

of horses performing very hard work, drawing heavily laden drags, allows forage per diem as follows: Hay, 16 lb.; oats, 10 lb.; beans, 5 lb.; maize, 4 lb.; bran, 2 lb.; total, 37 lb. The hay is all chopped, and the grain crushed separately; then the whole mixed together. Every Saturday night each horse is given a mash of linseed, mixed with a small proportion of bran, boiled all together and given warm. When the work is less, less grain is given.

For smaller horses undergoing regular, but hard, work within a brief space—such as omnibus or tramcar horses—a less allowance of food is, of course, given. The following is the diet allowance per day of the principal tramway companies in the United Kingdom. It may be observed, however, that this allowance varies according to the price of forage in the market, and also sometimes according to the season.

SCALE OF FEEDING OF VARIOUS TRAMWAY COMPANIES' HORSES IN THE UNITED KINGDOM.

North Metropolitan.	London.	London Street.	South London.	Birmingham.
Maize	13	12	12	12
Oats	8	8	8	8
Beans	1	1	1	1
Peas	1	1	1	1
Hay	1	1	1	1
Straw	1	1	1	1
Chaff	1	1	1	1
Total	26	26	26	26

It is a good plan to vary the diet now and again, such as giving a bran or linseed mash once or twice a week. An important question arises when treating of the quantity of the food a horse should receive, and that is with regard to bulk. Attempts are made from time to time to feed horses on concentrated food, with the view of securing facility of transport; but it is forgotten that a certain degree of bulk is necessary in all food, in order that the digestive organs may perform their functions properly. During working time food of less bulk may be given, such as oats, as it interferes less with the breathing organs, and is more rapidly consumed; but a certain amount of bulk the horse must have at some time or other, and the best time for giving this is at night.

Blinding and Shoeing Horses.

Put yourself in his place! If a man were blindfolded and led into the whirl or din of a factory or machine shop, with the whirring of wheels, the crashing of trip hammers, the hissing of steam and the many other evidences of danger, he would very naturally desire to have some use of his own eyes, and be unwilling to trust wholly to his leader. Is it not so with a horse, which has instincts and sagacity almost, if not quite, equal to human reason, when his sight is obscured by blinders, and he is driven in crowded streets or past locomotives or moving cars? Certainly it must be, and no wonder these animals become frantic with fear when some unusual noise, the cause for which they cannot see, bursts upon them, and dash away blindly and bring trouble upon their drivers. Therefore I never use blinders, and trust a good deal to the

common sense and discretion of my horses—and hitherto with perfect safety. The past season I tested the question of shoes or no shoes upon horses going upon rough, stony mountain roads. The mare I have been riding used to stumble frequently before the shoes were removed, but since then has never made a misstep. The hoofs are not suffering, but are improving in shape, wearing on the rough roads keeping them in better form than the blacksmith's paring knife. Another horse occasionally make a few stumbles when trotting over the rocks and roots in the roads, and he has cost me for four sets of shoes since the test began. Even in this rough country I begin to think shoes can be dispensed with with advantage. The cows and working oxen which are passing continually over the roads, feeding upon the sides of them and working upon them, are never shod, and why should horses be? This seems to be a reasonable deduction.—[Cor. New York Tribune.

The Shorthorn Herdbook.

The facts brought to light at the meeting of the Shorthorn breeders, reported in another column, should make a profound impression on the mind of every farmer who has the welfare of the country at heart. In principle, the question is a struggle between national progress and selfishness in one of its basest forms. Prof. Brown deserves the gratitude of the farming community for his bold advocacy of the question from a national standpoint in the face of such fearful odds. We shall heartily co-operate with him in any rational scheme he may adopt for the furtherance of his views. His sentiments are strengthened by the fearless speech delivered by Mr. Chas. Drury, M.P.P., and member of the Council of the Agriculture and Arts Association. Mr. Drury reviewed his policy in reference to the herdbook question, and his views were strictly national. By reducing the standard to a certain limit he contended that farmers and small breeders were enabled to procure first-class stock, having all the desirable points, at reasonable prices. This is the essence of the question from a national standpoint. The best authorities assert that a four or five cross is sufficiently thoroughbred for all practical purposes. Nationally, the tracing of a pedigree back to imported stock is an act of madness, and can only be defended on grounds of pure, unadulterated selfishness. Any insinuation about "rings" was cried down at the meeting. Granting that none of the breeders desired to move within rings, the results will be just the same; farmers will be governed by the effects, not by the intention. By the proposed standard of the Dominion Herdbook, breeders may secure fictitious prices for their stock from the Americans who are controlled by impulses, but what our farmers want is access to such stock at prices based upon the intrinsic merits of the animals, which are not enhanced by the fact that the ancestors were imported. Prices of thoroughbred stock have greatly depreciated during the past few years, owing partly to excessive speculation and partly to increased knowledge as to the real merits of the breeds, and an effort, which culminated in the establishment of the Dominion Herdbook, has been made with the view of regaining this lost position. But, as one of the speakers justly remarked, the scheme will again end in disaster because it is established on false principles.

We exceedingly regret that the breeders who called the meeting—those who suffered loss by

their stock not being eligible for registration in the Dominion Herdbook—also failed to contend for a just and national principle. These are honorable men whose word we do not call in question, but they failed to give the subject sufficient consideration. They contended for the registration of the bull Roger, through which they suffered loss. If they had also espoused the cause of their fellow-sufferers whose loss was sustained through the rejection of other valuable stock, they would have won the support of our farmers and small breeders, and would have therefore been better able to defy the action of the Dominion Shorthorn Association. But they sacrificed a national principle for the sake of a bull, and it will be hard for them to retrieve their lost position. Our sympathy with the suffering breeders is strong, particularly so for the sake of our farmers and small breeders, and if they will unite on a national principle, we believe they will succeed against all opposition, including government expenditures, and they may be assured of our support as well as the confidence and respect of the farming community.

The Value of Bran as Food and Manure.

There is no product of the farm which can be turned into such profitable account as bran. We have heard the question asked, If bran is such a valuable food for beasts as is claimed for it, why is it not allowed to remain in the flour and be eaten by human beings? This is a very pertinent question, indeed, especially when it is considered that bran is medicine as well as food. One of the best answers we have heard is that millers and machine makers would have little to do if the complicated machinery for separating the bran from the flour were abolished. We once heard a miller argue that bran irritated the human stomach so much that it was necessary to separate it from the flour. We told him that we never felt or heard tell of such effects, and that he must have reference to city invalids.

A practical stock-feeder recently informed us that he considered wheat bran so rich that he could fatten steers profitably on bran and straw. This gentleman makes profits on stock-feeding without counting the manure or having to charge the food consumed at cost of production prices. This decision is backed up by the chemical composition of bran, and its digestibility is at least equal to the average of other foods. With regard to its most nutritive constituents, it compares favorably with lean meat, but is more digestible. Both are very rich in mineral matter and in nitrogen, so that bran is to stock what meat is to human beings. Meat has no medicinal qualities, like bran. Bran is a very concentrated food because it contains a large amount of nutriment in a small bulk. It has much bone and muscle forming constituents, and is, therefore, conducive to the growth of young stock, if fed judiciously with other foods.

We were recently asked by a practical and progressive farmer if we would recommend the feeding of bran to stock in place of using commercial fertilizers. A very sensible and practical question, indeed. We told him that bran manure was very rich in commercial fertilizers, and advised him to buy all the bran he could afford to pay for, and use, besides, all the fertilizers that he knew how to apply with profit. The bran fertilizer is a general manure, so that if the land requires a special fertilizer, much bran can be saved and the savings