

No, we are not such admirers of the Clydesdale that we cannot see merit in any other breed. We recognize the very patent fact that in the four great draft breeds represented on this continent there are horses of exceptional merit, sires of world-wide repute. Down through the States, in the central and western parts especially, there are Percheron horses possessed in so large a measure of all the qualities that pertain to draft horses that one would be short-sighted, prejudiced against this breed, indeed, if he did not recognize the fact that back of them there must be a number of exceptionally meritorious Percheron sires. Our correspondent refers to one. We could name him a number more without going to the authorities quoted for our information. We don't need to go down into the States either, for individuals of this breed that are evidences of the greatness of some of the great sires from which they spring. There is not very much use, however, getting up a discussion at the present time to discover whether Baron's Pride or some other horse is peer of drafters. After all, it would only be opinion, to say he was or was not.

The Suffolk Horse

EDITOR FARMER'S ADVOCATE:—

Some time ago, in February, 1907, to be exact, you published an article, "Why not Suffolks?" to which my attention has just been drawn. The impression might be conveyed by that article that the Suffolk is an inferior draft breed. There is also an idea held generally that he is not a big horse. We wish to give some attention to these points.

We are prepared to prove that our three-year-old Suffolk stallions out-weighted, out-girthed and out-boned any winning Clyde of any age at the Dominion Fair this year, as we took the trouble to tape them. Girths of 7-ft. 4ins., bone of 11-ins. below knee (flat and clean as a thoroughbred), and a weight of over 1,900 lbs. for three-year-olds are larger than any Clyde we have seen, and this after the stallions had worked on the land all the spring and travelled an average of 75 miles a week during the season, without shoeing and without injury to their feet. We ask:—What other breed can do this? The Suffolk is as much a draft horse as any other breed, being faster than any and only inferior in size to the largest shires. Of course, there is no sense in crossing too violently, and if we had well-bred Clyde or Shire mares, we should certainly breed them to their respective stallions. It is for improving the ordinary Western range mare that we import Suffolks, as they have more compactness, hardness, purer breeding, activity, docility and capacity for work than any other breed. Of course, we don't expect to raise draft horses from range mares, nor could any other breed, and when in England they say that the Suffolk horse is hardly large enough for heavy draft, they mean a team of geldings weighing over a ton (2,240 lbs.) each, of the Shire breed. These are the pick of the farms, and are found on the docks chiefly, and will never be raised in this country, for the simple reason that they are better than the large majority of stallions in Western Canada, and if by chance one were raised, he would be kept as an entire. At the same time, the Suffolk won the championship for draft horses, at the International Show in London this year, and at the cart-horse parade held in London on Whit-Monday we have often seen teams of Suffolks which had attended the parade for fifteen years. We have pure-bred mares with which, when not in foal, we are prepared to out-pull, out-walk and out-last any team of any breed in the West.

We quite agree with the ability of the Scotch stockmen, also with their patriotism and enterprise, and all credit to them. We have always held that if there were no Scotchmen in Canada there would be no Clyde horses. We have never met a man, other than a Scotchman, who liked them. The Percheron is coming in with the American, and bids fair, in time, to predominate. The reason why the two English breeds are not represented in Canada is simply because the English stockman is not represented either. It may be news to many that the Clyde is unknown in England save on the Scotch borders, and in the Eastern counties the Suffolk has an entire monopoly. At one of the largest shows in Suffolk there were a hundred or more Suffolks and only one Shire.

In Suffolk they don't theorise about horses with theories changing with each generation, but the activity, endurance and docility of the breed is the natural consequence of centuries of selection, while the purity of the breed is proved by his unchanging form and color, and his ability to stamp his get with these qualities.

Who can say that a horse with these qualities is not the equal of any as a draft and the superior of any as an agricultural horse?

Alta.

NORMAN JACQUES.

