## Breeding Grade Stock.

BY D. F. WILSON, BRANDON, MANITOBA.

Breeding animals, as practised by the breeders of pure-bred stock, is an art, but there are many farmers who believe in the improvement of their stock that have very vague ideas of the principles to be observed.

At one time a neighbor of mine was outlining nis intentions with regard to his cattle. He was first going to use a Shorthorn bull, then on the progeny a bull of some other breed (I have forgotten which), and so on with four distinct breeds, fondly imagining that in the last cross he would have combined all the good qualities of the four breeds. Another farmer who heard him summed up pretty correctly by saying, "and by that time you will have a pure-bred mongrel". In such a case as this, where there was one cross of each of four breeds, all perhaps equally prepotent, two of the great laws of breeding-heredity and atavism-would be made directly antagonistic, and no idea could be formed beforehand what the progeny would be like. Now, instead of this being the case, a farmer should have an idea what the stock he breeds will be like, though "The best laid schemes o' mice an' men gang aft a gley."

As a rule, when a farmer wants to improve his cattle, he buys a pure-bred bull that he believes will suit, and uses him in his herd for a couple of years, by which time he thinks he should get rid of him, as his own get are then coming back to him. He may then buy another, though, as is often the case when money is not very plentiful, he thinks he can scarcely afford to buy another pure-bred animal so soon, and therefore uses a calf of his last bull's get out of his best cow, or else obtains a good grade bull calf from one of his neighbors. If he buys a pure-bred animal again, he probably takes the first one he comes across, so as to save further trouble, or buys one because he is cheap. Now, if the farmer started right, he when purchasing his first pure-bred bull decided what he wanted to raise, and having settled this it would not be hard for him, by studying the characteristics of the different breeds, to decide which of them he should select from. In making this selection care should have been taken that the animal was a typical one, also that it was one likely to beget stock of the type desired. When after two or three years it is thought advisable to get a new bull, the first pedigreed animal that is to be had is not the one to buy, just because it is a pure-bred beast, as if that was all that was required. He should be carefully selected as being suitable to use on the young half-bred heifers—one who will correct in the progeny any faults of the mother rather than perpetuate them; in fact, as far as can be seen, an improvement on the former bull, but at the same time one of similar type, for be it remembered the first bull was bought with a fixed view, and if sight is lost of this we fall into the same error that the man spoken of who would make use of four different breeds would do, but to a lesser extent. Now, supposing the first bull has proved himself an exceptionally good one, begetting stock of a quality leaving little to be desired in a first cross, why part with him for another, and that an untried one? The second animal may to all appearance be a better beast than the first, but it does not follow that his stock will be better, for it is a wellknown fact that many noted show animals have got but second-rate stock. It would, however, be unwise to disregard the law of heredity by breeding to an inferior animal because his get had proved to be good ones; it would probably be a case of atavism, and by the same law the bad qualities apparent in the bull might be expected to crop out in future generations, no matter how carefully bred. When, however, a farmer becomes possessed of a pure-bred bull that is a handsome animal and a good specimen of the breed, and begets uniformly good stock, he need not be afraid to use him on his own get, and he will be safer in doing so than if he bought a new bull whose qualities as a sire were unknown to him, and most decidedly better than if he used a grade, which, to say the least, would be a step backwards.

I am aware that any one advocating inbreeding is treading on dangerous ground, but no one can deny that to it we owe the present excellence of pure-bred cattle and sheep. The greatest breeders among those who brought the different breeds into prominence having practised it, we might almost say the closer the breeding the more successful the breeder. Why should not farmers follow their example to a certain extent? The early breeders inbred to set a type; the farmer also wants to set a type—he wants uniformity in his flocks and herds; it makes them worth more to him. When inbreeding was carried too far by some of the first breeders, it showed first in lack of fecundity; there is no need for the farmer to carry it to this extent with grade stock, but when a pure-bred male has been secured that has proved himself to be a good one, it is a great mistake to part with him, as is too often done.

The Southdowns of Mr. Henry Webb and Lord Polwarth's Border Leicesters are instances of the most successful breeding, in both of which cases no outside blood was introduced for nearly half a century.

