

"form and back." As fineness of bone comes under the head of quality, it would seem that Professor Curtiss would place "handling" as the third most important point in a beef beast. Again, in his paper, which, by the way, is entitled "The Fundamental Points of Practical Excellence in Beef Cattle," the Professor says "there is a certain quality, character, style, and finish that constitutes an important factor in determining the value of beef cattle. One of the first indications of this is found in the skin and coat. A good feeding animal should have a soft, mellow touch, and a fine but thick and heavy coat. A harsh, unyielding skin is an indication of a sluggish circulation and low digestive powers." Surely, if this is the case there must be but few scrubs, Jerseys or Holsteins that will produce a pound of beef as cheaply as the beef breeds do which are bred with the mellow skin and mossy hair in view. In the old scale of points which I have spoken of, and which I copied from a paper some years ago and did not note who was the authority for it, the total number of points is a thousand. Forty are allowed for handling, no other qualification getting more than thirty, showing that the author of it thought that handling was the most important point in a beef animal, thus differing somewhat from Professor Curtiss. I think, Mr. Editor, that a discussion on this subject by some of the practical cattlemen who subscribe for your paper would be a benefit and tend to decide just how much should be allowed for handling in judging cattle, for while most judges think it an important point, I think some men consider it much more important than others.

"CLAUGHBANE."

Our Scottish Letter.

About a month has passed since last we penned a few notes for the FARMER'S ADVOCATE, and that darkest month of the year has been fruitful of surprises to the agricultural, or, rather, the stock-breeding world in Scotland. The great fat stock shows have been held, but mere prize-winning details of these would not be of much interest to readers in Canada. The position of the breeds, as tested by the butchers and show judges after all is over, is a matter of much wider concern, and therein lies the unique character of the season of 1897. Two years ago the Smithfield Club inaugurated what is called a Carcass Competition (on your side of the Atlantic the same thing is known as the Block Test), and Scottish breeders expected that this would in the end greatly modify current opinions regarding the best breeds for producing beef and mutton. The Carcass Competition, in fact, has been the most conclusive demonstration ever witnessed of the excellence as beef cattle of the slowly-maturing breeds of Scotland and Wales, and the honors of the carcass awards have been curiously corroborated by the awards of the judges in the live competition, and *vice versa*. The year 1897 has been the year of the Galloway supremacy. The champion of all the three great shows at Norwich, Birmingham, and London was a Galloway-Shorthorn cross bullock, bred by Mr. W. Parkin-Moore, of Whitehall, Measgate, Cumberland, and fed for the last twelve months by Mr. John Wortley, Frettenham, Norwich, one of the most successful feeders of show cattle in Norfolk. The cross in the case of this bullock is unusual. His sire is the Galloway and his dam the Shorthorn. The ordinary programme is the other way about, and no cattle are in greater favor with feeders than the blue-greys, got by a white Shorthorn bull from the Galloway cow. Mr. Parkin-Moore resolved to give the unusual cross a fair trial, and he has had unexpected success. Curiously enough another great supporter of the Galloway—the Duke of Buccleuch—had equal success in the carcass competition, the first prize carcass there being that of a bullock got by a Galloway sire from a Shorthorn cow. This is likely to lead to an increased demand for the Galloway as a crossing bull, and the fact that the carcass of a pure-bred Galloway was second in the same class, and another of the same was first in the younger class, is not likely to retard this consummation. Galloway men naturally feel uplifted, and the Smithfield block test has done more for the breed in two years than the summer shows did in twenty. The first bullock sold at the show was the champion Galloway, and his price was £80. This, it may be thought, was dear beef, for his weight was but 1,730 lbs. at two years and seven months old. This is a right good bullock, and we expect to hear that he kills well. The Aberdeen-Angus men, as usual, come out well at the fat stock shows, their best card this year being Lord Rosebery's Scottish Queen, which was champion at Edinburgh and reserve champion at London. She has not matured much more quickly than the Galloway, weighing 1,780 lbs. at 2 years 8 months 4 weeks. This shows that something can be done with the Galloway, even in the matter of early maturity. The recent shows have shown that there is no profit at all, but much loss, in keeping cattle over for a year after they are ready for the butcher. Nobody, of course, does this but an enthusiast who wishes to win a prize with a specially good beast in the following year, but the experience of the enthusiast is of good value to the ordinary feeder, as it shows what cannot be done profitably in everyday farming.