The Feeding of Horses

In selecting food for the horse we should remember the anatomical arrangement of the digestive organs, as well as the physiological functions performed by each one of them. Foods must be wholesome, clean and sweet, the hours of feeding regular, the mode of preparation found by practical experience to be the best must be adhered to, and cleanliness in preparation and administration must be observed.

The length of time occupied by stomach digestion in the horse varies with the different foods. Hay and straw pass out of the stomach much more quickly than oats. It would seem to follow, then, that oats should be given after hay, for if reversed the hay would cause the oats to be sent onward into the intestines before being fully acted upon by the stomach, and as a result produce indigestion. Experience confirms this. There is another good reason why hay should be given first, particularly if the horse is very hungry or if exhausted from overwork, namely, it requires more food in mastication (insuring proper admixture of saliva) and cannot be bolted, as are other grains. In either instance, water must not be given soon after feeding, as it washes or sluices the food from the stomach before it is fitted for intestinal digestion.

The stomach begins to empty itself very soon after the commencement of feeding, and several hours are required to elapse before it is entirely empty. The nature of the work required of the horse must guide us in the selection of his food. Rapid or severe labor cannot be performed on a full stomach. For such labor, food must be given in small quantities and about two hours before they go to work. Even horses intended for slow work must never be engorged with bulky, innutritious food immediately before going to labor. The small stomach of the horse would seem to lead us to the conclusion that this animal should be fed in small quantities and often, which, in reality, should be done. The disproportion between the size of the stomach and the amount of water drank tells us plainly that the horse should always be watered before feeding. One of the common errors of feeding, and the one that produces more digestive disorders than any other is to feed too soon after a hard day's work. This must never be done. If a horse is completely jaded, it will be found beneficial to give him an alcoholic stimulant on going into the stable. A small quantity may then be given, but his grain should be withheld for one or two hours. The same remarks will apply with equal force to the horse that for any reason has been fasting for a long time. After a fast, feed less than the horse would eat; for if allowed too much, the stomach becomes engorged, its walls paralyzed and "colic" is almost sure to follow. The horse should be fed three or four times a day. It will answer to feed him entirely on concentrated food. A bulky food must be given to detain the grain in its passage through the intestinal tract; bulk also favors distention, and thus, mechanically, absorption. For horses that do slow work for the greater part of their time, chopped or cut hay fed with crushed oats, ground corn, etc., is the best manner of feeding, as it gives the required bulk, saves time and half the labor of feeding.

Sudden changes of diet are always dangerous. When desirous of changing the food, do so very gradually. If a horse is accustomed to oats, a sudden change to a full meal of corn will almost always sicken him. If merely intending to increase the quantity of their usual feed, this also must be done gradually. The quantity of food given must always be in proportion to the amount of labor to be performed. If a horse is to do a small amount of work, or rest entirely for a few days, see that he receives a proportionate amount of feed. If this should be observed even on Saturday night and Sunday, there would be fewer cases of "Monday morning sickness" such as colics, lymphangitis, etc.

Above all things, avoid feeding musty or mouldy foods. These are frequent causes of disease of different kinds. Lung troubles, such as bronchitis and "heaves," often follow the use of such foods. Musty hay is generally considered to produce disorder of the kidney; and all know of the dangers to pregnant animals from feeding upon ergotized grasses or grains. It has often been said to produce that peculiar disease known variously as cerebro-spinal meningitis, putrid sore throat, or choking distemper.

The best hay for horses is timothy. It should be about one year old, of a greenish color, crisp, clean, fresh, and possessing a sweet, pleasant aroma. Even

this good hay, if kept for too great a length of time, loses part of its nourishment, and, while it may not be positively injurious, it is hard, dry, and indigestible. New hay is difficult to digest, produces much salivation or slobbering, and occasional purging and irritation of the skin. If fed at all, it should be mixed with old hay.

