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There has been an increasing tendency during late years to coin words expressive of the various attributes of live stock. So much is now written by those who report at agricultural and other shows, and in describing the animals which appear in competition, and at sales, that it is only natural that writers are sometimes hard pressed to find words which will adequately convey to their read ers their points of excellence or the opposite, so that a correct idea may be formed by those who have not had the opportunity of seeing the animals themselves. One of the most difficult expressions, or, rather, one of the most difficult characteristics to describe on paper is "quality." All good judges and breeders know what that is, and can apply it



HON, WILLIAM I. BUCHANAN. Director-General, Pan-American Exposition,

equally to whatever class of animal may be under review. It is, however, a perfectly distinct feature in different breeds, and here comes in the difficulty of using the word in the description of all breeds At the same time, we do not think it is possible to substitute any other word which would convey to our minds the same meaning and all the vast importance to the live-stock interest which it contains. First let us consider the word as applied to light horses, inclusive of ponies. It may be taken for granted that "quality" in its first meaning is understood to mean high birth and good breeding. Not only is this so with reference to animals, but it is also applied to men and women. "The Quality," or "Quality folks," is a frequent expression in country districts when speaking of the "Upper Ten," and it is from this idea that Whyte-Melville, no doubt, gets his beautiful simile when he describes the Thoroughbred hunter:

"A head like a snake, and a skin like a mouse;
An eye like a woman; bright, gentle, and brown;
With loins and a back that would carry a house,
And quarters to lift him smack over a town."

No words could possibly draw a more eloquent picture, one that seems to speak to you, as it wer with such reality that it is easy to see in your mind's ye the lovely creature he so vividly portrays. With this idea to work upon, it is not difficult to carry the thought through the other breeds, and judge individual representatives on the same prin-It was mentioned in these columns recently by an able contributor that "quality" carried with it the impression of light bone and want of substance. There is no doubt a great deal of truth in this: but it is altogether a wrong notion. The general belief, more or less founded on fact, that Thoroughbred horses are deficient in bone is the origin of this supposition; and that when a horse is spoken of as being full of quality, or showing considerable quality, it is intended to imply that it is of such conformation. When speaking of other light horses, such as Hackneys, hunters, or ponies, by describing them by the same term "quality," people have been educated to think of the flesh or "touch." It is by handling a beast that you can at once discern its quality, the aptitude to feed and to assimilate most economically the food it is supplied with whether for the production of beef or dairy purposes. That well-known authority on Shorthorn matters, the late Rev. W. Holt-Beever ("Pimpernel"), used to describe the "touch" of the Shorthorn as that of the sea otter. Good touch need not necessarily be a thin skin-you want something more than this, or it would only be a sign of delicacy. The skin should be covered with soft hair with just the sort of tender touch which fills the hand like the skin of a sea otter. Nobody can really put the feeling on paper, but whatever it is when you feel it, it means "quality."

Sheep, and pigs too, may be judged by their well-

'Quality' as Applied to Live Stock. bred appearance; it is the absence of all coarseness and under-bred character which marks their quality, and without this no feeder or breeder is judicious if he attempts to keep them in his possession longer than can be possibly avoided. "Quality" means money, and without it no sort of live stock is worth encouraging, as it will leave no profit to the breeder.

Live Stock Journal.

## Some Facts About Pig Feeding.

Where feeding tests have been conducted, it has been shown that under good conditions from 4 to 5 pounds of suitable grain has produced I pound of live pig. But the question has frequently arisen whether by any combination of foods, or by the adoption of some materials with foods which have not been commonly employed, the quantity of food consumed by a pig to make a pound of live weight might not be diminished. Prof. Henry has ascertained a fact which is apparently of the primest importance to the pig-feeder, and if it is confirmed in everyday practice, it will prove enormously advantageous to the producer of pork. It is well known that the pig has a taste for ashes, and it was noticed that where corn was largely used the animals consumed a quantity of the ashes produced by burning hard wood. Evidently there was some cause for this, and that some material was required which was not provided in the corn in sufficient abundance. Some three different lots of pigs were fed in consequence, in the hope of ascertaining what result would follow by the supply of ashes and of bone meal, which contains mineral matter in part found in ashes. Some of the animals received corn without either ashes or bone meal. The last-named failed to develop so well as the others; they neither possessed bone nor size, consequently growth was slow, although fat was laid on plentifully. For every pound of gain in weight, only 4.87 pounds of corn meal were required, when used in conjunction with bone meal; when used in conjunction with ashes, 4.9 pounds of corn meal were required; but when neither wood ashes nor bone meal were employed, 620 pounds of corn meal were consumed. Here, then, we get at the secret of the difference in the cost. There is method even in the preference shown by the pig for a material so apparently useless as ashes. Practically speaking, 25 per cent. more food was required to make the same quantity of pork, or, to put it more correctly, live pig, where no ashes were employed.

