Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land .- Lord Chatham

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Management of the Brood Mare

A Sketch of Precautions Necessary Up to the Time of Foaling

N the management of the pregnant, or "in-foal" mare, the essential consideration is to secure a thrifty condition conducive to the well-being and profitable utilization of herself and offspring. The mare must safely carry the foal throughout the required period of gestation until it is born, and the foal must then be safely preserved during the earlier periods of its new existence. The average period of pregnancy in the mare is eleven months, though some mares normally exceed that period by two or three weeks. The foal that is born at a period of two or three weeks less than the eleven months is, on its arrival, often weak and lacking in vitality.

Throughout the period of pregnancy there is ever present the possibility of influences intervening which may produce abortion. By "abortion" is meant the premature expulsion or delivery of the foal at a stage when it has not attained sufficient development to live external to its parent. It is generally admitted that with some mares there is apparently a predisposition to premature delivery, and a trifling cause may make them abort or cast the foal before the proper time. Others, though exposed to the same influences, may not.

Causes of Abortion.

Abortion may result either from accidental causes or through the agency of disease germs. The causes of accidental abortion are numerous, but the way in which many of them operate in causing premature expulsion of the foal is not fully understood. Thus adverse weather conditions and irregular seasons, and certain odors, such as the smell of fresh blood, are considered as predisposing influences. There is no doubt that food of bad quality, especially when damp or damaged by the presence of moulds, rusts and smuts, is particularly injurious. Direct injuries, such as kicks and blows to the abdomen, or excessive exertion, especially after a long period of idleness, are liable to produce abortion. Severe straining at neavy loads should always be avoided, as not only is it liable to produce immediate abortion, but may cause an altered position of the foal, which may subsequently cause difficult delivery, with serious results to both the mare and foal.

Poorly fed and neglected animals frequently abort, yet perhaps not any more frequently than those which are kept pampered and fed too abundantly on stimulating food, with little exercise. Overfeeding and too high a condition with consequent fullness of blood may lead to a congested condition of the womb with bad effects. The moral of this is that between these two extremes lies the sensible course.

The presence of diseases which affect the sys-

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tem generally, and particularly those of an infectious nature, such as influenza and pink eye, are frequently the cause of many mares losing their colts.

Premature birth and weakness in foals have also been ascribed to some defect or other influences in the sire, although in what these consist it would be difficult to state. However, there is reasonable evidence to suppose that a stallion enfeebled from too frequent service, or, on the other hand, lacking in procreative power from being kept unduly pampered, or other causes, is likely to produce offspring lacking in vigor and vitality, and may even be a cause of premature delivery in some of the mares which he serves. Diet of Pregnant Mare.

In the general care of the "in-foal" mare there are certain factors which should be observed. The food supplied should be of good quality, easy of digestion, and of such a nature as not likely to cause constipation. Damaged or spoiled fodder, and that of a bulky, coarse, indigestible nature should be avoided. An habitual overloaded and constipated condition of the bowels tends to cause straining, which may become harmful.

The diet should be such as to make for a nor-



The World Crop Situation

AILY the situation becomes more serious. Russia, France, Spain and Italy all report unfavorable weather and slow progress in getting in this spring's crop. The acreage cropped in Britain will be reduced because of labor scarcity. The fall wheat crop in the United States is estimated 50,000,000 bushels short of last year. Australia has not been able to move much of last season's crop, and weather has been unfavorable this season. And now recent reports from Ontario Indicate severe damage to the winter wheat fields. From where is the food to some which will feed the world? Surely the call to arm the farms and Produce, Produce, Produce should be the rallying cry of the nation. The need is greater than many imagine.

mal condition, such as would prevail under natural conditions where mares are on grass. This means that the mare should have opportunity to exercise, and be fed on laxative foods, or, if grass is ready, be in pasture. When mares are to foal before grass is ready, a laxative condition. may be secured by feeding bran and roots if they are at hand. As the mare nears foaling time, she should get a more limited quantity of roughage, and the quality should be good. If sheaves, hay, or straw are fed, the amount should be cut down to about three-quarters of what she usually eats, and if clover or alfalfa hay is at hand it may be fed in limited quantities. Most mares may be wintered with very little grain, especially when they get sheaves, but as foaling time approaches they should get about six pounds a day of a mixture of half ground oats and half bran, and some salt. Cutting down the roughage, and giving the bran with plenty of exercise or work, should keep the mare in good condition.

Moderate, regular work is a positive benefit to in-foal mares, whereas idleness often contributes to weakness in the foal and difficulty in foaling. Mares receiving ample exercise have the normal functions, digestion and elimination, stimulated, and this in turn makes for the more natural performance of the function of giving birth. It is particularly important that mares which are disposed to be sluggish be made to exercise thoroughly.

A condition quite frequently met with in pregnant mares, particularly during the late winter months and early in spring, when kept confined in the stable and deprived of sufficient exercise, is the appearance of what is termed "edema," or dropsical swellings of the limbs and under surface of the belly. It may result from pressure of the gravid womb on the blood vessels, and an anaemic condition of the system, commonly known as a watery condition of the blood. The swelling commences usually at the lower part of the hind legs and gradually extends upwards. The front legs may also become affected and the swellings extend along the under surface of the belly from in front of the udder or bag towards the breast. These swellings sometimes cause inconvenience and difficulty of movement to the mare. However, the condition in most cases is not a serious one and can be remedied by exercise and hand rubbing of the swollen parts, or bathing there with hot water. In those cases the mare should be made to take exercise during a reasonable period each day. The swellings invariably disappear of their own accord a few days after foaling.

Pregnant mares should not be given large (Continued on page 8.)

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