Two Scottish professors or teachers of agriculture have lately bulked somewhat largely in public view. One is Professor Cossar Ewart, of Edinburgh University, who has done splendid work in the paths of telephony. His great aim is to prove or disprove

the truth of the theory that the first impregnation influences the subsequent progeny. He has taken an original method of finding this out. After many disappointments he succeeded in securing a Burchell Zebra male, and endeavored time and again to get him to serve a mare of any horse breed. Having all the traits which distinguish the wild animal, it was very difficult to get him to work at all, and he would not look at a mare, no matter how keenly she might be in season, if anyone were looking on. For two seasons the Professor failed to get a single animal in foal to the Zebra; but in 1896 a Rum pony mare, which he has named Mulatto, was served, and in 1896 she produced a lovely foal by the Zebra, beautifully striped, but, curiously enough, not with the stripes of his sire, but with the stripes of the Somaliland Zebra, which is supposed to be the original of the species. In 1896 Mulatto was served by an Arab stallion, and this year she has produced a foal having unmistakable stripes on the withers and legs, and so far apparently confirming the doctrine of telephony. Professor Cossar Ewart is not satisfied. He wants to know why the produce of the Zebra and Mulatto is striped not like his sire but like the Somaliland Zebra, and now that he and his men understand the ways of the Burchell Zebra better, they have been able to get this season four foals after him. One is out of a skewbald mare, another has for dam an Irish hunting mare, a third is from a Scottish draft mare, mostly Clydesdale, and the fourth is from a Shetland pony mare. All four, except the filly out of the draft mare, are striped like the Somaliland Zebra; she is striped on the legs and thighs, but bears more resemblance to the horse genus than the other three. Her dam has again been mated with the Zebra, but the dams of all the other three have been put to horses, so that telephony will have a fair and fuller trial, should all safely foal. If they should, and the produce again be striped as the foal out of Mulatto this year was, the question will be renewed with intensity. Is this telephony or atavism? And if the latter, why should the breeding back in the matter of color be coincident with the use of a Burchell Zebra sire? It will be apparent from this scanty outline of his work that Professor Cossar Ewart has embarked on a most fruitful inquiry in which much may be learned of benefit to the stock-breeder. In America his experimental work would be subsidized by Government, but in Scotland we are a frugal people, and the enthusiast has to pay for his enthusiasm. Other problems in breeding are engaging the Professor's attention, especially the serious question of abortion in mares—its causes and prevention. He has published the results of his investigations so far in a booklet entitled "A Crucial Stage in the Development of the Horse," in which many interesting facts are revealed relative to the embryo of the foal and its liability to escape from the uterus at certain stages and under certain conditions. The work on which Professor Cossar Ewart is engaged ought to be sympathetically regarded by all lovers of animals, and on the lowest plane of self-interest by breeders of every class of stock.

The other original investigator whose work seems likely to produce good results is Mr. I. R. Campbell, B. Sc., for five years assistant to the Professor of Agriculture in the Glasgow Technical College, and now Lecturer on Agriculture in the Harris Institute, Preston. Mr. Campbell has devoted himself very largely to problems in dairying and the improvement of the usual make of Scotch Cheddar cheese. He has also done much investigation work regarding the effect of nitrate of soda on hay and the manuring of the turnip crop. In recognition of his services, he was during the past week made the recipient of a handsome testimonial, and was entertained to a public banquet in Glasgow. The exact nature of Mr. Campbell's labors in the dairy department will only be known when his report appears in the "Transactions" of the Highland and Agricultural Society for this year. He will also give some account of his work in the report of the Cheese Discoloration Committee, which will be published in February. This committee, thanks mainly to your countryman, Mr. R. J. Drummond, Ingersoll, Ont., the head of the Scottish Dairy Institute at Kilmarnock, and one of the "smartest" men we know, is acknowledged to have done splendid service, and to have been the means of vastly improving Scottish Cheddars, which two years ago were badly discolored. This year, on the other hand, the judges at the principal cheese show in Scotland emphatically declared that an immense improvement had taken place, and a discolored cheese had scarcely been found in the show. All this is work which in Canada the Government would have seen to. Here a private fund was collected, amounting to about £100, and with that the experiments were entered on. The method adopted for the cure of unequally distributed coloring was the use of a starter, and in the hands of careful makers this has proved highly advantageous. Some makers, however, do not seem to have understood this, and they have produced the results which inevitably follow the use of good tools by unskilled workmen. The agricultural outlook is generally much more favorable this year than it has been for some time past, and if industrial warfare would only cease, a period of good trade might be looked for.

