

sold at a public auction for \$2,000, when a three-year-old. This mare has several first and championships to her credit from North Scotland shows. The other mare, Rose of Brownfield, is an eight-year-old, and weighs 1,950 pounds. She was bred by John Eaton, Dumfries, Scotland. The showyard record of this mare is quite exceptional, as she captured forty prizes in the Scottish show-rings. Her middle and top are of the approved modern type. Her feet and legs are up to the Scotch standard. All in all, she is a splendid type for a brood mare.

This experiment is already attracting much attention. The work with horses at Fort Collins, Colorado, started two years ago, is of a kindred scope, but at that point the Government is working toward a breed of carriage horses, while at Ames it is in the interest of the drafters. The Federal Government in both instances is furnishing one-half of the funds to carry on the work. Another importation will probably be made next year.

THE HORSE COMMISSION REPORT.

The following letter was received last week from A. P. Westervelt, Director Live-stock Branch, Department of Agriculture, Toronto:

"I notice in the reading notice regarding the report of the Horse Investigation (issue August 22nd), in the last paragraph, you state that the number of horses for the Province are not totalled up. I wish to draw your attention to the tables on pages 133, 134 and 135, which give totals for each county of the number of stallions of each class, and the number of mares bred to each class of stallions. The table on page 135 gives the totals of each of the breeds throughout, classifying the imported stallions, Canadian-bred, and grade stallions of each breed."

By some mischance or other, "The Farmer's Advocate" was furnished with a mutilated copy of this report, for the one we received ended with page 128, there being nothing to indicate that any pages had been torn out or omitted in binding. We are pleased to learn that the report has not been issued to the public in the incomplete state in which the review copy reached our desk.

LIVE STOCK.

CARE OF YOUNG PIGS.

