## HORSES AND CATTLE.

FEEDING AND MANAGEMENT OF HORSES.

The feeding of horses is no unimportant matter. The farmer who gives his horses a certain number of quarts of oats or corn two or three times a day and keeps a well filled hay rack in each stall, knows absolutely nothing of feeding horses. Good, sweet hay, and bright, plump oats may be the very best food for horses; but the sameness of the best diet operates injuriously upon any stock, and more especially upon horses. The most generous feeders are not always the best. I do not like to see hay always in front of a horse. In the matter of feeding hay, the rack should be placed so that the horse can reach for hay without any exertion, and while in a standing position. But a small quantity of hay should be given at one time, and when that is consumed, if the horse requires more, the manger and rack should be replenished. The reason why it is deemed advisable to feed hay in small rations is that, although it is more trouble to feed so often, yet by such frequent feeding the horses are not compelled to eat stale hay. When sufficient hay is given in the morning to last all day, as is the practice of some farmers, the hay soon gets fouled and the horse loses his appetite for it.

A horse will eat better and thrive faster if his food is always fresh, and the only way to insure this result is by feeding in small rations. The horse will keep in good spirits and retain his appetite much better if only fed in small quantities, and no more than he can readily consume while fresh. Hay containing weeds or that has become musty or mow-burnt, should not be fed to horses for the reason that it will not be consumed with relish.

The common method of feeding horses is objectionable in some respects. I refer to the racks in front of the stall, elevated above the horse's head, that are generally used for feeding hay. This method of feeding is the cause of the horse's head and neck being always dirty, and is an unnatural way for the horse to feed. A much better way of feeding is to place the hay in the manger. I had a young horse once that seemed to be weak in his forcings. By the advice of an old horseman I commenced feeding him hay on the floor of his stall, and with such good results, that in this individual case I still continue the practice. The best way of feeding hay, however, is an open manger.

In the matter of grain, oats may be said to be the most natural food for the horse, yet when corn is abundant, it proves a good substitute, and in other places wheat is fed with satisfactory results. I have fed a great deal of barley to horses, and think very highly of it. When I feed barley to horses I always cook it, and do not feed over two quarts to a ration.

There is a great deal of carelessness manifested in the matter of feeding grain to horses and in the sort of grain boxes used.

I have seen boxes used from which a large portion of the grain escaped through cracks while the horse was eating. I have seen grain boxes in the stables of careless horse owners become so filled with decaying matter, grain that the horse had refused to eat, that it was almost impossible to feed the usual quantity of grain. It is an exceedingly slovenly practice and most certainly injurious to the health of the horse to allow the manger to become dirty, or the grain box to become sour, filthy, or offensive in any respect. It is a good practice to scald the grain box every few days, as well as to take other precautions to insure healthy conditions for feeding the horses.

The capacity of the horse's stomach is of com-

paratively small proportion, and every facility should be afforded for properly digesting food. To this end the hay should be fed before the grain, so that the grain may remain as long on the stomach as possible. Should the grain be fed first, and hay immediately after, the latter, being the more bulky food, will be apt to crowd the grain out of the stomach only partially digested.

Grain and hay should not be relied upon as the sole food for horses, even the best quality of hay and different varieties of grain. I have known of horses that would stand for hours and eat apples from the tree. Apples may not be the very best food for a work horse; but, at the same time, a mess of apples occasionally will be a very agreeable change to almost any horse. There is nothing better than an apple to coax a young colt with, and in short apples are healthy, and an agreeable change in the diet of horses, and when there is a supply of apples grown on a farm they cannot be disposed of to better advantage than by feeding the horses all they will consume.

Potatoes and carrots are both very good for herses and need no preparation, not even cutting; of course they should be fed clean, and no more at a time than the horses will eat up clean. When horses are fed oats, mashes and vegetables indiscriminately, the feed box is very apt to become foul very easily. All kinds of vegetables that a horse will eat are healthy food, and they make a healthy and economical change in a hay and grain diet. All vegetables that are fed to horses should be first washed to avoid compelling the horse to eat the sand that always clings to potatoes and carrots, and they should be picked to avoid giving decayed or rotten vegetables. It is advisable to substitute a ration of vegetables in place of one mess of grain; thus, if grain is fed twice a day, then feed grain but once and vegetables for the second feed. If grain is fed three times, it will be better to feed potatoes or carrots once and grain only twice.

