solves itself mainly into two periods—one before, the other after its introduction. 'But for the blood I got from Wilkinson,' said Amos to me one of the last times I saw him, 'I don't know where I would have been,' so unsatisfactory was the general result of the other bulls imported into the Hardly a dozen calves are known to have been left by Lancaster Comet at Sittyton. There were some four or five heifers and six or seven bulls. One of these, however, was Champion of England (17526); another, called Moonshade (18419), went to Mr. Bruce, of Inverquhomery (uncle of the late proprietor of that estate), and helped to lay the foundation of the fine herd there. The influence of Lancaster Comet on the Sittyton herd was entirely effected through Champion of England. The other bull calves by him were all sold, and none of his heifers were retained long. One called Camelia was very fine as a yearling and two-year-old; another, called Oakapple, was also a good young cow, but, curiously enough, neither of them did much as breeders, and they, with their produce, were disposed of before the value of the Lenton blood came to be properly appreciated. The herd was then very large, and, among so many animals, it was a good while before the merits of the Champion's stock attracted the attention they ultimately did. I remember Camelia as a thick, short-legged cow, with a great coat of hair; extraordinary as a two-year-old, but she didn't do much after that. Champion of England himself was also nearly being thrown away. He had been sent to the Royal English Show, at Leeds, in 1861, and got no prize. I learn that he was also exhibited at Aberdeen, but did not get higher than third. Being a November calf, he had to compete against two-year-olds when little more than a yearling. Owing to his want of success in the showyards, he would probably have been sold had not Amos, for once, insisted on his own judgment being car-He was not anxious to show the bull at Leeds, for he recognized from the first that his proper place was at home. He appreciated better than the judges had done the massive robustness and natural feeding quality of the animal, points he valued so highly, and which were lacking in many of the bulls that had been previously used at Sittyton. Many Shorthorn breeders, however, freely acknowledged the Champion's merits when he was seen at the shows. He had somewhat of a droop from the hooks to the rumps, which detracted from his appearance, and several of his stock took after him in this respect. He was remarkably good in his foreribs, which was, think, the point that struck me most. not remember having seen the Champion's dam, but one day, when going through the byres with Amos Cruickshank, I asked him what like a beast 'Well,' said he, 'she was very like that one,' pointing to a cow standing at the end of the This was a good-sized red animal, with plainish hind quarters. The Champion of England was never kept on account of the merits of

"Mr. John W. Cruickshank furnished the following description of Champion of England to Mr. A H. Sanders ("Shorthorn Cattle," page 770): Champion of England was a beautiful calf; his hair actually waved in the wind, and, until his death, in 1870, no other sire was so fully trusted. his quarters, though not long, were broad and deep; his frame carried an unusually thick covering of natural flesh, and so full was he behind the and uniform for generations back. When buying shoulders, that the meat actually projected beyond the shoulderblades. No bull ever had such an in- stock, and, if possible, see his parents and grand-

fluence in the herd; his calves could be easily picked out, and the use of his sons, grandsons and great-grandsons impressed the Sittyton herd generally with his character. Himself descended on both sides from tribes of good milking qualities, his daughters were useful dairy cattle as well as heavy-fleshed Shorthorns. His death was the result of calculus, and when killed his organs were as healthy and as sound as possible.'

SELECTION OF BREEDING SWINE.

There are good and bad pigs in every breed, and it cannot be said that any one breed has all the points which are desirable in the bacon hog. The Yorkshire, Tamworth, the Improved Berk shire, and their crosses, are the most popular with the packers, especially the Yorkshire-Berkshire and Tamworth-Berkshire crosses. The other breeds which we have in Canada are not, as yet, as well suited to the trade as the breeds already mentioned, but their breeders, by careful selection and proper feeding, are gradually bringing them closer to the type of bacon hog.

In all classes of animals there are certain breeds which are practically useless from an economic point of view; so it is with certain breeds of pigs. This condition has been brought about either by neglect of the breed or from breeding and selecting solely for some fancy points, but sooner or later these breeds must go out of existence as recognized breeds, or the standard of the breed must change so as to bring the animal back to a useful condition; for, after all, all breeds must be useful and profitable, else they are simply a drain on the country and on the breeder.

A breeder of bacon hogs must have a clear-cut conception of the ideal pig, and then improve his stock by careful selection and breeding.

SELECTION OF THE SOW. In selecting females for breeding purposes, great care should be taken to choose sows of a quiet, contented temperament.

A restless sow, if let run at large about a farm is a nuisance; she may also be destructive, and at farrowing time is cross, excitable, and hard to handle. Unless care is taken, she may destroy a part or the whole of her litter. She may produce a large litter, but is not a mother, in that she will not nourish the little pigs as they should be nourished for their own good, and for the profit of the stockman. If the pigs are half-starved and stunted when they are small, they will always be unprofitable feeders, and should be got rid of as soon as possible.

The sow should be chosen from families that are active, prolific, and good mothers. should be large and roomy, with great length and depth of side, but she must be trim and neat, with no appearance of flabbiness. She must not be sluggish nor clumsy in her movements, as this indicates lack of vitality.

