

lieve it is unnatural and a grave mistake to attempt, in this climate, to keep live stock under hothouse conditions. We do not, of course, believe in reckless exposure for the sake of making animals tough, but in doing as the breeder aforementioned, letting the stock be the judge. A daily taste of our bracing winter air, together with good feed and a comfortable stable at night, is the way to breed a vigorous, profitable herd. Exercise, with judgment, is the word. Never turn stock out merely to stand in the yard. See that they have something agreeable to do.

Is Cattle-breeding a "Mystery?"

Writing, after half a century's connection with cattle-breeding, it seems to me that English farmers, Scotch farmers, Irish farmers and Welsh farmers, never had such facilities as they have at present of improving their cattle, no matter what the breed, and at so light an expense by means of progressive sires. Why is it that they have not availed themselves of the opportunity to its fullest practical extent? Sometimes I have thought that the glamour of the names of Bates and Booth, in place of proving an incentive, has been just the reverse, and limited enterprising effort. Ordinary farmer breeders have placed these men on a pedestal too high for the rank and file to emulate. They are held to have been men possessed with a speciality of acumen as to what blood and what forms of animals would nick with each other. They were giants in intellect on these points; they have accomplished all that could possibly be done, and they have absolutely left nothing for their successors to do. Folly, simple folly! They were men of sound common sense, and they used it in a sensible way. This recalls an incident of my youth. One of my fellow pupils (who, in a pecuniary sense, had what is styled "a father born before him") was told by the employer to whom his training had been entrusted that he was not making the necessary progress in his work. "Well, sir," said the lad, ingenuously, "you have learnt it all; what is there left for me to learn?" This seems to be the position of too many British farmers of today. Bates and Booth learnt and practiced all there was to be learnt in cattle-breeding; what is there left for present-day farmers to learn? With the materials they had then at hand, they accomplished wonderful results, and this leads to the reflection of what higher progress they would have evolved from present-day cattle. They recognized the preponderance of the sire on the outward structure, and that of the dam on the internal. This fact is illustrated in the human family, as well as in the bovine, for how few of our intellectual giants have transferred their gifts of intellect to their sons, unless when allied to an intellectual mother. In view of the present foreign competition in flesh meat, the apathy of so many of our farmers in not striving to perpetuate the work of past breeders is landing us in a most dangerous position. The late Mr. George Drewry realized in what might have proved a fatal turning-point in the world-famed Holker herd of Shorthorns, that some of his females were lacking in shoulder packing. He selected a sire strong in that particular point, of good blood, but otherwise not handsome. His choice underwent criticism, but it was justified by results. He used him only where and until the defect was remedied. The late Mr. Robert Thompson, of Inglewood, saw his herd deteriorating. The exclusiveness of Bates and Booth was then strong, and a cross between the two was anathema amongst breeders. He saw Beau Benedict; he took the plunge, and the result was the unique Nottingham "Royal" success, in which he won firsts in each of the female classes with animals of his own breeding, a feat no other breeder

has equalled, and followed this up by securing the Queen's massive gold medal at the Windsor Jubilee "Royal." Success such as this was mainly instrumental in breaking down the barrier of caste between Bates and Booth cattle, and other breeders more or less followed Mr. Thompson's example. Put the query to farmers generally, as to why so many coarse and indifferent cattle continue to be bred in the United Kingdom, and the reply is: "There have ever been good, bad, and indifferent cattle, and there will always continue to be such." Kismet! No reasons for the why or wherefore of such are forthcoming, and yet the foreign product is daily knocking louder at the doors of our markets with the improving flesh meat begotten by the superior animals they have purchased from us. They are breeding out their "weeds": why should not British farmers do the same? It is a truism that there is no beef to equal the British well-bred, grass-fed product, and yet there are complaints that foreign beef is palmed off on British consumers in our markets at English prices. No one, not even the veriest tyro, need be so deceived. Look at the deep, rich blood-red color of the beef on an English butcher's stall, and then glance at that on the stall of the purveyor of foreign meat, a pale, washed-out apology-red, in marked contrast to the other. To deceive a person of ordinary acumen, that person must be color-blind. The difference is produced by the superiority of British grass lands, just as the latter combined with our climate (our much-abused climate) give us the superiority over all other nations in live-stock breeding. Let, then, our farmers breed out the "weeds"; let our farm live stock be as uniformly superior as is our pedigree herd stock. There is no need to sacrifice either milk or flesh, and judgment only is needed to breed the best combination cattle; all the materials are at hand, and cheap; and so, and only so, aided by our grass and climate, we shall retain our flesh meat markets. In a wealthy nation like as is ours there is plenty of demand for the superior home product, but not for the inferior, at paying prices. We need not grudge the poorer members of the community the cheaper foreign flesh meat. What we have to do is to keep ahead in quality.—(Samson, in Live-stock Journal.

Basement Stable Ventilation.

Editor "The Farmer's Advocate":
To my mind, the editorial, "Is the Basement Stable a Success?" in your paper of the 29th inst., opens a very important subject at the present time? There is no doubt that a large proportion of the stables in use in this Province are dark, damp and unsanitary. As you properly point out, it is difficult to maintain a dry atmosphere in a stone building where there is no dead-air space between the stone and the air of the stable. We all know how unsanitary were the old stone houses, plastered directly upon the wall, and the ordinary stone-basement stable possesses in an aggravated degree the faults of such houses. It seems to me that the planning of sanitary stables is a subject worthy of careful consideration by architects of farm buildings. Sanitation seems to be one of the last things considered in the average stable, and yet it is a matter of first importance. I firmly believe that it would pay us to sacrifice considerable in the way of convenience in order to secure the benefits derived from superior ventilation and absence from dampness, and the latter conditions are more easily obtained where wooden walls are used and where it is a comparatively short distance from the ceiling to the roof of the building. The wooden walls give dryness, and the low roof makes it possible to ventilate more thoroughly. You have certainly opened up a subject that is worthy of careful consideration, and I trust that it may be the means of bringing out a rational discussion of the whole problem.
G. E. DAY.

