

Stock.**Feeding Horses.**

Extracts from a lecture delivered before an English farmers' club by Mr. J. Storey, V. S.:—In regard to food of all animals, the horse, in comparison to its size, has the smallest stomach. It is therefore of the greatest importance that his food should contain as much nutriment as possible in the smallest bulk, more especially when undergoing hard work. Hay and oats have this qualification to a greater degree than any other of the feeding stuffs in general use, and that they should form the staple food has been proved by long experience. Bruised oats are very suitable for old horses, and those that bolt their corn; but, beyond this, they have nothing specially to recommend them. The average quantity of oats required to keep a horse undergoing hard work in good condition is about twenty pounds per day. Of course, some horses will eat more. Others can not be induced to consume more than fourteen pounds. Drivers of contractors' horses are practically aware of the fact that the more they can get their horses to eat the more work they will do. But the result of over-working is the premature death of many valuable animals. Indian corn may be fed if it is cheap, but must only be used with an equal proportion of bran. Mr. Storey condemns the use of chopped hay, and says that the principal argument in its favor is that the bad hay is eaten along with the good. A horse is better off without bad hay than with it. All kinds of straw are inferior to hay, oats being the only variety that should be used; it does well when horses are idle, as they are not so liable to get into too high condition on it. Carrots, turnips and potatoes require to be fed with discretion; indeed, Mr. Storey is inclined to condemn the use of potatoes altogether. In cooked food, the lecturer said, the great objection is, that it fattens without giving strength and firmness to the muscles. It is also apt to be bolted without proper mastication, which is a common cause of colic and indigestion. For a horse recovering from any debilitating disease, or for one coming off a long journey, it is of great benefit if given judiciously. To make a regular practice of feeding with it every day, however, is unnatural, and, I believe, highly injurious. It is a common practice to give a feed of it every Saturday night for the purpose of keeping the bowels in order. Three-fourths of a pailful of mashed bran would serve the purpose better, without the risk of deranging the bowels. This is a most necessary adjunct in horse feeding, and should be given regularly once a week. It acts mechanically on the lining membrane of the stomach, increases the secretion, and thereby averts constipation. As already stated, the stomach, or receptacle for solid food, is very small; the cecum, or receptacle for water, is quite the opposite. It is not uncommon to see a horse drink two or three pailfuls of water at a time. It is, therefore, probable that he does not require it often. Three times a day is sufficient, provided the horse is allowed as much as he will drink. In cases where he is excessively hot or exhausted, or where he has been kept without water for an undue length of time, it should be given in smaller quantities and more frequently. It is a great and common error to allow horses water after being fed. In its passage through the stomach, the water is sure to carry with it some of the undigested food, which ought never to reach the intestines, and will probably cause colic or indigestion. Grooming or cleanliness of the skin is not a mere matter of glossy or staring coat; it is essential to the health of domesticated animals. When it is borne in mind that the skin is one of the principal organs by which refuse material is thrown off from the body, the necessity of keeping the pores or little drains clear will be apparent. When they become silted up, the lungs and kidneys are overtasked, and hence diseases of both these organs. Washing the legs is the cause of much harm to all horses. It checks circulation, and causes greater evils than the mud and sand which it is intended to remove.

In selecting an animal for breeding or fattening, obtain one having a large chest—the part containing the lungs, heart and the larger blood vessels, all of which have an important function to perform in the process of nutrition. It is well-known among cattle men that animals with small chests do not fatten readily, and they are remarkably susceptible to the influence of exciting causes of disease.

Oxford Downs.

The following description of these sheep was presented in a paper read at the Central Farmer's Club (Eng.):—

"The Oxfordshire Downs were, for some years, classed among cross bred sheep, but at a meeting of breeders in 1858 it was determined to give them a definite name. Hence their new title, the propriety of which is demurred at by some; for their only similarity to a Down is in their color. Their size and fleece—important qualities, which have been long and carefully cultivated by the promoters of this breed—partake more of the long wool. The Oxfordshire Downs were originally produced by crossing a Hampshire, and, in some instances, a Southdown ewe—most commonly the former, for it gave increased size—with a Cotswold ram, and then putting the crosses together.

"By constant attention and weeding a most successful result has been accomplished, producing a kind of sheep that possess, with uniformity of character and hardness of constitution, large frames, good fleeces, aptitude to fatten, and mutton of superior quality. It is about twenty-seven years since this breed was first established in Oxfordshire. The first Oxfordshire Down ram exhibited at the 'Royal' shows was shown at Windsor in 1851 by the late Mr. John Gillett, of Brize Norton, who was a very successful breeder of them, but as no separate class was assigned to them they seldom competed until the Warwick show, where there were thirty-seven entries, thus bidding fair for a very strong competition whenever the council of the Royal Agricultural Society determines to place them upon the same footing as their rivals the Shropshire.

They have the last few years spread most rapidly in Oxfordshire and distant counties, and a very large number of rams are annually disposed of, not only by private contract, but by auction at the Oxford cattle market, and not a few find their way into Hampshire and Shropshire.

In this connection it may be useful to append a reply made by an American correspondent of the English Agricultural Gazette.