Her udder must be of good shape. She should have twelve or fourteen evenly-placed teats extending well up to the fore legs.

SELECTION OF THE BOAR.

Even greater care should be exercised in choosing the sire than when choosing the sow. Of the two parents, the sire, if intensely bred, has the greater influence on the conformation of the off-He not only should be nure-br should be of a family that is particularly uniform on both the male and female sides of the family a boar, be sure that he is from good, pedigreed

parents before purchasing. It is not enough that the boar should be of good conformation, but his ancestors should also be, so that he may more certainly impress his qualities on his offspring. Sometimes we find an animal that is a great showyard winner to be a mere accident of birth, as his parents have no individual merits nor uniformity; and if the animal be put at the head of a herd, it would only be an accident if he reproduced his good qualities and conformation.

If buying a young boar, select one from a large and even litter, as fecundity is an hereditary trait, and is very essential to hog-raising. The evenness of the pigs and number in the litter from which you have selected your boar is a guarantee of the excellence of his breeding and of his pre-

Never choose the offspring of immature animals for breeding purposes, as they are liable to lack in size, vigor, vitality and fecundity. Lack of any of these qualities in the breeding animals will soon deteriorate the herd.

The boar must be of the improved type, and must be masculine in appearance, but not coarse nor rough; he should be of good size, but not unduly large. Although some persons make mere size a great point when choosing a boar, experience leads us to consider this to be a mistake. A very large boar seldom lasts long; he becomes too heavy for the sows; he probably proves to be slow, and his litters few and small in number. A very large and heavy boar is also more likely to suffer from weakness of the spine or hind quarters, and is frequently weak in his joints and crooked in his legs. These latter failings, especially, should be avoided, as they are hereditary, and will frequently crop up for several generations. Weakness in pasterns and roundness of bone, two qualities which should be avoided in a sire, are often allied with great size. A mediumsized, compact boar, heavy in the hind quarters and light in the fore quarters, will usually continue fruitful for at least twice as long as will the heavy-shouldered and coarse-boned boar. Nearly all of the most successful sires have been on a small rather than a large scale

R. W. HODSON.

THE FARM

A GREAT DISTRICT FOR SILOES.

Editor "The Farmer's Advocate":

I have been taking "The Farmer's Advocate" some time, and like it very much. We take several other papers, but look for "The Farmer's Advocate," and read it first.

I was very much interested with some of the articles recently published re cement-silo building. Mr. Jos. Mountain described it well. Mr. E. Dunsmore, the inventor of the outfit referred to by Mr. Mountain, did not start out to make a fortune out of the farmer in a short time. He made fair wages, and did good work. Our silo was the first to be built with his steel outfit, and a good one it is, 35 feet high, 14 feet in diameter. There is a footing 1 foot deep and 1 The wall is 6 inches from bottom to top; no battering outside or inside. It is plumb.

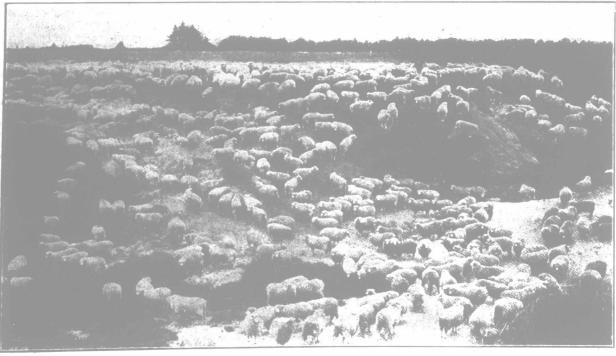
I believe, in the vicinity of Avonbank, there are as many siloes, if not more than in any other part of the country, and more building every year. And, by the way, farmers here know the value of siloes, and know how to handle the corn, and have their corn cultivators, corn harvesters, and steam-power cutters and blowers (perhaps some of the people could blow, too), low corn trucks; everything, in fact, which tends to make the work easy.

The owner of this same steel outfit must have under contract more siloes than he can build by

The cost of building one 14 feet in diameter is \$4.50 per foot in height. The builder finds the cement. The estimated cost is as follows: 35 feet high, \$4.50 per foot, \$157.50; 30 loads gravel, 25c. per load, \$7.50; lumber for doors, S1.00; iron above and below doors, 50c.; total, \$166.50. (Board of three men one week.) This is the actual cost—a vast difference between building a silo here and Mr. Holtby's, which Mr. Stevenson writes about, and he says there is more

This is six years for this steel outfit, and it has been in use every year, building about thirteen siloes per year, sometimes more; and, as far as I know, it is as good as ever. Those siloes are standing all right. There are about a hundred I know of, and none have given away yet. Now, what would be the use of hauling so much more gravel, using so much more cement? These take less labor. mixing, hoisting and tamping. There have been several accidents building siloes where the wall is much thicker, but I have never heard of one with this outfit.

J. F. BETTRIDGE.



A New Zealand Paddock of Fat Lambs.

New Zealand exports, annually, almost \$3,000,000 worth of frozen lamb, mutton and beef.