breed, they are very prepotent, and stamp their characteristics on their progeny. The sows are excellent mothers and grand milkers, and as might be expected from their great length, they are well able to raise the large litters which they usually pro-

Messrs. Wm. Davies & Co., Toronto, in writing me a short time ago, said: "For the last few years we have, through the press, advised farmers to raise and feed more hogs and to sell them alive. This advice has been acted on to a considerable extent, advice has been acted on to a considerable extent, and farmers have not been slow to own that the advice was good. Hog raising and feeding, as well as dairying, have been branches of agriculture that have not suffered during the depression that has overtaken almost every other industry; the swine thriving so admirably on the waste products of the dairy. Grain, even including wheat, has been so cheap of late that farmers have not needed urging to convert the feed into pork. This last point is what we now wish to call attention last point is what we now wish to call attention to. A very large proportion of the hogs now offering, dead and alive, are too fat, and packers, unless they are prepared to lose money faster than they ever made it, are obliged to discriminate most severely against fat hogs, no matter what weight. We are now paying 60 to 75 cents per 100 pounds more for long, lean hogs, from 150 to 200 pounds. This advantage, which amounts to a very handsome profit, the feeders will lose if they persist in making such fat hogs. Possibly the farmers have not yet experienced this sharp discrimination, but the drovers have, and unless they are prepared to play the roll of philanthropist, the feeders, in turn, will speedily suffer. Here we want to point out very clearly that the mere fact that hogs are between the weights named does not bring the remaining the re the weights named does not bring them within the charmed circle, unless they are long and lean. Nothing is easier than for farmers to produce such hogs. Yorkshires are scattered all over the Province. Grades are easily obtained, and if they are liberally and judiciously fed till six or eight months old they will be the years these ideal? of months old they will be the very 'beau ideal' bacon pigs, fit for local or export trade, and will bring the highest price. There can be no conflict of opinion on the above between the export packers and local mer; the demand for lean bacon and hams and local men; the demand for lean bacon and hams is as urgent in one case as the other. Cable advices reach us almost daily: 'Fat unsaleable,' and this mail brings the following from our English agent: 'Buyers have got wonderfully fastidious about weights the last year or two, and in every section of the country where they used to work heaps of fat they will not look at it now, and consequently it is a terrible drug. It is most difficult to find buyers for it at any sort of price. We feel sure this condition of the trade will become more marked, not only from year to year, but from day to day. We have lost many thousands of dollars in fat hogs in the last six months.

J. L. Grant & Co., Ingersoll, who do an immense pork-packing trade, in a recent letter wrote: "The foreign and home trade demand more lean meat. We have found the Improved Large White York shires and their crosses admirably suited to produce the desired type. Short pigs, with broad, fat backs, are no longer wanted. It is to the interest of farmers and feeders to produce what the market requires; it will be a source of profit to themselves

and also extend the pork trade.

I notice that Messrs. J. Y. Griffin & Co., packers, of Winnipeg, recently wrote the Advocate in a similar strain, and the new Packing Co. at London, Ont., express their most decided preference for

this breed of hogs.

My aim, as a breeder, has been to produce an easy feeding hog that would furnish the highest priced pork which the trade of to-day demands, With a stock that now includes over fifty Yorkshire breeding sows, and an experience of ten years, I still find an increasing demand from the men who feed hogs for the market. As a hog's life is now very short, this test is surely most convincing. People will not go on producing that for which there is no demand and in which there is no profit. I have tried to establish a reputation on merit, not by "boom," having strong faith in the permanence and profit of pork rearing as a Canadian industry.

## Fall Feeding of Horses.

Although this season's hay crop is fairly large throughout the Province, there will be a shortage on many farms before next year's hay season, because of the necessity of very early fall feeding of stock, due to failure of pasture. From the time fall ploughing commences, there need be very little hay fed to working teams, provided one has access to a fodder corn field. The common practice of giving horses all the hay they can use, and a heavy grain ration, is entirely unnecessary. It has been the writer's practice for several falls to feed all the cut corn mixed with wheat chaff his working teams would eat, morning, noon and night, with a few pounds of good hay to be eaten before morning. With the corn and chaff was fed the grain ration consisting of crushed oats and barley. The horses have invariably gained, and when the ploughing season ended, there was little or no trouble with stocked legs or scratches. Mares and foals had better be stabled and fed on corn fodder and chaff than allowed to race about the fields fighting flies

The Evolution of the Scotch Shorthorn.

