

Stock Department.

The Relative Merits of Short-horn and Ayrshire Cattle.

At a meeting of the Logie and Leicrop Farmers' Club, G. H. BINNING HOME, Esq., of Argaty, made the following remarks:

Having paid at all times the greatest possible attention to the different kinds of breed, there was one thing that appeared to him quite clear—that the cattle in different parts of the country had been introduced by the different tribes of population there now settled. When at the Great Exhibition of Paris in 1861, he paid very great attention to the various breeds of cattle exhibited there. He saw, amongst others, red cattle from Flanders, with almost all the qualities which are desired in Shorthorns. He might say that, with the exception of being of every color, the cattle in Normandy resembled the Shorthorns very much. The splendid butter that was to be had at Paris all the year round was produced by them. He believed that the only pure breed of cattle to be found in this country was the West Highland and the black cattle of Wales, which were much about the same—the only difference being, the Welsh had much less hair than the Highland, which might be accounted for by the difference of climate. As to the Short-horn and Ayrshire cattle, neither of them, he believed, could be strictly called a pure breed. The population which had emigrated from Flanders into Yorkshire brought with them a fine, large, red stock, and from thence Holderness cattle were known to have been imported into the neighborhood of Kilmarnock, by Campbell, of Cessnock. Dunlop, of Dunlop, introduced Dutch cows, and others had introduced cows from the Channel Islands, from all which, combined with West Highland blood, the present improved breed of Ayrshires had arisen, and were now recognized as a distinct breed, though they were neither more nor less than the result of a judicious crossing, to make them what they now were famed for—first-rate milkers. As to their West Highland blood, he remembered seeing, as a constant prize-taker, a bull named "Geordie," whose color was nearly black, and was said to have one-eighth of West Highland blood, and with upturned horns, which was now the fashionable shape among prize-taking Ayrshires. He did not know if any improvement had been made on Ayrshire cows for many years; as he remembered, when a boy, of his father having at Auchinbowie two cows which had almost all the shapes and qualities now so much desired. He also recollected old Lord Abercromby having some wonderful milking Ayrshires. The principal object in the breeding of Ayrshire cattle had been to attain great milking properties, whilst the sole aim in the breeding of shorthorns was beautiful forms combined with great feeding properties. He considered it a great mistake of the English breeders in not looking more to the milking properties, for he considered a cow that could not nourish its own calf was of very little value. He was quite certain that young heifers forced to great fatness at an early age had their milking properties completely ruined or destroyed. He considered this a great loss to the farmer when cows were rendered unfit for breeding, owing to the great aptitude for fattening. Short-horned cattle were not considered good milking cows; but he would mention one instance of a cow of that breed which belonged to the late Mr. Burnett, of Gadgirth, and which gave eighteen Scotch pints of milk and two pounds of butter in the day. He might say that in Yorkshire for a long time there was a competition between Booth and Bates. Booth's cattle, going wonderfully to fat, while Bates maintained that his were excellent milkers. He recently attended a sale near Hull, where he saw a number of cows with as beautiful milk-vessels as anybody could look upon; and yet it was a remarkable fact that there was not a single man in England who knew what every Ayrshire breeder looked first at in choosing a bull for getting milking stock—that was, as to the position of the teats in the male. Many people said that the first cross was the only cross worth breeding. This, however, was diametrically opposite to the theory of shorthorned and Ayrshire cattle being brought to their present perfection by a great variety of crossing. He might also mention that Mr. Bates told him that at one time he had got some fine West Highland heifers from Lewis Macfarlane, from which he had bred by his shorthorned bulls some of the finest animals he had ever possessed. Whether the longish and black-tipped horns of his Wild Eyes tribe had anything to do with this cross, might be left for conjecture—parties might draw their own inferences. The celebrated Frederick the Great, of Prussia, thought of breeding great grenadiers by getting the largest

men in his army to marry the largest women. However well this system had done in regard to cattle, it was a very different thing in regard to men and women, who might be supposed to have certain fancies somewhat different from those in bulls and cows, and of course this project of the Prussian king turned out a failure. With regard to cattle, they had sufficient evidence that great perfection could be attained by crossing the breed of those animals which had the different points required. Bakewell, of Dishley, proved the same as to Leicester sheep, and he believed it to be of general application in almost every respect, whether of milking, fattening, or strong constitution, fitted to contend with coldness of climate. He should be very much inclined to cross the West Highland cow with the shorthorned bull. In short, a judicious selection of the best animals to breed was the great secret in the breeding of good stock. He was of opinion that it was that, and that alone, that had made the shorthorns and Ayrshires what they now were. As to the difference of milk, he had found out by experience that the milk of the shorthorns was much richer than that of the Ayrshire cows—that they gave a larger percentage of cream. On testing the milk, which he had done for many years, he found that that of the shorthorns contained from twelve to seventeen parts of cream, whilst the milk of the Ayrshire cows only contained from nine to twelve parts; and, therefore, although the apparent quantity of milk might not be so great, there might be fully as much butter, and of a richer quality. To conclude, he believed that the great point for the breeders of stock to observe was, if possible, to get a judicious selection of pure shorthorns, and cross with whatever breed they found most suitable. Climate seemed to have considerable effect on the milk-producing qualities of cattle, and he would rather buy a shorthorned cow from Cumberland or Westmoreland than from the east side of the island. As to the Ayrshire cattle and their milking properties, the average good milkers among them produced about eight Scotch pints per day. As to the shorthorns, he had not yet ascertained the real quantity of milk produced by them, as many of his cows suckle their calves. He hoped that what he had said might lead to some discussion on the subject. He ought to have added that, at the Paris Exhibition of 1861, there were a great many Dutch cows having every point of Ayrshire stock except that of their color, being all black-and-white without exception.—*Mark Lane Express.*

The *American Farmer* publishes two essays discussing the question of the best breed of cattle for the extreme cold of northern winters, with special reference to quantity and quality of food required, and the production of beef. One writer gives the preference to the black, polled Galloways, the other favors the little Irish Kerry.