The straws are not extensively fed in this country, and when used at all they should be cut and mixed with hay and ground or crushed grain. Wheat, rye and oat straw are the ones most used, and of these, oat straw is most easily digested, and contains the most nourishment. Pea and bean straw are occasionally fed to horses, the pea, according to most writers, being preferable.

Wheat and rye chaff should never be used as a food for horses. The beards frequently become lodged in the mouth or throat, and are productive of more or less serious trouble. In the stomach and intestines they often serve as the nucleus of the "soft concretions" which are to be described when treating of obstructions of the digestive tract.

Oat chaff, if fed in small quantities and mixed with cut hay or corn fodder, is very much relished by horses. It is not to be given in large quantities, as I have repeatedly witnessed a troublesome and sometimes fatal diarrhoea following the practice of allowing horses or cattle free access to a pile of oat chaff.

Oats take precedence of all grains as a food for horses, as the ingredients necessary for the complete nutrition of the body exist in them in the best proportions. Oats are, besides, more easily digested and a larger proportion absorbed and converted into various tissues of the body. Care must be taken in selecting oats. According to Stewart, the best oats are one year old, plump, short, hard, clean, bright and sweet. New oats are indigestible. Oats that have sprouted or fermented are injurious, and should never be fed. Oats are to be given either whole or crushed—whole in the majority of instances; crushed to old horses and those having defective teeth. Horses that bolt their feed are also best fed upon crushed oats and out of a manger large enough to permit of spreading the grain in a thin layer.

The average horse requires, in addition to the allowance of hay above mentioned, about twelve quarts of good oats daily. The best oats are those cut about one week before being fully ripe. Not only is the grain richer in nutritive materials at this time, but there is also less waste from "scattering" than if left to become dead ripe. Mouldy oats, like hay and straw, not only produce serious digestive disorders, but have been the undoubted cause of outbreaks of that dread disease in horses, already referred to, characterized by sudden inability to eat or drink, sudden paralysis, and death.

The bran of wheat is the one most used, and its value as a feeding stuff is variously estimated. It is not to be depended upon if given alone, but may be fed with other grains. It serves to keep the bowels open. Sour bran is not to be given. It disorders the stomach and intestines and may even produce serious results.

Ground linseed is occasionally fed with other foods to keep the bowels open and to improve the condition of the skin. It is of particular service during convalescence, when the bowels are sluggish in their action. Linseed tea is often given in irritable or inflamed conditions of the digestive organs.

Carrots make a most excellent food, particularly during sickness. They improve the appetite and slightly increase the action of the bowels and kidneys. They possess also certain alternative properties. The coat becomes smooth and glossy when carrots are fed. Some veterinary writers claim that chronic cough is cured by giving carrots for some time. The roots, then, may be considered as an adjunct to the regular regimen, and if fed in small quantities are highly beneficial.

Foods are prepared for feeding for any of the following reasons:—To render the food more easily eaten; to make it more digestible; to economize in amount; to give it some new property, and to preserve it. We have already spoken of the preparation of drying, and need not revert to this again, as it only serves to preserve the different foods. Drying does, however, change some of the properties of food, i.e., removes the laxative tendency of most of them.

The different grains are more easily eaten when ground, crushed, or even boiled. Rye or wheat should never be given whole, and even with corn it is found that there is less waste when ground; and, in common with all grains, it is more easily digested than when fed whole.

Hay and fodder are economized when cut in short pieces. Not only will the horse eat the necessary amount in a shorter time, but it will be found that there is less waste, and the mastication of the grains (whole or crushed) fed with them is insured.

One objection to feeding cut hay mixed with ground or crushed grains and wetted, must not be overlooked during the hot months. Such food is apt to undergo fermentation if not fed directly after it is mixed, and the mixing trough even, unless frequently scalded and cleaned, becomes sour, and enough of its scrapings are given with the food to produce flatulent (wind) colic. A small amount of salt should always be mixed with such food. Bad hay should never be cut simply because it insures a greater consumption of it; bad foods are dear at any price and should never be fed.