

### MANAGING BROOD MARES.\*

This can hardly be called a veterinary subject in every sense of the term, but as many of the large horse-breeding establishments employ veterinarians as superintendents, it may not be out of place to present a paper on the above subject. On the stock farm where the only revenue derived from a mare consists in the production of a foal, it is necessary for the owner to use his best effort toward getting every one of his mares in foal each year. Then, after getting them in foal, the risk of accidents tending to produce abortion should be carefully considered and all the seemingly minor details of everyday management and feeding should be attended to with the utmost care and attention. As regards the ordinary causes of abortion (exclusive of contagious abortion and those that are a sequel to debilitating diseases, such as influenza, pneumonia, etc.) I have noticed cases that I am sure were produced by the following causes, as the abortion took place in a few hours after the apparent mishap had occurred :

1. Slipping on icy spots and either falling or producing a strain.

2. Fighting with other horses and getting kicked in the abdomen.

3. Getting pinched in box stall doors while entering stall (this is where the doors swing out).

4. Getting into deep snowdrifts or muck holes, thereby producing strains.

5. Mares in searching for a place to rub, or as it seems to be with some of them from pure curiosity, will get into all kinds of traps, such as between windmill towers, or try to get through some opening that is about half wide enough, and I have seen them get into a feeding pen for sucking colts where they had to get on their knees to crawl under ; of course when they come to get out they usually get excited and try to jump over the top, get hung up, and abortion follows.!

6. Another cause is abuse from attendants. Some mares are very stubborn and aggravating about going into the barn at night and have to be driven in from the yard by force ; then, after getting them into the barn it is still harder to run them into their stall ; finally, when they do go into the right stall it is a very natural thing to strike them over the rump with a halter, board, or anything that comes handy just as they jump

through the door. I saw this done once, causing the mare to fall ; this took place while letting them in from the yards at evening and the mare lost her foal that night. Of course there are many other causes that produce abortion, and the foregoing are simply examples of a few of the minor accidents that have come under my notice and might happen at almost any time.

The remedy for this class of accidents is *prevention* ; if there is ice in the yard and there is too much of it to be chopped up, ashes or manure may be spread over it and then wet down so that it will adhere and freeze to the ice underneath. Mares that are mean should not be allowed to run with others, and it may be necessary to let them have a small yard by themselves. Box stall doors should always be fastened open, before the mares are let in for the night and it is wonderful how soon each one will learn her place and seldom make a mistake, or get into the wrong stall. In regard to deep snow-drifts in yards, I remember seeing, during the severe winter of 1896-97, snow fences in the yards of the largest horse farm in Iowa. They were built on the plan of snow fences in use on the railways, and were placed around deep drifts to keep the brood mares from getting into the deep snow.

I prefer earth floors in the stalls and alleyways, as the danger of slipping is less than on a plank floor, especially in winter, when their feet on very cold days become balled up with snow and ice ; sometimes elevating them from the ground three or four inches, and it often seems advisable to knock the balls out of their feet before they are let into the stable. The approaches to the stable door should be arranged so there will be no still to step over, as a mare will sometimes get just a slight toe-hold with one hind foot in going over a sill and slip off just when the most weight comes on the foot, thereby causing her to either knuckle over at the fetlock, or causing abnormal extension of the hock and general concussion. As regards diet we should be careful to see that the food is of the best, and that no smutty corn or rusty oats are fed. It is also rather dangerous to allow pregnant mares free access to straw stacks, as is done in the West. Flax straw is particularly harmful, as is any food that acts as a purgative.

It will pay the brood mare owner to try his mares often in the breeding season, and the plan adopted by most breeding farms of any size is to try all of the mares twice a week, for example,

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