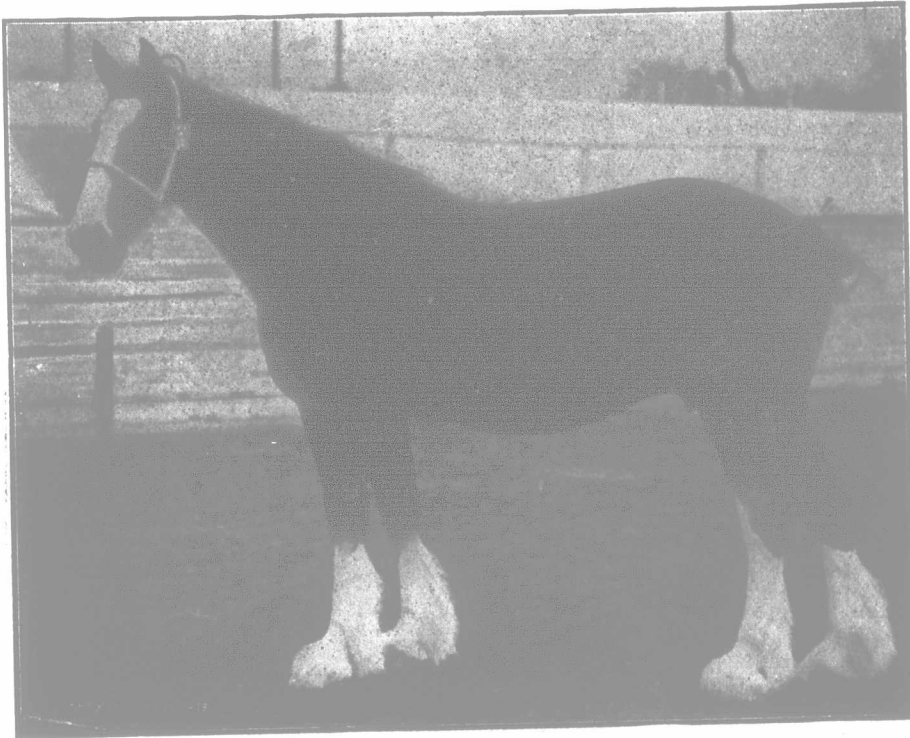
The prospect is that the supply of bacon hogs will be short the coming winter and spring, and that prices will rule high in this country. The outlook is the same in England, where the packers and dealers are complaining bitterly of the shortage of pigs, and are forced to handle more second-class product from outside sources than they would if the supply of first-class were sufficient. Many farmers fail to make a success of feeding fall pigs during the winter months, and many have become discouraged through failure and have abandoned the work. On the other hand, not a few have succeeded satisfactorily, and made it a profitable business. What is the secret of their success? is a question others should observe and study, in order that they may share in the good prices going. Probably part of the difficulty in carrying pigs through the winter in a growing and improving condition is due to having the litters come too late in the fall. September and October are the favorite months to have them come, as then they may be kept running out on the ground and the grass a good part of the time for two or three months, treatment which is essential to the growth of bone, the development of muscle, and the laying of the foundation of a vigorous constitution, which will enable them to withstand the effects of the enforced confinement due to snow and the cold weather in winter. Much trouble is experienced from crippling of pigs in winter, apparently from rheumatism, but probably from inactive livers and imperfect digestion or derangement of the stomach, due to lack of exercise, and possibly from feeding too much cold, sloppy food, which, in cold weather, may well account for a sluggish circulation of the blood and consequent inaction of the organs of the system which perform the functions of digestion and assimilation. If there is reason to believe that the ailments which so often check the growth and health of pigs in winter are due to the system of feeding above indicated, why not try the system of feeding by which the grain is fed dry, either whole or ground, and the drink given in a separate trough, to be taken when required. We have seen pigs thrive admirably in winter in very ordinary quarters, fed in this way. Most of the hogs raised in the corn-growing States are fed whole corn, on the ear, or shelled and scattered on the ground or on plank platforms; and nowhere are so many so successfully raised and fitted for market, the principal difficulty there being that the hogs, being kept in such large numbers, bunch together too closely, and are liable to become overheated from contact of their bodies, and to catch cold when separated. It is, we believe, sound doctrine that food eaten slowly, and thoroughly masticated and mixed with the saliva of

the glands of the mouth, is best fitted for being readily digested, the exertion required to pick up thinly scattered grain or meal in a flat-bottomed trough tends to keep up the blood circulation, and the process of mastication is much more complete than in swallowing sloppy food. In the early years of farming in this country, it was the common practice to keep porkers till they were fifteen to eighteen months old before fattening; they were carried over the first winter almost invariably by scattering whole peas on the frozen ground or on plank floors, or in troughs, and given water separately, and were fattened at last to great weights on whole peas, with water to drink, yet rheumatism and winter crippling was practically an unknown ailment. Pigs seldom go wrong in summer where they are allowed to run

duction of bacon to meet the good demand and prices of the present. At least, the suggestions offered are open to discussion, and these columns are open to such discussion, which is earnestly invited. Who will be the first to take a hand in it, and add his quota to the solution of the question?

SELECTING A RAM.