Attend to your "Farmer's Advocate" subscription early, and avoid regrets for oversight.

The Tuberculosis Scare.

To the Editor FARMER'S ADVOCATE:

SIR,—Just starting for a three weeks' trip to the West leaves me but a few minutes to pen some words endorsing every line Dr. Sankey has written. Had I the time I would have entered more freely into the subject, as you know I have so often expressed my views entirely on the lines that the Doctor has taken in my crude way. The tail was being allowed to wag the dog instead of the dog wagging the tail. In other words, while the crusade was being waged upon the poor animal, the walking danger, the tuberculosis-affected individual, man, was stalking abroad unnoticed and unmolested. I have no time to enter into the subject fully, but I could not refrain sending these hurried lines to congratulate you upon getting such a lucid expression from one whom all must acknowledge as an authority upon his subject, as well as to congratulate him upon his moderate views as expressed by his lucid article. It is the best, clearest, fairest and most valuable brochure yet issued by either English, Canadian or American experts, and its great value to the farming community is that it is written from the standpoint of a professor who takes no narrow view of the trouble.

A word more: Let us urge upon all who have the interest of our live stock at heart, and the interest of breeders thereof, to drop this scare. Why should the breeders of what is one of the greatest assets of our Province pander to this unwholesome panic and do their best to prevent the consumption of both beef and milk by encouraging amateur cow testing with tuberculin and discussions upon the subject at Farmers' Institute meetings and at the annual meetings of the Live Stock Breeders' Associations, by this means keeping the subject before the people? Let it alone and it will die a natural death. It is more of a veterinarian's disease than a cattle disease.

RICHARD GIBSON.

FARM.

Institute Work in Maritime Provinces.

The farmers of New Brunswick are somewhat in advance of those in Prince Edward Island or Nova Scotia in the matter of Farmers' Institutes. The Local Government of New Brunswick, in concert with the Farmers' and Dairymen's Associations of the Province, have arranged for a series of Institute meetings in every county in the Province during the months of January and February. Not all of the dates are yet announced, but it is expected to cover the whole country. The speakers at these meetings will be Wm. C. H. LaBelle, Com. of Agriculture; D. McCrae, of Guelph, Ont., upon Cattle Feeding and Tuberculosis; J. S. Armstrong, C. E., Sec'y of N. B. Good Roads Association, upon "Good Roads," with lantern slide illustrations; W. Saxby Blair, Horticulturist Maritime Experimental Farm, upon Planting and Management of Orchards and Fruit Gardens; W. W. Hubbard, upon Dairy Cattle, illustrated by lantern slide illustrations of famous cows. Several other speakers of note are being engaged. These meetings will form the nucleus of Institute work in the Maritime Provinces. It is time for the other two Provinces, Nova Scotia and Prince Edward Island, to look to their laurels. New Brunswick has got ahead of them in this matter of Institutes. Nova Scotia may be moving and will probably, if not this winter, certainly next; but Prince Edward Island has done nothing thus far, nor is there any immediate hope that she will. The Professor of Agriculture of the Provincial College began a series of Institute meetings in January, 1894, which, considering that he had no assistance, was fairly successful, and had Prof. Harcourt remained and been given a free hand, Prince Edward Island would now be reached even unto the remotest corners. The Local Government of the day thought the teaching of agriculture in the Normal School and by Institute meetings superfluous, and now P. E. I. has neither agriculture taught theoretically nor Institute meetings. Strange indeed when you come to consider that 85 per cent. of the population of the Island live on the farms and are supported by the fruits of the Island red clay! Thousands of dollars are spent by our Government in teaching the youth of the Province the elements of Latin, Greek, French, etc., and practically nothing is spent for the teaching of the elements of agriculture, and as the result, as might naturally be expected, we have an overabundance of lawyers, doctors, school teachers, and scarcely any skilled farmers or artisans. This goes to show, too, that if the youth of the country had the same opportunities to follow agricultural and technical pursuits as they have to follow professional, their numbers would not be less; for they do not lack the attribute of taking advantage of the opportunities offered them.

J. A. MACDONALD.

King's Co., P. E. I.