

stupid, for stupid horses are the most dangerous of all. Every horse shows his character in his head, and chiefly in the eye, just as certainly as a man shows his character in his face; although, as in the case of men, it is not always easy to read what is written in the equine features. But as to horses of positive character, positively good or positively bad, there need be no mistake. I once bought a mare of a dealer for a woman's use, without even taking her out of the stable. She seemed to be sound, and I felt sure from her eye that she was unusually gentle and safe, and so she proved to be. On the other hand, out of six or eight horses shown to me at a sale stable on another occasion, I rejected one—the best in the lot otherwise—because his eye, though not absolutely bad, was such as to arouse suspicion; and the owner afterward admitted to me that the animal was different from the rest in being a little "mean."

I mention these instances to show that any person of average intelligence can learn, by taking pains, to read the equine character. Horse dealers and trainers seldom make a study of this matter because they do not care about it. What you should look for is a large, clear, luminous eye; what you should distrust is a small eye, a protruding eye, a sunken eye, an eye that shows the white, glancing backward, which indicates bad temper; and, above all, a glassy, tremulous eye, which indicates stupidity. It is hard to describe, but easily recognized. There should be a considerable space between the eyes. The ears and the carriage of them are hardly less significant. Well-cut ears that move continually with a general tendency to be pricked forward indicate a good and lively disposition. Large ears, if well shaped, are better than very small or "mouse" ears. Lop-ears, coarse ears, ears planted either very far apart or very close together, are to be viewed with great distrust.

Next in importance to the head come the feet. They should be of medium size, neither steep like a mule's, nor flat, but sloping at a medium angle. The best feet are "cup-shaped," that is, so formed that when you pick them up they will hold water.

As to the other points of a horse I shall not attempt to go into details, because I fear that they would convey information only to those who do not need it. But this may be said generally by way of advice: Avoid a long-backed or thin-waisted, still more a long-legged, horse. Look for a compact, rather low-standing beast, with a good head, good eyes, and well-shaped ears, and you cannot go far wrong.

Feeding Standards for Different Kinds of Animals.

It will be remembered that the primary functions of food are to repair the waste of the body, to promote growth in immature animals, and to furnish heat and energy. And, for these purposes, only the digestible portion of the food is to be taken into account. The amount of digestible protein, fat, and carbohydrates in a ration is an indication of its fitness to fulfil these purposes. The next question is, How much of these materials does an animal require, and in what proportion should they be given? This differs with the purpose for which the animal is kept, whether it is growing, being fattened, used for work, or making milk. An animal standing in the stall requires less food nutrients than one which is worked hard every

day. That is, in drawing heavy loads the animal breaks down a certain amount of muscular tissue, which must be replaced by protein in the food and it uses energy or force which is also furnished by the food nutrients. In standing in the barn it still requires some protein, fat, and carbohydrates to perform the necessary functions of the body, as digestion, to maintain heat in winter, to grow a new coat of hair, etc. But if it is fed the same ration as when working hard the tendency is to get fat.

The cow requires not only materials for maintenance, but must also have protein, fat, and carbohydrates to make milk from. The milk contains water, fat, protein (casein, or curd), sugar, and ash, and these are all made from the constituents of the food. If insufficient protein, fat, and carbohydrates are contained in the food given her, the cow supplies this deficiency for a time by drawing on her own body, and gradually begins to shrink in quantity or quality of milk, or both. The stingy feeder cheats himself as well as the cow. She suffers from hunger, although her belly is full of swale hay, but she also becomes poor, and does not yield the milk and

they are said to be better proof against fluke and footrot than most breeds of sheep. Their mutton is decidedly good, while the wool is of heavy weight, with a long, full, and decided staple.

Up to a short while ago there was no record book for this breed, and no decided efforts had been made to improve them to any extent. Now, however, an association has been formed, with Mr. W. W. Chapman, London, as hon. secretary, which embraces both Romney Marsh sheep and Kentish sheep, the latter a somewhat larger variety of the former. There is every reason, then, to believe that in the future this breed will be more widely known and will be found in many parts of this continent, as they deserve to be.

The accompanying illustration is one of a ram of the breed mentioned. This is Prince, sire of the Ashford lambs, and whose owner is Mr. H. Page, Walmer Court, Walmer, Kent, England. The flock to which this ram belongs was established in 1852, and has always been one of the leading flocks of Kentish sheep. Numerous prizes have been won by Mr. Page at the Royal and elsewhere, and the flock will well repay a visit to it.



The Kentish Ram, Prince.

