THE HORSE.

The horse is still the farmer's cheapest and surest power.

A good show horse that is a first-rate breeding sire is a safe proposition.

If you are thinking of purchasing a sire for next year's use you would save money by buying this fall.

If the ground should get soft a good way to train the colt would be half a day about on the plow this fall.

You cannot keep a hard-worked team up in flesh and vitality on grass alone, particularly when it is parched and dry.

No man should be disappointed if he breeds a heavy mare to a light horse and gets a misfit. That is the way misfits are made.

Unless there are a few frequent and heavy rains soon plowing will be a hard job on horses' shoulders this fall. Watch them carefully, for sores are more easily prevented than cured.

Be careful in starting to feed new oats. Every farmer should save enough old oats each year to carry his horses over the bulk of the summer and fall work. Selling oneself shy of grain is a mistake.

The signs of the times are such that it should pay to breed mares, which had been held off for fear of a continued slump in the horse trade, this fall. Try breeding for a fall colt. It may suit your purpose well.

If the mare is to do hard work this fall it would likely pay to wean the colt early. Colts tagging around after their working dams in the heat and flies do not usually do their best, and it isn't fair to the dam.

Some Figures and Forecasts on Draft-horse Breeding.

Secretary Wayne Dinsmore, of the American Percheron Horse Society in a letter to this office in which he quoted some comment formerly referred to in these columns and made by the London (Eng.) Live Stock Journal gives some figures with regard to horse depletion since the war and readers will be interested to know his views of the future for draft-horse breeding:

The most experienced horsemen in the United States, who have been in close touch with the business through good and bad times, are of the opinion that the horse-breeding industry is now at the beginning of some very prosperous years.

For several years prior to 1915, the increase in horses had fallen below reasonable expectations. A large proportion of mares had not been bred. This was particularly true of mares of light-horse blood, as prices had been so far depressed on light horses, as to lend no inducement to breeders of such stock.

This diminution in production was practically world-wide. To make the shortage still greater, the European war has caused greater loss in horses than has ever occurred in the same period. The horses in France were reduced from 3,331,000 to 2,227,000 head during the first eleven months of the war—a decrease of 31 per cent. The reduction in horses in other nations engaged is considered to be nearly as great.

Exports of horses and mules from the United States have broken all records. During the 21 months ending June 1, 1916, 611,790 horses, valued at $134,943,456 and 167,387 mules, valued at $34,198,955, have been exported. Purchases and shipments are being made more rapidly than ever before. In the judgment of experienced horsemen, familiar with conditions abroad, foreign countries will make very heavy purchases of horses for years following the war, and the United States is in the best position of any nation to supply the demand.

Seven thousand eight hundred and fifty-three transfers of Percherons have been made in the nine months ending August 1, 1916, an increase of almost 3 per cent. in transfers over the same period a year ago.

Another indication of increasing interest in Percheron breeding is shown by the increase in applications for membership in the Percheron Society of America. Six hundred and forty-two breeders applied during the nine months ending August, 1,1916, as against 484 for the same period last year, an increase of 32 per cent.

Good Percherons are in strong demand. Farmers and breeders have every reason to feel optimistic over the outcome.

WAYNE DINSMORE.

Real patriotism smothers under the blighting influence of greed and commercial prosperity.

LIVE STOCK.

Tuberculosis in Swine.

The prevalence of tuberculosis in swine was not fully realized until a few years ago, when the present somewhat thorough system of meat inspection was put in force. Under this system a considerable percentage of swine slaughtered is condemned as totally unfit for food, and a much larger percentage is found slightly affected, but not sufficiently so as to warrant condemnation of the entire carcass.

Causes.—The active cause of tuberculosis in swine, as in all animals, is a specific germ, known as the tubercle bacillus. This little germ is a very small, microscopic body, which gains entrance to the body with the food or drink, or in the inspired air, and, locating in some favorable spot, sets up a diseased condition, which may remain localized, or spread through different organs.

