties of protection, requiring greater weight and strength on the part of the male in earlier times; or, on the other hand, the smaller size of the female may be due to the greater tax on her in the reproductive office; a large part of the nutriment she gathers is not appropriated to her own organism. The question of how the difference in size and strength of the male and female arose is not a matter of much importance practically, except in so far as we may learn from a study of it that the differences are fundamental, and really points that go to constitute masculinity on one hand and femininity on the other. It is not to be inferred that in practice no deviation in the correct relative sizes should be made. On the contrary, sheep are subject to ready variation in a domestic state under the hand of man, and it would be quite wise, on the one hand, for a breeder to reduce the rawness and inordinate size of his ewe flock by using a tidy, medium-sized or smallish ram; or to increase the size by the use of a larger ram. There is no danger at lambing time from using a relatively larger ram on small ewes of the same breed; the size of the foetus depends on the size of the pelvic chamber, and on the nutriment provided by the ewe. The individuality of the offspring asserts itself more distinctly after birth, however, and both ewe and lamb will require generous treatment to keep the growthy lamb well fleshed up.

The additional strength of the ram over the ewe will be manifest, particularly in the form and features of the fore end of the sheep. The front of his barrel should be so full of large, vigorous and active blood-making machinery that his breast should hang well down between his fore legs, and should force them wide apart. He should be thick through the heart from side to side, and be low enough in the foreflank that his belly will not sag below a line from front to rear flank. He should be correspondingly well filled directly above the heart, behind the top of the shoulder. These parts generally correspond; light in the crops generally means light in the heart. The base of the neck should be strong, broad and rising. He should not drop in front any more than behind the shoulder. Neck has been almost wholly eliminated in the mutton sheep, and the head appears to be set on the corner of the carcass, but such as it is it should show a broad base and sturdy upper arch.

The head of the ram is where masculinity most appears. His original pugnacity has left him an aristocratic Roman arch. This is one of the first marks of ramminess; see that you get it. If it should happen that his actions correspond with his looks, don't think the worse of him for that; a fighting ram is generally a vigorous ram. A surly wrinkle or two towards the nose generally appear in old age. Undue coarseness of this kind is undesirable in a young sheep. The top of the head should be broad, and the general effect of the head short and square rather than long and thin. The eye should be clear and alert, and with this it will generally be noticed that he takes an active and rather assertive interest in whatever is going on about him. A good ram is usually not easily pushed about, or moved where he does not want to go, unless he has been carefully trained to lead while young.

Leaving the front of the ram, which, as contrasted with the ewe, is the end in which preponderating strength and character are looked for, let us look along his back. He should be long, level