There is one respect in which we can make a great improvement in the feeding of our horses, and that is in the quantity of food. Every one concedes, or should concede, that the quality ought to be improved, but that the quantity might be improved with benefit to the horse may be a novel proposition. In speaking of quantity I do not mean that the quantity of hay and grain fed to a work-horse should be increased. Too much food is apt to produce indigestion and increase of flesh without increasing the ability of the horse to perform labour.—F. K. Moreland, in Western Agriculturist.

## A HEIFER WITH A BROKEN LEG.

A correspondent of the Journal tells the following story of how a cow got her leg broken, and how a little home surgery spliced it again, and made it as good as new without much trouble, a useful hint perhaps, to many owners of valuable stock. He says:

A farmer showed me a few days ago a handsome Jersey cow, which was so unfortunate as to
get a broken leg in the pasture a year ago last
summer. He did not know how it was done, as
she was found upon as smooth a field as he had.
As a foot-path crossed the field, and as she had
a slight cut upon the inside of the leg opposite to
the break, it is quite possible that it was done
with a stone thrown by some careless or malicious
person. The break was in the hind leg, about
five inches above the gambrel joint, and was
apparently a bad break.

The neighbours all advised him to kill her immediately. It could not be set. It was hot weather. She was forward with calf, and it was no use to try it, was the universal opinion, and he said he did tell the boy to bring the axe and

he would kill her; but her patient look and lickhis hand, as if appealing to him for sympathy and help when he went up to her, was too much. He decided to try to get her to the barn and see if he could set the leg and save the cow. With the assistance of the neighbours she was put upon a sled and drawn to the barn. Then with ropes and meal bags a sling was made, in which she was hung up so as to stand upon the three sound legs, while the broken one hung in a hole made on purpose.

The splints and bandages he made himself and put on himself, although not pretending to much surgical skill; but he had scarcely hope enough of saving the cow to venture to employ a doctor to do the job, for he was a poor man, and thought the loss of a cow would be enough without spending any money on her. I think he is also one of that sort who think they can do what other people can, or at least have confidence enough in themselves to try to do what other people can do, if they have occasion to do so. Having secured the cowin her sling in the shed and set the bone as well as he could, he made a practice of wetting it with a liniment made by steeping wormwood and smartweed together and mixing it with cider brandy.

When he thought the bone had had time to knit together, he used to take the bandage off two or three times a day, for a little while each time, and bathe and rub the leg. After a while the bandage was gradually loosened, and about nine weeks after the accident it was taken off altogether and the cow let out of the stable. During this time she had not lost a single feed and had improved in flesh, and had seemed to enjoy her position as invalid much better than human patients do. The leg was, when I saw it a year after the accident, as perfect as any leg, and the cow promises to be, as she is now, a very valuable cow for many years. I have told of this because many farmers have the idea that it is absolutely necessary to slaughter any animal which is so unfortunate as to get a limb broken. Some animals may not be worth the trouble of setting the leg and taking proper care of it. Some may be so wild as to render the taking care of them much more trouble than it would be if lame, but if the animal is worth the saving there is no more need of killing them because of a broken bone than of killing a man for the same reason.

## TRAINING VERSUS BREAKING COLTS.

A correspondent of the Ohio Farmer gives his experience in training colts so that they will not require breaking, as follows:

"I have two Norman cults, one yearling and one three-year-old. When the latter was ning days old I made a halter for him, bedded a stall by his mother, and tied him in it. He gave a long, steady pull, fell two or three times, got up and shook himself, and that was the end of it. He has never tried to break away since. I petted him, gave a little bran and oats, and never permitted him to follow his mother when at work. In a few weeks he would go to his mother for his milk and then march back to his stall to be haltered. I fed him regularly as I did the other horses, and he soon began to paw and ask for food with the rest. I placed the feed sack on his back and let him stand and eat, until he grew accustomed to it. Next I put on the saddle, and next the harness, and by the time he was a year old he was not afraid of anything. I tied him to the work horses to go to and from water. When twenty months old I hitched him with anothhorse to the sled-good sleighing, no load, drove moderately, and he never scared. He was so thoroughly accustomed to the harness that there was no trouble whatever. I now work him on the near side with shooks. He takes a fair,