When the progeny of related animals do not do well, or there is anything the matter with them, it is generally put down to the relationship of the parents, when in reality this may have nothing to do with the trouble. There is no reason why farmers should not breed grade stock in such a way as to give their animals an uniform appearance, and of the type which they find most profitable under their conditions, but this can not be done by using untried sires or those bred from stock of opposite types.

## Which is the Best Breed of Sheep? Read before the last meeting of the Sheep Breeders' Association by James Tolton, Walkerton, Ont.

To answer this question, defining the particular breed of sheep that is best, might appear on casual observation as treading on dangerous ground, and also might appear a little presumptuous on the part of the writer. It is true with sheep, as with other lines of live stock, that there are particular sorts that are better adapted than others to certain conditions and localities. For instance, the Clyde or Shire horse, with his large bone, great muscle, and heavy weight, is the most suitable for moving heavy loads; but if style, action and speed are required, we would not look among either of these breeds, but go to the blood or carriage horse with their fine style, splendid action, and clean bone. Or if we want a cow to make gilt-edged butter, we would likely find her among the so-called dairy breeds; or if we desired cattle more particularly for stall feeding or grazing for beef purposes, it is not at 'all probable we would find them among the "dairy breeds," but would get Shorthorns, Herefords, or Polled Angus. If Providence, aided by the skill of man, has created and perfected the horse for his multitudinous purposes, and the cow for her economic uses, the more useful animal, the sheep, has not been left in the rear. Among sheep, we have as many or more breeds than among the sorts above mentioned. We have the fine, medium, and coarse wool sheep, some producing wool suitable for the soft raiment of those who live in luxury, others from which are clipped wool suitable for making the coarser clothing of the toiler and wage earner, We have the light and nimble sheep that can glean more than its ex-istence from the rocks and hills where the pasturage is scant. Again there are sorts that are better adapted and more profitable in climates that are warmer than ours, and we have those breeds that are common to us and well adapted to our climate. We have those with white faces and legs, and some have brown faces, others with black faces. We have sheep that have horns, while some have none, and sheep that have what are commonly called foretops, others have bare faces, and so on almost without end.

It may be said that the question is not being answered, which is the best breed of sheep. It is not the purpose of this paper to name one particular breed as the best for every person who breeds or intends to breed sheep. But it would be passing strange indeed, if from the numerous breeds we have, with their varied qualities, a selection of the best breed for each individual breeder could not

There should be good and valid reasons why any particular breed should be selected as the most suitable, and when selecting a breed it should be considered which sort under the circumstances would be most profitable and suit the conditions and surroundings best, or else be more pleasing to the eye and taste. It is true that there are several breeds that are common to us that may meet one or all of the requirements, so that after all every sheep breeder or person desirous of becoming one should answer the question for himself, after making due allowance for what may seem the popular demand.

When the selection of the best breed is made, what I would like to impress on the readers of this paper is not to attempt to keep sheep for the purpose of keeping weeds down on the summerfallow, or to run on the roadside to be chased by every passing dog in the summer, and just eke out an existence around a straw stack in the winter,—for by this method they will neither fill the pocket or please the eye; but, on the other hand, give them the attention that has been recommended many times by papers read at meetings of this Association. I do not know that there are any domestic animals that respond to kind, attentive and liberal treatment more readily than the sheep.

I may not have answered the title of this paper in the way some may have expected, but if by word or sentence I have assisted in drawing the attention of the general farmer to the importance of keeping more sheep, giving them better attention, and breeding to pure-bred sires, the object of this paper has been accomplished.

At a recent meeting of the Executive Committee of the American Shorthorn Breeders' Association the following resolution was moved by S. F. Lockridge, seconded by John Hope, and unanimously adopted: "That it is the sense of the committee that it is not practicable nor judicious to attempt to hold a convention of Shorthorn breeders during the World's Fair, but in case that there should be any considerable number of stockholders who shall insist that the former resolution be carried out, the Executive Committee hereby authorizes the president and secretary to fix a date and arrange a programme for the meetings."

## Are Holsteins Profitable Cows for Winter Dairying?

[Read at the last annual meeting of the Holstein Breeders' Association by R. S. Stephenson, Ancaster.]

