

Veterinary Department.

Rupture of the Stomach and Bowels in Horses.

This very serious occurrence is by no means uncommon amongst horses, and as a matter of course causes death in a very short time. The stomach of the horse is a very small organ in proportion to his size and strength, and in general the process of digestion goes on quickly. Where the stomach becomes weakened from long fasting, and is unable to digest a hearty meal, a quantity of gas is frequently evolved, which distends the stomach and bowels to such an extent as to produce a rupture of the walls of these viscera, allowing their contents to pass into the abdominal cavity, producing fearful and severe symptoms, and death in from two to eight hours. The stomach of the horse is liable to become inordinately distended at any time, but during the autumn and fall months it appears to be more common than at any other period of the year, especially amongst farmers' horses; it is then frequently brought on by feeding on new-cut hay, or wet clover; and new oats, when given in large quantities, have a great tendency to cause extreme distension of the stomach and bowels. The same thing is also produced by feeding on Indian corn; in fact any description of food to which the stomach is unaccustomed, when given in large quantities, and more especially after a long fast, or severe exertion, is apt to cause such a suspension or derangement of the process of digestion as to lead to this fearful result.

Rupture of the stomach or bowels, as can be easily understood, is somewhat difficult to recognise. The symptoms in the early stage are similar to those of colic. The horse is uneasy, he keeps moving about, and every now and then casting a glance to his sides; he paws the ground with his fore feet, he throws himself to the ground, sometimes violently, and rolls over on his back, and attempts to balance himself in that position; the pulse is quickened, but not to such an extent as in inflammation of the bowels; he strains to pass feces, and the severe pain produces a copious perspiration, the breathing is also accelerated, and the abdomen is distended, in some cases enormously so. These symptoms will continue and increase in severity. There are also eructations of gas from the stomach, and the horse will arch his neck, and make attempts to vomit: he will also sit upon his haunches for a short time. After the more violent paroxysms, an hour or two preceding death, the pulse will become so weak as to be almost imperceptible at the jaw; the ears are deathly cold, and likewise the limbs: the mucous membrane of the nose is pale and blanched, and the mouth becomes cold; the under lip is retracted, and the more violent symptoms pass into a mitigated form; he will walk

and stagger around, and perhaps, after a few convulsive struggles, expire. To prevent such an occurrence as rupture of the stomach, horses should be fed sparingly for some time when the food is changed, and especially so with new oats, corn, &c. Rupture of the stomach seldom occurs, for instance, in military horses, and their exemption from it is owing altogether to the care and regularity of their feeding. It is mistaken kindness to allow a horse to unnecessarily gorge his stomach with large quantities of oats, as is often done amongst farm horses, immediately before starting upon a long journey.

Sterility.

In certain seasons and certain localities breeders are much troubled by their cows turning again from their bullings. Highly-bred, artificially-kept animals are most subject to such annoying irregularities. During a hot dry summer like that of last year such complaints are apt to increase. It will be well to discover, if possible, whether the fault is chiefly ascribable to the bull or the cow.

Bulls are apt to be inefficient owing to their being used when too young. Except to ascertain what he can do, no bull however, well grown, should do work until he is fifteen or eighteen months old. Until two years old his stud work should only be light and occasional. Calves got by weakly juvenile bulls are often themselves weakly, and are usually more difficult to rear than those produced by the same animals when they have become more vigorous and mature. Bulls when suffering from cold, weakness, or overwork, are uncertain in their service; and calves, when begotten by sires in a delicate or weakly state, usually inherit the sickly state of system, even although such delicacy of the parent may only have been temporary. Many good bulls are at fault from want of exercise. In a small court, or, still worse, if secured to a stake, they often stand with little intermission for months. If good thrivers, they are almost certain to lay on flesh and fat, and in this state they are not, of course, to be depended on for stud purposes. All bulls should be loose, in a large pen or small paddock. In the highly-bred American Shorthorn or Hereford herds the patriarch of the tribe is generally allowed a paddock of about an acre in extent. A bull should only be tied up occasionally to quiet him; or as the cattle men sometimes term it, to "quank" him. Every bull over two years old, unless he is in a place of such size that he can himself take abundance of exercise, should be led out regularly every day for about an hour; should be made to do ploughing or other work, as is still exacted from both bulls and oxen, over the Cotswold hills, and throughout many parts of the continent, or be placed regularly for an hour or two every day in some horse-mill or such roundabout

contrivance. With one or other of such arrangements, proper healthy exercise will be ensured. The bull's labour may be utilized by cutting chaff, grinding corn, or pulping roots. Switching the bull along the belly with nettles, which has been advised, administering cantharides or other stimulants, are popularly believed to increase the virile power; but all such unnatural expedients are of little avail in securing a good get of calves. Bulls of full growth, in sound health, and intended for service, should have good food, but in somewhat sparing amount; they require nutritive aliment to support strength and muscle; mouldy hay, refuse fodder, coarse straw—so often the staple food of bulls—may satisfy hunger, make an animal pot-bellied, but certainly do not add to his vigour. Vetches, too many roots, and all bulky victuals are injurious. But attention to exercise, we repeat, is as essential as attention to feeding.

A short drop of calves is as often the fault of the cow as the bull. Thousands of calves are lost owing to abortion or premature birth. Often the embryo is got rid of without the owner or his servants knowing anything about it, and so early as the third, sixth, or ninth week after service. This is especially apt to occur where cows are much disturbed by flies or dogs, are overfed, or kept on unsound marshy land. So notorious are some pastures for the production of this mishap, that no in-calf cow remains safely in calf if grazed there for six or eight weeks. But dairymen are also liable to disappointment from their cows altogether failing to become pregnant. Sometimes this results from injury or disease of the generative organs, as from overbulling; from laceration of the parts, owing to the forcible extraction of a large or awkwardly-presenting calf; or from the retention of a dead, deformed, or mummified calf. Occasionally the cow is weakly, consumptive, or dysenteric, and, on such account, fails to conceive. A cow, whilst suckling a calf, rarely takes the bull, but usually comes in season a week or ten days after the calf is separated from her. Cows, although sometimes served six or eight weeks after calving, seldom stand to such service. Short-horn cows rarely prove pregnant from service effected at the first period of oestrus after calving. We always advise that the cow be missed the first time, and attended to at the second period of oestrus. No cow should ever be put to the bull whilst she is in an excited or over-heated state. If she has been driven far she should remain in a barn-yard or house for an hour or two before the bull has access to her: whilst for a day after she is better to be kept quiet and separated from her fellows, whom she is apt to annoy, and by whom she is herself annoyed. Such precautions are especially requisite amongst highly-bred shorthorns and other cows which have been pampered in their youth, and are thus particularly apt to turn out shy breeders.

When a valuable cow persistently turns repeatedly from her service, the best plan is