

to eliminate certain elementary forms of pedigree from the studbook. The idea here is that pedigrees should be allowed to grow up naturally, and hence the comparatively easy standard of three registered crosses. But there is a drawback in working along these lines, viz., that where a high standard is not made compulsory, breeders become careless, and rest content with the minimum; hence the short-pedigreed fillies which your breeders complain about. These have, no doubt, all long pedigrees, if they had only been recorded, and your proposal to insist on five registered crosses will greatly facilitate the work of those who advocate a higher standard here.

The Clydesdale Horse Society had a very prosperous year in 1905, and closed it with a capital of over £3,000. The membership stands at nearly 1,400, and the Studbook volume now in the press is the largest issued for 14 years. The great difficulty here is to get breeders to register their stock. Everybody knows every other body's business, and the necessity for registration does not appeal to the average breeder as it does to dwellers in a new country such as yours.

"SCOTLAND YET."

Indications of Feeding Qualities in Swine.

By Prof. G. E. Day.

It is an extremely difficult matter to convey through the medium of words just what constitutes a desirable type of hog for making economical gains. There has been, however, so much discussion on the question of types of easy-feeding swine, that I am tempted to say something on the subject in spite of the danger of being misunderstood.

In the first place, an animal that can make economical use of its food must have a good constitution. In this connection it is well to remember that a broad, heavy shoulder, and a broad, fat back, do not necessarily indicate constitution. If any person is inclined to dispute this statement, let him reflect for a moment upon the conformation of a good type of dairy cow, as compared with the conformation of a beef animal. There are plenty of beef animals that have broad shoulder-tops and broad backs that are seriously defective in constitution, and there are plenty of cows which have sharp, pointed shoulders and sharp backs which possess constitution to a marked degree. In other words, we must look for constitution to that part of the animal which contains the heart, lungs and digestive organs. No matter how broad a top an animal may pos-

sess, if it has a narrow, cramped chest the indications are that there is a lack of constitution. When we compare a hog of bacon type with one of fat type, we are at first inclined to think that the fat type possesses greater indications of constitution; but when we examine them closely we are forced to the conclusion that the difference in actual thickness through the heart is more apparent than real. If the hog stands with its front legs reasonably well apart, has reasonable depth between and back of the fore legs, and good thickness through from side to side at this point, the chances are that it will possess good constitution, though the top of its shoulder and its back may be comparatively narrow. It is true that when a hog possesses extreme length there is a danger that it may lack in thickness through the heart and in general depth of body. It is just here where breeders of the bacon type have to exercise judgment and care, and make their selections along the line of producing an animal with sufficient length to give a good side of bacon, and yet with sufficient depth and thickness through the heart to ensure constitution. Thus, while the breeder may sacrifice a little of what the packer requires, it does not follow that he must sacrifice nearly everything which the packer requires, and select for a broad, fat back and a thick, heavy shoulder-top, which are not closely associated with the question of constitution.

Another thing which indicates a good feeder, and an animal which will grow as well as become fat, is the quantity and quality of bone. An extremely fine-boned hog almost invariably runs towards fat, and lacks muscular development. On the other hand, an extremely coarse-boned hog may be a slow-maturing kind, and lack the quality of flesh desirable in meat-producing animals. The ideal bone is somewhere between these two extremes in quantity, and the bone in the legs should present a very clean-cut appearance, which is a sure indication of general quality. These strong-boned hogs will grow more rapidly than the very fine-boned type, and will weigh much heavier for their appearance. The pig which tends to produce an excessive amount of fat does not, as a rule, make the most rapid growth, and does not attain so great a weight for its age as the pig which develops bone and muscle along with the fat. A person who is not accustomed to weighing these strong-boned, growthy pigs is likely to make very serious errors in attempting to estimate their weight. We have had many evidences of this on the College farm when different breeds were fed side by side. To this fact may

be attributed a great deal of the popular prejudice against the bacon hog, but the constant use of the scales will have a tendency to break down the most strongly-rooted prejudice.

While a great, fat, heavy jowl is not necessarily an indication of constitution or feeding qualities, at the same time the jowl should have good width between the angles of the jaws, and the jowl should be well clothed with muscle, though not overloaded with flabby fat. A very narrow jowl is often associated with a narrow chest.

Another indication of a good feeder is seen in the width between the eyes and the width and prominence of the poll. A narrow face and forehead, with a retreating poll, generally indicates a lack of feeding qualities. Just why this should be the case it is difficult to say, but experience goes to show that there is a close relationship between the formation of the skull of the pig and its ability to utilize food.

An abundant, straight coat of glossy hair, free from bristles over the neck and shoulder, constitutes another indication of thrift and general quality.

To sum up the matter, we must say that we look for a pig with good depth and thickness through the heart, as well as throughout the lower part of the body generally, though the top of the shoulder and the back may be of just medium width. The length of the pig should not be excessive, but may be plenty long enough to give a desirable side of bacon; the bone should be strong and clean; the jowl wide, but neat; the face wide; the poll wide and prominent, and the hair abundant, smooth and glossy. These, to my mind, are the principal points to be taken into consideration in judging of the feeding qualities of a pig.

I may add that the desire of many feeders to see a pig broad in the back, leads to the spoiling of a great many otherwise useful pigs. Possibly the time when this is most likely to happen is when the pig is from three to four months old. If it is fed in a way to produce an excessive development of fat at this time, it hardly ever recovers from it, and does not, as a rule, make satisfactory growth. We have had a number of promising litters spoiled by the feeder in this way, and we always find that pigs that become overfat when they are three or four months old, seldom go to market at as early an age as pigs which have been fed with moderation, the aim being to keep them in good growthy, thrifty condition, without an excessive development of fat.



The O. A. C. Stock-judging Team that Won the Spoor Trophy at Chicago.

Standing (from left to right)—J. Bracken, Prof. G. E. Day, H. B. Smith. Sitting (from left to right)—W. A. Munro, Prof. H. S. Arkell, G. G. White, H. A. Craig. Prof. Day and his assistant, Prof. Arkell, together with Dr. J. H. Reed, V.S., were the instructors who trained the team.