

ities of their cattle, and succeeded in a large measure in establishing this important propensity. Bates' great cow, Duchess, would give 28 quarts of milk a day on grass alone. Contrast this record with the milking qualities of many of our Shorthorn cattle of to-day, for some of which the owners have to keep foster mothers to raise their calves. I am glad, however that some of our Shorthorn breeders are giving attention to this most important phase of their work, and are striving to maintain amongst their cattle the dual purpose ideal. I wish them every success, as I believe that such a cow is the only profitable one for the farmer who wishes to produce beef for the export or any other trade. Could not the Dominion Shorthorn Breeders' Association and agricultural societies do something along this line, by setting a standard of weight of milk to be given by show cows, so as to encourage breeders to discriminate between cows that will give a profitable amount of milk and those that will not.

I have simply given a few practical thoughts from the standpoint of one engaged in the business of raising export steers, and would be glad to see others interested in the same business give their views on the question. A. W. P.

Keep Up Supply of Bacon Hogs.

EDITOR FARMER'S ADVOCATE:

Being one of the oldest breeders of pure-bred swine in Canada, my experience having been continuous since 1865, there appears to be considerable feeling that the packers combine, for the purpose of keeping down prices, to the detriment of the producer (the farmer). On the other hand, there is an urgent desire on the part of the packers to allay that feeling. Having been a breeder and a dealer in live stock, shipping cattle, sheep and swine to the British markets for over thirty years, and knowing as I do from past experience that markets are always controlled by supply and demand, and in no market are such conditions taken advantage of more readily than in the English markets; therefore, I can easily understand why the packers' prices fluctuate as they do, and was much pleased in reading the report of the conference held in the office of the Wm. Davies Company, Toronto, which resulted in the bringing of both parties—the representatives of the producer and packer—to a better understanding of each other, and removing the suspicion of combination. So far as the Wm. Davies Company are concerned, and having myself and associates had hundreds of thousands of dollars' worth of business with their company, especially with William Harris, buyer at the Western Cattle Market for the Wm. Davies Co., I can cheerfully give testimony to the honorable way in which I have been treated. They have generally, on Fridays or Saturdays, quoted prices for the coming week. Three weeks ago we were ordering in hogs at six cents per pound for the following Monday's shipment, and wired Mr. Harris as to prices that morning. After getting his reply we paid the farmers 25c. per cwt. more that day. This will show conclusively that the farmers get the advantage when markets go up.

In 1904 we had hogs in on Thursday's market, and were told by Mr. Harris that the price would be the same for Tuesday following, and having our hogs ordered in for Monday's shipment, for Tuesday's market, with prices made on the basis of Thursday's market, on Saturday evening we received a telegram that, owing to bad reports from England, they would have to put hogs down twenty-five cents per cwt. On Monday morning I telephoned the London packing-house, and received their reply as to what they would pay, which we accepted, being 25c. per cwt. more than the Davies Company were paying, and the expense was only \$3.50 per car more than to Toronto. When in Toronto the next day I told Mr. Harris what we had done, and his reply was, you were fortunate, as they were still going lower. If a combine existed the London house would have been posted, and we would have been the losers.

The whole agitation hinges on the prohibition of American hogs for slaughter in bond. The packer fearing a shortage in hogs, the farmer expecting very high prices, it is a good thing that the latter do, as it is a stimulus to raising more hogs, which will, at present prices, or even lower, be profitable to the feeder. The low prices in the latter part of 1904 and the fore part of 1905 caused a goodly number of farmers to give up raising pigs. During that period I never noticed so many breeding sows on the market before, and often remarked that there would be a shortage in pigs the following season, which has happened, and will be for some time yet. At present, and

ever since the abrogation of the order allowing American hogs through in bond, there is a keen enquiry for breeding sows.

Now that the quality of Canadian bacon is established in the markets of the Old Country, I would advise careful selection of breeding sows. A fairly good specimen of any lengthy breed will, if bred to a good pure-bred sire, produce the almost ideal hog. I was much pleased with the remarks of Mr. Bowman, of the Montreal Packing Co., and Dr. Smale, at the Winter Fair, held in Guelph in December last. While they found it hard to discriminate in selection, they emphasized the fact that the ideal bacon hog was what they required to meet the demands of the best customers in the Old Country. Now is the opportunity for our farmers to get the right kind of hogs, as there will be paying prices for a good while, and keep our present packing-houses supplied, that they may not have to curtail their output, but rather increase, as they are a great factor in trade returns in Canada, especially to the farmers in the Province of Ontario.

My advice to the farmer is, have your young pigs come in April or May and September, as they are always stronger and healthier when farrowed in fine weather, where they can have access to grass and fresh air. Once a pig gets a good start, they are more easily raised, and make better growth when old enough for feeding. The farmers in this vicinity all have choice pigs, and feed cheaply, growing their pigs on grass in summer, and roots in winter, with light feed of barley, oats or middlings. Some prefer peas and bran mixed; light feeding of grain is most profitable. Always keep plenty of fresh water for pigs both summer and winter, and there will be no doubt as to profits in raising hogs for market.

JOSEPH FEATHERSTON.

A Study of Breeds of Swine.

BERKSHIRES.

The Berkshire is one of the oldest of the improved breeds of swine, and is named from the County of Berkshire, in England, in which they have been numerous bred, but the principal improvement of the breed was probably made in Leicestershire and Staffordshire. The original Berkshire was a large, coarse animal. The color was sandy, white or reddish-brown, spotted with black. The breed was brought to a considerable degree of improvement in the eighteenth century. The precise step taken at the first to improve the breed is not very well known, but it is pretty generally conceded that Chinese, Siamese and Neapolitan crosses were used, more especially the first mentioned.