The subject which I have been allotted is one of great importance at the present time. As winter dairying is destined to become in a very short time one of the greatest sources of revenue for the Ontario farmers, it is, therefore, of the greatest Ontario farmers, it is, therefore, of the greatest importance that we should have the best cows for the purpose, as our success in the dairy business depends very largely on having a breed of cattle capable of consuming and turning into milk and butter profitably the large amounts of coarse grain and fodder we can raise on our farms. I will endeavor briefly to place before you some of the reasons why I believe the Holstein to be the best breed for the general farmer to keep, who makes breed for the general farmer to keep, who makes dairying one of the chief branches of his business. First, the Holstein combines more desirable qualities than any other breed. The most valuable is the production of milk; for this purpose they have been bred for centuries, and are acknowledged to excel all other breeds. They mature early, coming into milk when about two years old, and hold out well through nearly the whole year. Their milk is not only abundant in quantity, but rich in quality. They are large, hardy and rapid growers, fattening readily when dry, and make a good quality of beef. Many people dispute the idea of a general purpose cow, and we are frequently reminded of the folly of feeding four or five hundred pounds of useless carcass for eight or ten years in the shape of a large milch cow, for the sake of get ting an indifferent carcass of beef at the end There might be some sense in this sort of argument if it were solely for milk that cows were usually kept, but as the general farmer, especially if he follows winter dairying, wants large, growthy calves that will make good veals or fine steers to feed, he certainly cannot get them from the small, ill-shaped cattle often seen in dairies, and the value of the little extra feed it takes to maintain the large, thrifty cow, such as the Holstein, is very much over-balanced by the value of the calves and the larger quantity of milk she will give. And when we find a breed of cattle that are capable of consuming and digesting large quantities of food and turning it into milk, and at the same time pro-ducing fine, growthy calves, like the Holstein, I claim that is the most profitable breed for winter

## Chatty Stock Letter from the States.

Live stock men all feel that the World's Fair will not make an adequate show of live stock. The appointment of the chief of that department was so long delayed that it has been impossible to make proper arrangements. The show of horses and of the dairy breeds of cattle promises to be most satisfactory. The general agricultural display, however, no one can find fault with, and the exposition on the whole is beyond the power of most people to appreciate.

Fine cattle continue to sell fairly, but not up to

old-fashioned prices.

Fancy light cattle and hogs are outselling the big, heavy drones. Early maturity pays. Many 1600 lb. cattle and 300 lb. hogs are selling lower than 1200 lb. steers and 200 lb. pigs.

The first five months of 1893 Chicago packers

The first five months of 1893 Chicago packers slaughtered 35,458 more cattle than during the corresponding period of 1892. The number handled here was nearly 900,000 head. The general feeling is, however, that the slaughtering at all points combined will show a large loss for the entire year.

A man interested in packing circles said all the hogs slaughtered in Chicago last month made 60c. per head. The fact remains, however, that hogs are very high, and that packers can do no more than hand-to-mouth business at such prices.

The lack of confidence in the financial world, due largely to the fear of flooding the country with silver and draining it of gold, has lately cut an important figure in the live stock business. The supblies of marketable stock have been moderate and the consumptive demand very strong, or prices would not be so much higher than a year ago, especially in hogs and cattle. Of course, the financial uneasiness has been used for all it was worth, and more, by the buying and slaughtering interests, and idle and sensational talk has, in some cases, caused much trouble. In the main the country is in good fix to stand a severe shock, and as a rule shocks do not come when they can be withstood. If there is anything like the shortage in cattle this year that is expected the markets ought to rule strong. Cattle feeders have not been overly joyful at the result of their work, but in the main they have obtained satisfactory results.

The calves are being drawn to market quite freely by the good prices for those in fair to good veal condition. "Native" calves have lately sold at \$4.50 @ \$6.00, and Texas calves at \$2.75 @ \$4.75. These prices tend to cut off future cattle supplies at

We don't hear very much about dehorning nowadays, but an astonishing proportion of the best cattle come to market without their natural and useless head gear. At the prices for fine stock it is a shame that so many scrub sires are allowed to exist, Sheep are being marketed much more freely than last year and are selling at lower prices. However, producers of mutton have been fairly well remunerated. The extent of the Texas mutton crop so far this year has been quite unprecedented