CALF.—A fellow at a cattle show was making himself ridiculously conspicuous by an evident intention of finding fault with everything. At last he burst forth with, "Call these here prize cattle? Why, they aint nothing to what our folks raised. My father raised the biggest calf of any man round our parts!" "I don't doubt it," was the timely remark of a bystander, "and the noisest." The forward youth, as may well be imagined, incontinently subsided.

RUSTY STRAW—EFFECTS ON ANIMALS. B. McClure states in the *Practical Farmer* that feeding rusty straw to cattle and horses has a very injurious effect upon their health and efficiency. The class of diseases induced by this aliment are marasmus, glanders, farcy, skin diseases, catarrhal affections and watery swellings of the body and legs. He adds that during the last eight months, out of 700 horses fed upon such straw, from forty-five to fifty were on the sick list.

DARKNESS FAVOURABLE TO FATTENING.—It is a fact that all animals fatten faster in dimly-lighted places than the full light of day. This is well known in respect to fowls. From experiments made with sheep, conclusions have been reached that in a dark shed, well ventilated and properly warm, they will make the most mutton from a given amount of food. But dark stables are not good for horses, or breeding stock of any kind. Fat is not with such the most important object in view.—*Mark Lane Express.*

CLEANSING WOOL OF GUMMY MATTER.—The *Maine Farmer* gives the following:—"Take one pound of saleratus for twelve pounds of wool, dissolve in water not quite boiling hot, then put in the wool, and stir occasionally for one hour; take it out and squeeze it thoroughly, or what is better, run through a clothes wringer, rinse in cold water, and spread on grass ground to dry. This process will remove all gum and dirt from any kind of wool, and make it much better for custom work."

Canadian Natural History.

The Canadian Deer.

(*Cervus Virginianus*)

THE form and general appearance of the Canadian deer are familiar to most of our readers, who have either met with the graceful animal at large in the still unleared portions of the country, or have seen the dead body, the spoil of the hunter, exposed for sale in the markets of the more settled districts. All will recognize the faithful and spirited portrait which the artist has given in the accompanying illustration, which is an excellent representation of the characteristic form and general markings of this deer, as distinguished from the larger Canadian deer or Wapiti, (*C. canadensis*), the red deer (*C. Elaphus*) of Europe, or any other of the numerous and closely allied family.

The deer is a member of the natural order of Ruminants (RUMINANTIA), animals who chew the cud—a peculiarity of habit which implies a combination of certain well defined peculiarities in structure, being exclusively vegetable feeders, and the materials they consume requiring a longer and more complex process to convert and assimilate them into animal tissue than the natural food of flesh-eaters, they are provided with a complicated and appropriate digestive apparatus. This is characterized not only by the length of the alimentary canal, but more particularly by the structure of the stomach, which is of extra dimensions to receive the greater bulk of food required, and also divided into four compartments. The first of these, into which the herbage passes direct from the mouth, is called the paunch, and serves principally, like the pouch of the monkey, or the crop of birds, as a reservoir for food. The contents of this cavity, after being macerated and softened, pass on to the second compartment, or honey-comb, as it is called, there to undergo a further softening process. It is this portion of the stomach that in the camel is adapted by a special modification rather for the purpose of holding water than for performing any share in the digestion of solid nutriment, a provision which admirably fits this animal to sustain the protracted droughts and long marches over arid deserts to which it is exposed. The crude and bulky vegetable material, after remaining a sufficient time in these preparatory receptacles, is again returned in small pellets, pretty much at the leisure and in accordance with the will of the animal, into the mouth, there to undergo a complete mastication and intermixture with the saliva. The food is then again swallowed, and now passes into the third stomach or maniple—so called from the number of folds or laminae into which the interior is divided—and finally enters the fourth compartment, where true digestion takes place, and the food is subjected to the action of the gastric juice. In this lengthened and complicated process we see a beautiful adaptation to the peculiar circumstances of this class of animals. They are mostly of a timid disposition, and exposed to attack from various enemies. Their exclusively vegetable diet, at the same time, has to be consumed in considerable bulk, and to undergo an extra amount of comminution. To effect this while they were feeding would be quite impracticable, exposed as they are to frequent and sudden alarms, and compelled to gather in a large supply of nourishment in a comparatively hasty manner. But no time having been lost in mastication during the first stage of supplying themselves, the animals retire to their coverts and fastnesses, where at leisure, in security from attack and under shelter from the fierce rays of the sun, they complete with apparent enjoyment the preliminary process of digestion by chewing the cud. The peculiar structure of the teeth in Ruminants ought perhaps to have been noticed first; but the name suggested the special peculiarity in the diges-