The property of Mr. H. Page, Walmer, Kent, England.

butter she should. Her milk glands are a wonderful machine, but they can not make milk casein (curd) out of the carbohydrates in coarse, unappetizing, indigestible swale hay or sawdust any more than the farmer himself can make butter from skim-milk. She must not only have a generous supply of good food, but it must contain sufficient amounts of the nutrients needed for making milk. Until this fact is understood and appreciated, successful, profitable dairying is out of the question. The cow must be regarded as a sort of living machine. She takes the raw materials given her in the form of food and works them over into milk. If the supply of proper materials is small, the output will be small. The cow that will not repay generous feeding should be disposed of at once and one bought that will. There are certain inbred characteristics which even liberal feeding cannot overcome.—From Bulletin of United States Department of Agriculture.

Kentish or Romney Marsh Sheep.

The October number of THE JOURNAL last year contained an article on Romney Marsh Sheep, which very fairly described the many excellent points of this breed, which has hitherto been kept rather in the background. They are hardy, and of strong constitution, and will live and thrive on very poor land, while

The Present Position of Horse-Breeding in Great Britain.

By ALAN MACMILLAN.

(Continued.)

"The first cause of the scarcity of heavy draught horses during the past decade was the extensive exportation of the very animals which would have gone to swell the ranks of commercial geldings for street traffic. This trade, as we have seen, only reached its zenith in 1890, and it is impossible therefore that the balance can have righted itself in the years which have intervened. Any one who attended the shows of 1894 will, however, admit that the number of big, growthy geldings is on the increase, and that within the Clydesdale breed horses can be produced as heavy as the most glutinous contractor can desire, combined with beauty of form and wearing qualities which are not to be found in the representatives of any other breed or in any cross. The second cause of the scarcity is the tendency in showyard judging to prefer beauty to strength, quality to size. This is a tendency in the judging of every class of stock. It is the cause of a standing quarrel

between commerce and fancy, and the contractor and dealer do not more eloquently denounce it in the horse world than do the butcher and the cattle dealer in the bovine world. Without the showyard and the pedigree register no breed of animals has ever been improved; but both the show and the register are good servants, but bad masters. The defence of fancy points in showyard judging is that the judges give prominence to those points which are most essential in the breed judged. Feet and legs are the most important points in draught horses, and in the show ring this is emphasized. The milk vessel and teats are the most important points in a dairy cow, and therefore in the show ring these are most insisted on when Ayrshires are being judged. Similar remarks may be made about other classes of stock. The skin is of first-rate importance in a breed of mountain sheep, and so some judges go all for skin and no frame. The defence here sketched may be good as far as it goes. Whether it is sufficient is another matter. This is certain, alike in breeding and in judging, fancy points can only go a little way to determine the value of the draught horse. While not forgetting the main points, judges should remember that they are judging cart horses, not ponies—and strength is all-important in an animal whose life work is drawing loads. The first cause of scarcity we have seen is in a fair way of being removed; and the second, judging by the class of horses favored by district committees this year and last and the tendency in showyard judging last year, is also likely soon to be mollified, if not altogether dispensed with. We have quoted Wordie & Co.'s opinion in full, because they are a representative firm. Horses from 16 cwt. up to 20 cwt. in weight, when matured at five or six years old, are always in demand by such men, and for these horses they are willing to give from £70 to £100, according to merit. It is because we are firmly convinced that the Clydesdale breed can supply such horses that we have taken up this subject. With Wordie & Co. we are at one in thinking that the shortest way to breed such animals is to take big, open, rough Shire mares—we would not mind how coarse they were, if only they were sound and clear of side-bones—mate these with a sound-footed, broad-boned, short-legged Clydesdale stallion. The produce would, in most cases, be an animal of the kind desired by the contractors. The speediest way to breed commercial stock of any kind is by crossing two distinct breeds. But yet it is true that the best commercial horses, the best geldings on record, have, with but few exceptions, been raised within breed limits. This leads to the discussion of the last point.

WHAT THE HOMEBRED HORSE MIGHT BE.

"Three of the principal horse dealers describe what they want in these terms. No. 1 says: Farmers must breed bigger horses, and let us have them practically sound. For a strong animal of this stamp, even although a little coarse, we will give £80 apiece at five years old. Size and soundness, with good feet and legs, and weighing up to 18 cwt. when in working condition. There is no difficulty in selling any number of such horses. No. 2 says: Let farmers go in for breeding big, sound-constituted horses, with good feet, and look more for substance and weight and less for pasterns than of late years, as near to one ton in weight as possible. In my opinion, this is a class of horse foreign competition can never put out of the market.