

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

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JOHN WELD, MANAGER.

Agents for "The Farmer's Advocate and Home Journal,"
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1. THE FARMER'S ADVOCATE AND HOME MAGAZINE

is published every Thursday. It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.

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City, Heal Thyself.

Again and again, in the press and on the platform, the country is commended as being the source of supply for infusions of new blood to replenish the depleted life of the cities. The industry of the farm is suffering from this perennial drain, and is it not about time the cities were doing something more for the purification of their own conditions and the regeneration of their own life? One of these days someone will call a halt to shutting out sunlight and air with sky-scrapers, the huddling of people together in "flats" on crowded streets, and in the mad race of bonusing huge establishments in which thousands of hands are employed.

HORSES.

Don't forget that the horse just in from the pasture is in need of regular exercise; so, also, and even more so, is the horse which has been used to regular work during the summer and is now enjoying the winter rest.

Get the old horse's teeth examined. He is now forced to subsist on dry feed, which is more difficult to masticate than the green fodder, and unless the horse's teeth are kept filed even, there is a likelihood that he will not thrive very well.

When horses cannot be protected from the cold, raw winter weather, they should under no consideration be clipped in the fall. It is cruel to deprive an animal of nature's protective coat, and not furnish him with some artificial means of keeping up the necessary body heat.

The horse that is at hard work should get his largest feed at night. He then has more time to eat it, and while his body is at rest his digestive organs are given an opportunity to do their best work. Fill the mangers when feeding up for the night.

The horse's stomach is small. Owing to this, care must be taken in supplying hay, water and grain, that they be given in the best possible order. It has been shown by investigators that the horse's stomach fills and empties several times during the partaking of a large meal. The material first taken is quickly crowded on into the intestines. From this, the logical order of feeding and watering appears to be water first, roughage next, and the concentrate material last, in order that it be acted upon to the fullest extent by the digestive juices of the stomach.

The use of the outdoor blanket is as important as the use of the stable blanket. If the horse is allowed to stand outdoors either for a short or for a long time, he should be well blanketed. If one is going to stop but a short time, the temptation is strong not to blanket the animal. The horse cools off rapidly and may chill, so that it is best to blanket, if only for a moment. Again, in the spring, when the weather is fair, one is likely to think that no ill will result from leaving the animal unblanketed; and yet he may chill as before. It is best, on stopping the animal, to see that he is well protected.—[M. W. Harper, in Manual of Farm Animals.

Abortion in Mares.

A subscriber asks for the causes and treatment for abortion in mares. He also asks if bleeding from the jugular vein, the injection of anti-abortion serum, and the giving of a few drops of carbolic acid in the food will prevent the accident?

Abortion is of two kinds, viz., sporadic or accidental, and infectious or contagious. The infectious form is not uncommon in cows, occasionally seen in the ewes, but very rarely occurs in mares. Hence, we will confine our remarks to accidental abortion. Abortion, or immature birth, may be said to occur when the foetus has not reached that stage of development which will enable it to live external to the parent, but when the foetus is expelled before full term. Yet, with all the organs sufficiently developed to enable it to live at least for a time, it is called premature birth. In the first case, the foetus is either dead when born, or dies soon afterwards; while, in the second, it may be weakly and immature, and succumb after a variable period, or it may continue to live.

The causes of accidental abortion are many, some evident, and some obscure. Very slight and often unnoticed causes produce it. In a large percentage of the cases the causes have been unnoticed, and it is not possible to tell exactly what caused them. Atmospheric influences, bad weather or irregular seasons may cause it. Cold suddenly applied to the skin, in some cases, by causing a contraction of both voluntary and involuntary muscles, is by no means an unknown cause. Hence a sudden change of weather, from hot to cold, is sometimes followed by miscarriages in females exposed of it. Food of bad quality, indigestible, or containing injurious ingredients, is dangerous. After unfavorable seasons for harvesting foods, abortions are more numerous than when the weather has been favorable. Frozen food or water, when taken in large quantities, especially when the organs of digestion are empty, is productive of abortion. Food or herbage covered with snow or frost may produce like effects. Putrid or dirty water may be the exciting cause of the accident. Ergotized grasses or grain have often caused widespread losses from this trouble. Drastic purgatives, as large doses of aloes, have a tendency in the same way. Excessive muscular exertion (especially following a period of rest), as drawing heavy loads, plunging through deep snow, long-continued fast driving, etc., is very liable to produce it. Work under the saddle, especially if spurs are used, may, by causing violent contraction of the abdominal muscles, be followed or accompanied by contraction of the uterine walls and expulsion of its contents; so may slipping and falling, or being cast for an operation or other purposes, give the same results. Contusions or pressure upon the abdomen by kicks, blows, falls, squeezing through narrow doorways or passages; long railway or steamboat travelling, especially if standing in constricted stalls; blows, shocks; keeping mares standing in stalls with inclined floors; ascending and descending tramways, etc., are all exciting causes. Excitement, fear, sudden surprise, anger, etc., are also causes. Abortion has been noticed to follow heavy thunder. Access to the male has also been responsible for miscarriage. Exploration per vagina by an expert, in order to ascertain whether the mare was in foal, has been followed by abortion; so, also, have operations of different kinds. Obnoxious odors are said to operate. It is not uncommon for abortion to occur after the mare has been in the vicinity of a slaughter-house or other places where she has come in contact with fresh-drawn blood. In these cases, the odor of the blood is cited as the cause. If odors cause