In Wiltshire experiments, the ration in which albuminous matter was added to meal produced the best results. It appears that twenty-four diets were employed, and the highest points—1,000—were assigned to a mixture of barley meal, potatoes (S pounds), and separated milk (1 gallon), the meal employed in the mixture being as much as the pigs chose to consume. Both the second and third rations in order of points, barley meal and corn meal, contained separated milk, and these were proved to be of the highest value, as compared with the remaining rations, all of which, so far as they are quoted, were prepared without the milk; barley meal and corn meal being used alone and in conjunction with pea meal or bran. There is, therefore, something which is outside of the albuminoid matter to account for the success of the milk as compared with the pea meal, both being rich in this material, for barley meal and milk proved almost twice as valuable, on the basis of points, as corn meal and pea meal. Where barley meal meal were compared with each other, corn meal proved the cheapest, in the production of 20 pounds of dressed weight, when its price was \$2.50 below barley meal, but on the basis of points assigned for he highest value, barley meal did better than corn. When, however, the rations were placed in order of merit for cheapness in conjunction with efficiency, barley meal, milk and potatoes, and corn meal and milk, stood upon the same level, both at the top, the barley meal and milk coming next in order with four points less, all the other mixtures being well beaten; barley meal and corn meal, when fed alone, containng precisely the same points. These points may be illustrated in this way: Barley meal, separated milk and potatoes, or corn meal and milk, produced as much profit to the farmer, upon an expenditure of \$75, as \$155 spent upon barley meal or upon corn meal. Whether the mineral matter in the skim milk influenced the results in a similar way as the bone meal increased the feeding power of corn, is a matter which we can only conjecture, but there can be little doubt that the casein of milk is of the highest value as a pig food when employed in conjunction with corn or barley meal, and that the mineral matter of milk, so essential in the growth of young cattle, is of quite as high a value in the feeding of young pigs.

Pedigree is the foundation and performance is the superstructure of the good cow. As the best of foundations is useless without a superstructure, so the best of superstructures is of only temporary value without a lasting foundation. When the two are rightly combined the edifice is complete. So it is with a combination of pedigree and performance: The best of pedigrees without performance is of no practical value, and the best of performance with no pedigree is of only temporary value. It gives no issurance of continuation of inheritance. Jersey

## Weaning Pigs.

The common method is to let the sows go out in the pasture and shut up the pigs. Then the music begins. This is the way I used to do. The sows hang around there the whole day, and then the udder would get caked, and we would have trouble with them, and sometimes an excellent brood sow ruined. I don't do that now. I have a feeding floor adjoining my hog-house. The feeding is all done on this floor, the sows are shut in on this floor, and the pigs allowed every access to them. I feed the sows all the oats they will eat; give them all the water they can drink. The pigs are fed all the shelled corn they will take. They go up there, eat, and get to the sows. By the end of the week these sows are dry, and the pigs get so disgusted going up there and finding nothing, that they just quit. Absolutely, at the end of one week not a pig will go near its mother. You can turn the sows right out in the pasture with the pigs, and there is no more trouble. Now, this is not a theory. I have done that way for years, and I never had pigs suck the sows again. It is a very easy thing to dry a sow that way. Feed them nothing but oats, and let them drink water, on a dry floor. It is not always convenient to have so many different pastures, sows in one and pigs in another. In this way you can utilize one for both. Swine Breeders' Journal.

## Scour in Calves.

Scour is prevalent in calves at certain seasons of It is interesting to observe how breeders treat it. The volume published under the auspices of the English Jersey Cattle Society gives particulars of several methods, a few of which we reproduce. Mr. Ernest Mathews uses two tablespoonfuls of flour, one tablespoonful powdered ginger, mixed to a paste with whiskey, and made into small balls, and given every two or three hours. This is particularly useful in the earlier stages of the complaint. Mr. W. Milward Jones recommends a dose of castor oil and ginger, given at once as soon as scouring is observed, followed by pills of butter and bicarbonate of soda († lb. butter, with teaspoonful of soda, well mixed). In Earl Cadogan's herd, a small dose of linseed oil is given, followed by two tablespoonfuls of a powder, consisting of prepared chalk, 2 ozs.; powdered catechu, loz.; ginger, loz.; opium, ldr.; peppermint and water, l pint. Fresh eggs (shell included) are also given. Lime water, and old beans, are recommended. A piece of chalk put where the calves can lick it is also recommended.

## Tubercular Infection.

A correspondent recently called attention to the fact that the dangers of contagion from tuberculous



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patients through breathing was being greatly exaggerated. In this connection we notice, by the report of the Pennsylvania Agricultural Department, experiments were conducted with guinea pigs, which were kept in a compartment in the lower end of nosebags attached to tuberculous cows. The guinea pigs were thus forced to breathe the air expired by the tuberculous animals. Twelve guinea pigs were used in these experiments, and were exposed for periods varying from 2½ to 26 hours. None of them became infected. Two lots of guinea pigs inoculated with tuberculosis were kept in light and dark boxes, respectively. One lot was placed in a box with a glass front and the top and back made of wire netting, covered with white cloth. The other lot was placed in a box of equal size, made of wood, painted black inside, and a wire-netting back, covered with black cloth. The guinea pigs in the light box lived from 5½ to 6 days longer than those in the black box. This experiment indicates the effect of light in checking the development of tuberculosis.