Prominent among the early improvers of the breed are the names of Richard Astley and Lord Barrington. Among the more noted of the later improvers, the names of W. Hewer, Sevenhampton; Rev. H. Bailey, Swinder; Heber Humfrey, Shrivenham; Russel Swanwick, Cirencester; and T. A. E. Hayter, Salisbury, may be mentioned as prominent breeders.

Berkshires were probably imported into America in 1823, but the date usually given is 1832. The breed was imported to Canada in considerable numbers, and first became popular on this continent in the sixties of last century, while in the seventies, and later, so great was the demand for them in the United States that fabulous prices were paid for notable specimens, a boom from which Canadian breeders and importers reaped a rich harvest, culminating in the sale, in 1875, by John Snell's Sons, of Edmonton, Ont., (now Snelgrove), to N. H. Gentry, of Sedalia, Missouri, of the imported boar Lord Liverpool for \$700, the sow Sovereign Lady for \$500, and Royal Duchess for \$400. In the ten years following that date, higher prices than these were reputed to have been paid, T. S. Cooper, of Pennsylvania, having been reported as selling a boar for \$1,400, and Mr. Gentry one for \$1,000.

Previous to 1870 the breed suffered on this continent from the influence of a fad for short, dished faces and perfect color markings, the demand by new breeders being for white markings only on the face, ankles and end of tail, and so widespread and general did this fetish become, that these were the principal points required by such buyers, the more essential qualities being regarded as secondary. The payment by Mr. Gentry of \$500 for the sow Sovereign Lady, with a white mark on her shoulder as large as a man's hand, did much towards breaking up this fad, as she was a model in conformation and quality, and a prizewinner at the Royal Show of England, while her companion, Royal Duchess, whose markings were not quite up to the extreme of fashion, was the ancestress of a boar sold by Mr. Gentry last year for \$2,000.

LEADING CHARACTERISTICS.

As now bred, the Berkshires are, as a rule, larger than any other breed, except, perhaps, the Yorkshires. The breeders have in recent years, given more attention to lengthening the form, by selecting and mating the longer-bodied specimens, by giving more attention to out door exercise of the young and growing pigs, and by feeding less of rich, concentrated foods, and more of such grains as oats and barley, together with shorts and bran, roots and clover. By these means the breeders have succeeded admirably in this object, while retaining the general character of the breed, such as pleasing head without the extreme dished face and heavy jowl which has been the bane of some of the other large English breeds as well in the past, as observation has revealed that the extreme short neck and heavy jowl are often associated with short and labored breathing, liability to pulmonary troubles, and inability to throw off disease when attacked by such. Great improvement has also been effected in securing smoothness of shoulders, the shoulders of the ideal Berkshire fitting neatly and evenly into the body, in line with the sides. This improvement is the more valuable, since a broad, fat back is not desirable from the bacon standpoint, but a medium wide back, well covered with firm flesh, and the back slightly arched and strong. These points have been well attained in the case of the best Berkshires of the present day. In general adaptation to climatic and other conditions, the Berkshires probably stand at the head of all the improved breeds, all things considered. Their color is in their favor, as a black skin will not blister, mangle or crack under a hot sun. They are hardy, active, good grazers and rustlers, while having a quiet and contented disposition, they mature early, and may be fattened at any age, but will grow and develop lean meat rather than fatten if given a range of pasture, while, as feeders, their strong digestive and assimilative powers enable them to give a maximum return in first-quality flesh for the food consumed. They also weigh well for their appearance, and dress well in proportion to live weight.

VALUE IN CROSSING AND GRADING.

None of the breeds of swine have been found more useful than the Berkshire for crossing on other breeds and grading up common sorts to the standard demanded by the markets. They have proved of great value in refining coarser breed and improving the quality of the flesh, the lean and fat being well intermixed. As to their breeding qualities, or prolificness, while they probably do not, as a rule, produce as large litters as some of the other large breeds, they vary with the varying conditions to which they are subjected, as do the other breeds. Sows of any breed that are fed fat when young, and this course continued from generation to generation, naturally become less prolific, while those allowed free range of pasture or yards while young and growing, rather than fattened, will produce larger litters and mother them better. The large type of Berkshire sows, as a rule, produce good-sized litters of not infrequently ten or a dozen pigs at a birth, and they are, as a rule, good nurses. The Berkshires are second to no breed in strength and vigor of constitution, healthiness, and the power to resist and repel disease. They are attractive, spirited, and, as a rule, possessed of a good quality of bone, with well-shaped legs and strong, straight pasterns. The principal points in the standard for judging Berkshires are: Head moderately short, broad between the eyes, face slightly dished, snout broad, neck medium to short, ear upright on young pigs, good size, inclined to droop slightly with age, brisket wide, hair fine and soft, inclined to thickness in the male. Shoulders smooth and even on top, and in line with sides; skin smooth and pliable; back moderate width, strong, and straight or slightly arched; side moderately strong and deep, and of nearly even thickness above and below; flank wide, deep and low down on leg; loin full and wide, ham deep, and holding thickness well down to hock; tail well set up on line with back; legs and feet short, straight and strong, set well apart, with hoofs nearly erect, and capable of holding good weight; size all that is possible without loss of quality or symmetry, style attractive, spirited, indicative of good breeding and constitutional vigor; color black, with white on lower part of legs, on face and tip of tail, a white fringe on one or both ears, or on inside of ear, a white splash on jowl or forearm, or a few white hairs on any part is not a serious objection. In general appearance, Berkshires are of good size, fairly compact in form, regular and even in outline, and easy in movement.