Compiled from an article prepared by Robert Bruce for the Highland and Agricultural Society.]

Never before in the history of the Shorthorn breed has any family or strain of blood attained such a position as that at present held by the cattle known as Scotch Shorthorns. For years, at the breeding and fat stock shows in England, Scotch Shorthorns have taken a large proportion of the prizes, and in the year just past the merits of this strain of blood have asserted themselves, both at home and abroad, in the strongest manner possible.

At the great World's Fair, at Chicago, almost the entire amount of money offered as prizes for Shorthorns was gained by animals of direct Scotch descent, and the sweepstakes prize for the best male animal in all the cattle classes was won by a bull bred in Canada of pure Sittyton blood. Such a record at such an important fair must have drawn public attention to Scotch cattle, but their doings at the principal breeding and tat stock shows in England during the past few years had in a large measure prepared the minds of breeders to expect such a result at Chicago.

The Collings brothers are said to be the fathers of the Shorthorn breed, as prior to their time such cattle did not hold public favor, and in 1810, 29 females averaged £140 4s 7d, and 18 bulls and calves, £169 8s; and in 1818, 51 cows and heifers averaged £111 13s, and 10 bulls and calves, £215 17s 7d.

These prices created quite a sensation in the cattle breeding world, and led to the spread of the Shorthorn breed of cattle throughout the length and bread h of the kingdom.

BOOTH AND BATES. Looking back over a period of 50 years and more, we can fancy we see the two rival types. We can see the thick-fleshed, short-legged, wide-chested Booth cattle, of a sort to spread thrift and goodness as meat producers amongst the ordinary herds of the country. We can also see the Kirkleavington the country. We can also see the Kirkleavington cattle, with their fine movement and greater style of carriage, the udders of the cows showing evidence that dairy properties were qualifications especially attended to.

There is no doubt but these two strains of Short horns were really superior cattle, that they were brought out and carefully bred by men who were born breeders, and that the influence of their herds was felt throughout the whole Shorthorn world. Their popularity became so great that not to own Shorthorns of one or other of these strains was to be out of the charmed circle. From the time of the Bates dispersion sale in, 1850, there was an extraordinary run on that strain of blood. There was a widespread feeling in America that these cattle were the pure, and only pure, strains of Shorthorn blood, and that for a time nothing else was of value in the States. This craze culminated in the New York Mills sale in 1873, when 25 animals of the Duchess family averaged £3,679 18s each. Six of the higher priced animals were bought by English breeders at an average of over £5,000 each. seemed to become axiom in the belief of such buyers and traders in Bates cattle that to be valuable these animals had to be what they termed straight-

THE PEDIGREE CRAZE.

For several year before 1875 prices for fashionably bred Shorthorns had been steadily mounting upwards, and these Shorthorns consisted of Booth and Bates breeding. Wherever men leaned to the Booth and Bates cattle, every effort was made to enhance the value of their herds by the introduction highly bred females, and by t 'straight" blood.

From the time these cattle became valuable on the market may be dated the decline of their usefulness. Pedigree became to a large extent the only requirement necessary to obtain a good price. Because of this, Shorthorns were only dealt in by a few moneyed people, and were no longer farmers' cattle. Farmers became conscious of the fact that highly bred bulls were not of the rent-paying sort, and therefore could not be induced to buy them; dairymen would not use them, and butchers scoffed at a system of breeding which aimed at producing fat animals with but little flesh.

In short, the whole system of what was termed high-class breeding operated against the general production of Shorthorn cattle full of practical

SCOTCH SHORTHORNS.

Practical utility seems to have been the aim of Scotch breeders. For this there appears to be good and sufficient reasons. If the matter is looked into it will be found that many, and indeed most of those North Country breeders that have done much for the breed were tenant farmers, who had to depend upon their cattle for their livelihood. They pursued their calling in a country where farmers made cattle breeding and feeding the main source of income. They had to produce a class of bulls likely to get steers to feed quickly, and die full of lean, marketable flesh. That they succeeded in this is quite beyond question, and a short survey of what may be justly termed the parent herd will suffice to make the matter clear as to how Scotch Shorthorns originated, and how they have been bred.

THE SITTYTON HERD.

We cannot enter into particulars of the breeding or details as to pedigrees of the animals selected by Amos Cruickshank. Constitution, substance and quality were three essential points looked for in both bulls and cows. After these were put symmetry, and in the cows a fair appearance of milk, | Sittyton - ED.

as this indicated not only direct usefulness, but a disposition to more regular and continued breeding. The cows were selected from herds of acknowledged purity. There was at the date the herd was formed little known of the two great rival herds, which afterwards came to be looked on as the two, and only two, fountain heads from whence anything that was good in Shorthorns could be drawn.