Scotch Feeders Lose.

A cable despatch from London, England, discloses the true reason for the demand for cattle embargo removal. In the Tariff Commission's report some Scotch witnesses, especially feeders of stock, meat salesmen and butchers, indicate the losses brought about by the exclusion of Canadian store cattle. In the absence of such store cattle, they say, feeding has been ruinous. Feeders in the east of Scotland say that when the supply of Canadian store cattle was cut off twelve years ago profits in cattle fell £3 per head.

THE FARM.

Use of the Road Drag.

Editor "The Farmer's Advocate":

The letter of your correspondent, H. R. M. D., in your issue of Nov. 22nd, is most interesting as showing one of the few cases in the Province in which individual property owners have so actively sought to improve the roads passing their own farms. It has been difficult for me to understand why landowners, energetic and painstaking within the limits of their line fences, can fail to see that their true interests do not end there, but that the roads to and passing their farms are essentially a part of their own property. No farmer ever looked its true value when viewed from a road axle-deep with mud or ruts. No farmer can do justice to its owner and his family when it has to be reached over a bad road.

The drag-scraper which your correspondent has used during the past season is an excellent implement to use as he describes. Where individual farmers cannot be induced to carry out the work themselves, the municipality, acting for the community, should undertake it.

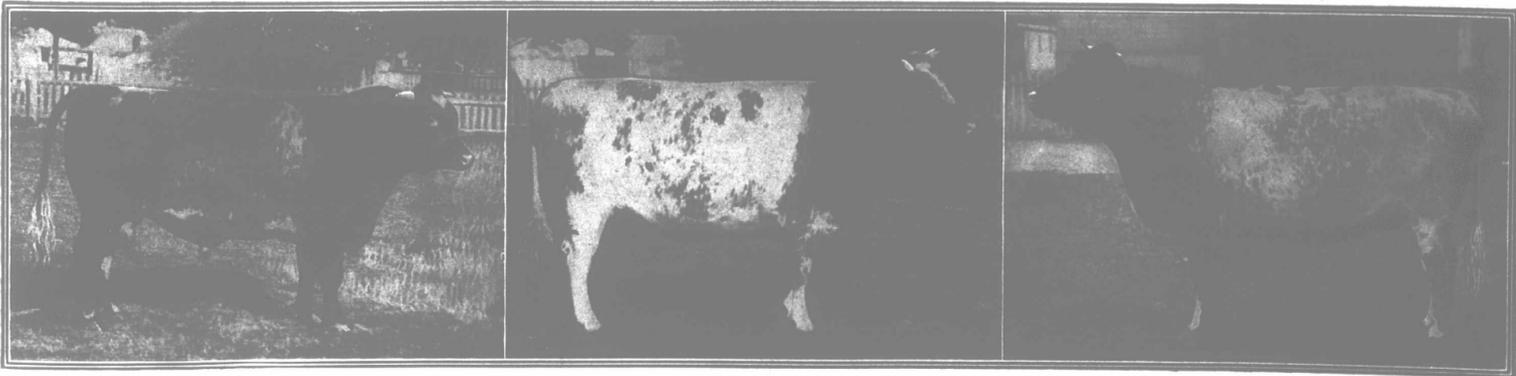
The drag is a very simple implement, but it is applicable only to earth roads, however, and should not be used on gravel or stone roads, as it will draw in sod and earthy material from the shoulders, spreading it over the metal. One form of this implement is as follows:

A log, nine or ten feet long, is split in halves. The halves are placed parallel to one another, the edges down and flat face to the front, and are firmly braced together in this position with cross-bars. A chain hitch is attached in such a manner as to incline the machine at an angle of 45 degrees, the forward corner being near the outer edge of the road, and the rear corner at the center of the road. By weighting the machine and dragging it up one side of the road and down the other, making a number of circuits, using two or three horses, the edges of the logs plane off the tops of ridges and rough places, drawing the material sideways and forward to fill hollows and ruts, and crowning it at the center of the road.

The principle has been applied in using a steel scraper, a steel rail, or steel I-beam, and in even using ordinary fence rails fastened together. The results are excellent on earth and clay roads, but are not adapted to improved roads, where a more careful treatment of the metal is needed, and where a hardened roadbed of gravel or broken stone would be much injured by drawing over it the sod and earthy material from the shoulders of the road.

The clay or earth road, while it can be much improved for all seasons by the use of the drag, cannot be made to equal the macadamized road. The latter can be made to resist the severities of spring and fall, but clay will inevitably cut and rut under traffic, particularly when the frost is "coming out" in spring.

For strictly clay and earth roads, this method of repairing them in the spring, when the ground is moist, is inexpensive, and has much to commend it. The mileage of earth and clay roads in the Province is very great, and to bring them to a fit condition for summer travel is very important. By levelling them when moist in the spring



Prizewinning Shorthorns.

Representing the herd of Senator Edwards, Rockland, Ont. The yearling bull is Royal Favorite =56149=, grand champion Canadian National Exhibition, Toronto, 1906.