In most cases this germ reaches the body of the hog in the food. The most common foods in which the germ enters are the faeces from tubercular cattle and the milk of cows that are affected with the disease. Cattle that are suffering from pulmonary tuberculosis usually cough, and in doing so raise the tuberculous sputum from the lungs, and, instead of spitting it out, as is the case in human beings, the sputum is swallowed and excreted with the faeces. In this way the faeces of tubercular cattle become a very productive source of infection in hogs. In many herds of cattle there are a greater or less number of tubercular animals, and, when swine are allowed to follow in the same yard or pasture, the disease is almost sure to be developed.

Another very common source of infection in swine is through milk. The milk of any diseased cow may contain large numbers of tubercular bacilli. In creamery districts, the milk from a greater or less part of the community is taken to the creamery, the cream separated out of it, and the skimmed milk conveyed to a large vat, from which each patron draws his share, and takes it home and feeds it to the hogs. If any of this milk is from tubercular cows, (and there are few, if any cases in which there is not) the germs are mixed through the entire body of the skimmed milk, hence are carried to the home of every patron of the establishment.

Predisposition to the disease is caused by insanitary conditions. Filthy feed lots, mud-holes, dirty wallows, and unhygienic surroundings of any kind, render the hogs more susceptible to the action of the germs, and increase the chances of infection.

Close, ill-ventilated sleeping quarters, and especially allowing the hogs to sleep on a manure heap, increases the dangers of infection. The over-heating that results lowers the animals vitality, chronic irritation of the lungs is set up, and the tubercle bacillus finds a very suitable field for development if it gains entrance.

Symptoms.—Well-marked and diffused tuberculosis often exists in the hog, without any apparent clinical derangement, or any observable symptoms, that would lead the most expert to suspect the existence of the disease. The disease usually develops slowly, and, while there are exceptions, it usually requires many months and probably years for it to cause symptoms that indicate its presence. On this account tuberculosis exists in a large percentage of hogs without its presence being suspected. At packing houses some of the best marked cases of the disease are found in the carcasses of hogs that were large, fat, and apparently in the best of condition. Some claim that during the first few weeks or months of the disease the presence of the tonic substances produced by the germ act as a tonic to the system of the animal and cause thriftiness.

In cases where evidences of the disease are noticeable, they principally consist in a general appearance of unthriftiness. This, of course, is a general symptom of many diseases, hence has not great diagnostic value. In cases where the disease advances rapidly and becomes generalized (that is involves many organs) more marked symptoms may appear. When the digestive organs are largely involved, the appetite becomes impaired or capricious and digestion is irregular, either constipation or diarrhœa or an alleviation of each is often noticed. When the respiratory organs are the seat of the disease, there is usually more or less persistent coughing of a dry, rather harsh character. Coughs in hogs that are kept in improper surroundings, especially with over-heating and over-crowding at night, and also in those affected with lung worms or bronchitis, either accidental or infectious are quite common, and there are no well-marked differences in such coughs that will enable a person to differentiate between the different diseases. In cases where different systems of organs are involved, the symptoms become more suggestive. There will generally be both a cough and irregular digestion and appetite, with a noted loss of weight, energy, vigor and activity. Such cases are, however, unusual, and even the most expert can seldom diagnose definitely except by the tubercular test, which, on account of the difficulty in controlling the animal, and the excitement thereby caused, is not as reliable a diagnostic medium as in cattle, hence is not largely practical.

Post Mortem Lesions.—When a tubercular animal is opened after death, certain characteristic lesions or pathologic changes are noticed. There are certain parts of the body in which, these lesions are particularly frequent, hence, in making an examination for tuberculosis, these particular parts should be examined. The favorite location for tuberculosis in swine is the digestive tract. At the angle of the jaw the sub-maxillary gland is situated. This gland is very frequently affected. The mesenteric glands (those little bodies situated in the webbing which suspends the intestines practically in a sling) is another favorite seat. The liver is frequently involved, and sometimes the spleen. Tuberculosis of the lungs is not nearly so common

A Peculiar Affection.

This heifer takes a motherly interest in the colt shown.