abortion, it must be from some influence they have upon the sympathetic system of nerves, causing a contraction of the uterine walls. Very lean or very fat animals are prone to abort. In some mares, from causes not understood, there appears to be a special tendency to abort, and in such, a very trifling cause, often no appreciable cause, will induce the accident; while other mares, although exposed to the influences apparently of most powerful causes, will not succumb. This predisposition cannot be recognized in an animal, and it often disappears with age. Many diseases, as influenza, bronchitis, pneumonia, or other diseases which induce coughing or bloating, indigestion, enteritis, or other acute diseases of the digestive organs, are sometimes followed by abortion. It will be seen that there are so many conditions, accidents or diseases which may become the exciting causes of abortion that it is not wonderful that the accident frequently occurs, when the owner or attendant is at a loss to find the cause. Mares readily acquire the habit of aborting, and, after having once suffered from accidental abortion, will abort regularly at about the same period of gestation at which the first accident occurred.

Treatment.—The accident usually occurs without well marked premonitory symptoms, hence treatment cannot be adopted. In other cases, especially when pregnancy is well advanced, the usual symptoms of approaching parturition, viz., the abdomen becoming more pendulous, a swelling of the lips of the vulva and enlargement of the mammae and teats, a tendency to seek solitude, and uneasiness, are more or less marked. When labor pains become well marked, the water bag may become apparent through the lips of the vulva. If these symptoms be noticed, and the foetus still living (which fact is often impossible to determine), it is possible the accident may be averted. The mare should be placed in a partially-darkened, comfortable box stall, her excitability allayed by petting, etc., by her usual attendant. If the water-bag is apparent, but not ruptured, it should be gently pressed back, and she should be given a large dose of laudanum (from two to three ounces, according to size) in a little cold water, as a drench. Hot cloths placed over the loins appear to soothe and quiet. The dose of laudanum may be repeated every two to three hours, until the symptoms disappear, or at least until three or four doses have been given. If the water-bag be ruptured, the accident is imminent; it is the duty of the attendant to assist delivery, if necessary. If successful in averting the accident, the mare should be kept very quiet for a few days, and be fed lightly on easily digested and laxative food. Mares that have acquired the habit should be kept alone and very quiet and lightly fed on laxative food for two or three weeks before and after the period at which they usually abort.

As to the treatments suggested by the inquirer, of course, bleeding must not be practiced, as it is an exciting cause, rather than a preventive. The injection of anti-abortion serum and the administration of carbolic acid are recommended in the treatment of infective abortion, but would have no beneficial action in the accidental form.

"WHIP."

LIVE STOCK.

The cattle-feeder has two purposes in fattening cattle: He desires to increase the weight of the animals, and at the same time improve their condition from a butcher's viewpoint, by adding a larger percentage of fat to the carcass.

From experiments carried on at the Nebraska Experiment Station in growing feed and steers in Western Nebraska, it was found that, in order that cattle pay for their winter feed, it is necessary that the price should be approximately one dollar per hundred pounds more in the spring than in the preceding fall.

It is necessary that the cattle be fattened as rapidly as possible. Experiments have proven that, the longer the feeding period, the more expensive the gains. The most profitable ration is, therefore, that combination of feeds which will produce the highest degree of finish in the shortest time.

Cattle feeders realize that stall feeding can only be successful from a financial viewpoint when the animals are fed a very small or even a minimum grain ration, together with some form of highly palatable roughage which will take the place of grass. Good corn silage, well-cured clover hay and a few roots make very satisfactory substitutes for grass, and in experiments carried on at the Virginia Experiment Station in the feeding of upwards of four hundred cattle, silage showed a material advantage over all other forms of roughage used in the experiments. Only a moderate