1. The dead weight of an average lot of lambs at 3 months would be from 32 to 40 lb; at 6 months, from 48 to 56 lb; at 9 months, 64 to 72 lb; at 12 months, from 80 to 96 lb.
2. The weight of ewes at 18 to 24 months, from 80 to 104 lb; of wethers, from 88 to 112 lb; of rams, from 150 to 200 lb.
3. The weight of aged (full mouthed) ewes from 80 to 100 lb; of 2 and 3 shear rams in working order, from 160 to 200 lb.
4. Oxfordshire Down wethers are generally sold to the butcher, shorn, at from 12 to 15 months old, weighing from 80 to 112 lb; some even weighing more—the average probably about 88 lb.
5. The ewes produce their first lambs at 24 months old; some few breeders put them to the ram as tegs, many at 9 or 10 months old. The Oxfordshire Downs are very prolific and excellent mothers.
6. The mutton is very superior, and commands a high price in the London markets; there is a good deal of lean meat as compared with the fat; and it compares favorably with the mutton of any other breed of sheep.
7. The weight of fleece 12 months' growth of ewes is from 7 to 8 lb; of rams, at 15 to 18 months old, from 10 to 15 lb; of wethers, at 13 to 18 months old, from 8 to 14 lb.

COMPARATIVE VALUE OF DEVONS, HERFORDS AND SHORTHORNS.—STORE CATTLE.—At the great annual fair held at Barnet, England, each class of stock had separate fields assigned for exhibition. Prices were as follows: Devons, well grown store steers, £11 to £14 per head; and ditto, good blood and level lots, £18. Herefords were in limited supply, and made £15 to £21. Shorthorns, large steers, £18; and ditto, in condition, £20 to £24; heifers, £14 to £16.

A MIXED RATION FOR COWS. Mr. Henry Stewart says that after feeding cows for years, and making a large number of tests for different kinds of feeding substances, he has settled down to a mixture of corn, oats, and wheat-bran ground together—not merely mixed—in equal parts by weight, as the best and most profitable food for cows, either for milk or butter, and on ten pounds per day as the ration that can be most economically employed.

Can Farmers Afford to Improve their Stock.

Throughout the great and growing agricultural districts there are thousands of farmers who, for various reasons, most of which are insufficient, have made little or no improvement in the grade of their cattle. Occasionally one will be heard to argue that it doesn't pay, but this class is rapidly disappearing. A great majority admit that the improved breeds mature earlier, take on flesh quicker, and convert grain and grass into beef or milk more economically than the common or native stock, but put in the plea of "can't afford to raise fancy stock." That is the delusion which prevents thousands of farmers in moderate circumstances from having anything to do with blooded cattle. We speak of cattle in particular, because, as a rule, this is the last class of stock which the ordinary farmer commences to improve. It doesn't require a block of land, nor a big bank account, to make a beginning. You need not go to England, nor even to a sister province to get the "blood" which is so sure to "tell." Good, reliable breeders of Short-horns, Herefords, Jerseys, etc., are scattered all through the country, and will supply, at reasonable cost, a young bull or a few cows, or whatever may be desired. A pure-blooded bull calf can be bought all the way from \$50 upwards, and, bred to native cows, will give half-blooded animals which, when grown, will sell readily at high figures, when the "scrubs" are not wanted at any price. If the farmer says he hasn't \$50 to spare, let him join his neighbor, and own the animal in common. From this point of view the "can't-afford-it" plea disappears; for, if necessary, a pool of \$5 each can be formed. In just that way the breeders of Madison, Clinton, and other counties in Ohio, in early days, formed their associations for importing Short-horns from England, and the great results accomplished point the way for the common farmers of to-day.—[National Live-Stock Journal, Chicago.]

Inoculation a Preventive of Pleuro-Pneumonia.

From a communication to an English paper we take the following extract:—

"Inoculating non-diseased cattle with virus taken from a diseased beast has long been practiced in Australia with the very best results, as a preventive to the spread of pleuro-pneumonia. When pleuro-pneumonia makes its appearance among a herd of cattle, usually only one or two are affected at the outset, and it is some time before others become diseased, but when once the disease has thoroughly established itself, cattle take ill daily and die rapidly; such has been my experience of this complaint in New South Wales. When a beast is observed to become sick, this, to an experienced eye, is easily detected by the following signs:—1st. The animal has a cough. 2nd. The animal remains away from the rest of the herd and grazes but slightly or not at all, though there may be plenty of pasture all around. 3rd. The animal has its neck outstretched and extended towards the ground." The writer having described the method of the inoculation, says:—"After inoculation the cattle will be more or less affected, and will, to a great extent, refuse food for a few days, but usually within ten days they will have entirely recovered, and are safe against any contagion."

Hampshire Downs.

Great improvements are reported in this breed of sheep within the last decade. The English Agricultural Gazette, speaking of the Royal Agricultural Society's Show, says the Hampshire breed is yearly gaining ground, and will, we are convinced, become more highly appreciated. They are in the hands of a very business-like class of men, who keep them for profit, and because they believe no other class of sheep will pay so well for their keep. No breed produces lambs which come quicker to maturity, and no race is better calculated for crossing with long-wooled ewes, to produce strong, half-breed lambs or yearlings. The Hampshire combines the quality of the Southdown with the size of the Shropshire, which, indeed, they excel. The Hampshire equals the Southdown in the London market as regards price per pound.

Le Courier de Canada claims that the beet-root sugar industry will enable the farmers to fatten stock for export in the winter. Three tons of beet-root pulp are equal for fattening purposes to a ton of hay.