Females from the very best herds were introduced into the Sittyton herd, and individuals that failed to reach the required standard in breeding, etc., were at once weeded out. For a long series of years the best bulls to be found in England were bought; money was freely spent whenever and wherever bulls to please Mr. Cruickshank could be obtained. These bulls were bought, not because they were of any particular strain of blood or family, but on account of their individual merits, while all the time the quality and kind of stock from whence they came received the most careful attention.

One cannot fail to admire the greatness of the preeder who, in a steadfast way, kept breeding his own ideal of what constituted the animal needed by the rent-paying farmers, when we consider that this was done for a long series of years, when fashion was dead against him. Many of them became infected with the general, we might justly say the universal, opinion that one of two sorts— Booth or Bates—ought to be at the head of every herd. We again repeat, when he kept steadily on, while hundreds and thousands were freely given for single animals, and the whole Shorthorn world was against him, the greatness and worth of the man stand out in bold relief.

The utmost limit of perfection in Shorthorn breeding was not reached in the days of the Collings, as many would have us believe; nor are we prepared to assert that Amos Cruickshank has reached that limit. The purposes to be answered by the cattle of to-day are altogether different from what they were fifty or even twenty years ago, and there is still scope and room for brains and ability in the pursuit of Shorthorn breeding. This aspect of the subject cannot be entered upon just now, because of its magnitude and growing difference of demands.

CRUICKSHANK CATTLE IN ENGLAND. The success which attended the introduction of Cruickshank sires into herds full of Bates and Booth blood naturally led to many being taken south, and their general utility qualifications widely acknowledged. The Canadian and American demand for Cruickshank cattle, which for some fifteen or sixteen years previous to the disposal of he Sittyton herd, absorbed every available bull. There were comparatively few bulls bred by Mr. Cruickshank in the country. Under these circumstances, the selection of sires to be taken south was restricted almost entirely to the last crop of bull

calves bred at Sittyton.

It is to be acknowledged that there is much about the Scotch Shorthorns which is certain to impress many breeders as being "common." They have neither the dash of the Bates cattle nor the round ribs of the Booth sort, while, generally speaking, they lack a certain finish of quarters which would tend to increase the length of body. Many also object to the style of heads met with in the majority of Cruickshank bulls. Judging from what Mr. Cruickshank has done in bringing out a fixed type of animals, it is quite evident that his aim had been to produce a class of stock full of lean flesh and constitution, while other features, more striking, seem to have been neglected. To infuse a little more of those striking features, and yet retain the main practical utility of these North Country cattle, is the ambition of several able men who have profited so largely through Mr. Cruickshank's work. They have, without doubt, the hearty good wishes of all lovers of Shorthorns.

It may strike breeders as peculiar, when we tell them that very few Sittyton-bred females have ever been allowed to remain in England. The reason is this: for 16 years before the herd was finally sold, every female that could be spared from Sittyton, and all the young bulls, except those kept for a few regular customers, were contracted for, first by a Canadian and afterwards by an American speculator. Englishmen regret that such animals should have been allowed year after year to leave their shores. The fact that they did so accounts for the unparalleled success of Scotch cattle at the great World's Fair, at Chicago, last year.

CRUICKSHANK CATTLE IN SCOTLAND. There are, we believe, only three herds in Scot-In the are, we believe, only three nerds in Scotland where direct Sittyton females are to be found. In two—those of Mr. Wilson, Castle Park, Huntly, and Mr. Cameron, Fettes—has been made with great care and judgment. With regard to the other—that of Mr. Duthie, Collynie, Tarves—a great deal may be said. At the time the entire Sittyton hard was cold. Mr. Duthie, arranged to supplies. herd was sold, Mr. Duthie arranged to purchase from the Messrs. Nelson all the cows over nine years of age, and in this lot he got possession of 18 of the proved matrons of the herd. Had a public sale been made, we are inclined to think that a goodly number of these old cows would have been competed for more keenly than even the younger ones. With the annual draft made for so many years to go across the Atlantic, such old cows as were the best breeders were naturally retained in the herd, and but for a question as to their extreme old age, they were the very cream of the herd.

(To be continued.)

Note. - In our next issue we will continue our excerpts from Mr. Bruce's interesting paper, giving details of the general management of the cattle at