The character of a flock and its improvement depends so largely on the sires used in its building-up and maintenance that special care should be exercised in their choice. One of the first points to be considered is that he conforms nearly to the most approved type of the breed to which he belongs, but even in this regard one should be careful to avoid being led away by the fads of fashion which would attach more importance to such non-essentials as extra covering of head and legs than to strength of constitution and masculine character, which, more than any other qualities, marks an improving and prepotent sire. The matter of extreme head covering is sometimes due to extra care in its cultivation, or to lack of energy, or of the spirit of combativeness which prompts a ram to hit a head wherever he sees one, and not infrequently a sheep of vitality and vim, with a masculine head, thick, muscular neck and loin, wide chest, and good feeding qualities, that has had part of his head covering removed by butting with his companions, is rejected, and one much weaker in all these points is chosen on account of his perfect covering. This is a serious mistake, as extreme head and leg covering often go with a weak head, light bone, cat hams and wobbly legs. Most people are particular about the underpinning of a horse, but many do not attach sufficient importance to the quality and placing of the legs and feet of a sheep or a pig, on which much of their usefulness in producing healthy, vigorous offspring largely depends. In selecting a ram, one should not only handle him thoroughly to ascertain his weaknesses, if he has any, but should also notice his manner of walking, to see if his legs, fore and aft, are sufficiently wide apart without being bowed, and that he stands firmly and walks freely, and has straight pasterns and good feet. The head should be moderately short, and broad between the eyes and ears; the neck short, thick and strong; the chest full in front and wide between the fore legs; the shoulders fairly wide, and the space behind the shoulders well filled in; the ribs well sprung; the loin wide and strong, and the twist or buttocks and leg of mutton full and thick. Then, the quality of the fleece should be carefully examined to see that it is not only fairly dense, but of nearly equally fine quality on all parts of the body. Coarse, hairy wool on thighs and rump is decidedly objectionable, and a thin ringlet fleece indicates a light shearer and generally a weak constitution, while, on the other hand, too close a fleece on a sheep of the long-wooled breeds tends to coarseness and brittleness of fibre, and often an unthrifty feeder. The ideal fleece combines sufficient thickness with lustre and fine fibre, and free from any black strands, and is set in a healthy, pink-colored, oily skin. While a ram heavily fed in fitting for show purposes may be overdone for usefulness, yet, as a rule, if he has a vigorous and active appearance, he is tolerably safe to depend upon as a breeder. He should not, however, be rapidly reduced in condition but given a light ration of oats and bran to keep up his vitality and spirit while mating with the ewes, and it is safer, where more than thirty ewes are to be bred, to have the flock brought into a small yard every morning during the breeding season, the ram turned with them, and those found in heat caught and placed in a pen, to be turned with the ram at intervals of an hour or two, and allowed but one service each. A ram one year old or over that has had the run of the pasture during the season, being fed little or no grain, and is in vigorous condition, may run with a flock of forty or fifty ewes without danger of injuring himself or his usefulness, though he will be the better of a feed of oats, or oats and bran, once a day. The selection of a ram should be attended to early in the fall, before the best have been picked up, and he should be kept with the ram lambs or wethers, or an old ewe or two, for company, till the season for service arrives.



Chester Princess (16371).

Clydesdale mare; black; foaled 1900. First and champion, Highland Show, Edinburgh, 1907. Sire Baron's Pride.

on the ground, with access to grit and grass, and if we cannot have summer conditions in winter, the best we can do, it would appear, is to get as near as we can to it by adopting methods of treatment which aid nature to do its work, despite the handicaps of frost and snow. To this end, it is surely worth while to experiment, by supplying the needs of the animal system, by providing bone-and-muscle-forming foods, and feeding them in the manner best calculated to aid digestion and assimilation. Well-cured clover or alfalfa hay, cut up fine, and fed in combination with pulped mangels or sugar beets and a little meal, should answer admirably for this purpose, and should greatly reduce the cost of production, as compared with the common practice of heavy feeding of grain meals, much of which is often worse than wasted when the animals are knocked off



Pitlivie Rosebud 2nd.

Two-year-old Shorthorn heifer. First prize and champion Highland Show, 1907. Shown by Robert Taylor, Pitlivie.

their balance, and lose ground, instead of gaining in condition and weight. It would cost but little to provide a load or two of gravel in a covered place, or to carry over the coal ashes for this purpose, or to partially burn, under cover of earth, some of the rough wood lying around the yards to produce charcoal, to which the pigs could be given access. A mixture of salt and sulphur and wood ashes, as a condiment, kept under cover in a low, flat box, so the pigs can help themselves, may prove the savior of life and vigor. These are but hints which may serve a helpful purpose in solving the problem of successful winter pro-