it would be too late in the season to breed them again, even if they did come in heat. I have seen mares that were bred in April refuse twice a week from May to July, and then come in season. In cases of this kind, it is probable that abortion takes place, but owing to the early stage of impregnation, the external signs of abortion, such as soiled condition of vulva and tail and tucked-up appearance of the abdomen, are not noticed. Sometimes a mare is noticed in whom it is almost impossible to determine whether she is in heat or not, and will allow a horse to tease her and will stand perfectly quiet. The only way to tell is that if she is not in heat she will object if the horse attempts to cover her. This kind of mare is a source of con-

tinual annoyance to all concerned. In warm weather, the best place for a mare to foal is out of doors, on a good grassplot, but until warm weather arrives, arrangements must be made for foaling inside in a good-sized box stall, in which there should be plenty of bedding. Mares that foal inside should be watched both night and day, so that in case of non-rupture of the feetal membranes during labor, they can be opened by the attendant before the foal suffocates (this also applies to mares foaling out of doors). Another reason for requiring an attendant is to prevent the mare from lying down with her hind parts against the sides of the stall, thus interfering with the delivery of the foal; also to catch the foal from those mares that persist in foaling in the standing position, and in so doing, preventing the foal from falling and forcibly striking the floor. These are the principal difficulties met with by the attendant, exclusive, of course, of the many different phases of difficult parturition. Immediately after foaling, the foal should be carefully placed in one corner of the stall, where the bedding is usually comparatively dry. The stall should be re-bedded with dry straw at once, before the foal attempts to stand, as it is bad policy to allow a young foal to slip and sprawl about on a slippery floor. This should be done regardless of the strandard may the time of night or how sleepy the attendant may be, and it will be found that small attentions of this kind will go a long way toward making the business a success.—J. P. Foster, V. S., in Journal of Veterinary Archives.

## Diarrhea in Calves.

Many calves become stunted and have their constitution undermined, and many are lost, from this trouble. Very often the cause is obscure, and the means of prevention seem to be not generally understood; but prevention is so much better than cure in regard to this, as well as to many other troubles, that it is well worth while to take precautions for its prevention. The cause may, as a rule, be traced to damp, dark and filthy quarters and to unclean drinking vessels, to overfeeding, feeding at too long intervals, or feeding with cold milk. The vessel from which a calf drinks, in order to be really safe, should be rinsed with cold water and then scalded with hot water and placed in the sunlight to day averaged. then scalded with not water and placed in the sunlight to dry every day. Filth and decaying milk generate poison germs which set up the disease of diarrhea. Give the calves light, airy and clean quarters, and keep their drinking vessels well cleaned. If from any cause scours occur, do not neglect the case and wait for "a faith cure," but at once look for the cause, and remove it. If you have been feeding cold milk, you deserve to be punished. Cold milk is not fit food for the stomach of a young calf, and is almost sure to cause indigestion, which brings on scours. Let the milk be warmed so that when fed it will be about the temperature of milk as it comes from the cow. Do not boil it, nor feed it when hot. It is better to heat it on the stove, and remove before it gets too hot; but if that is too much trouble, or is inconvenient, better far add enough hot water to raise the temperature to the desired point than to feed it cold. Overfeeding is another prolific cause of scours. Young calves, before they have learned to eat other food, should have milk three times a day in small quantities. The long fast from morning till night makes them very hungry, and if a big mess of milk be given, they gulp it down greedily, and it is liable to bring on indigestion and the serious trouble we are considering. The natural way of the calf getting its supply of milk is by drawing it slowly from the udder of the dam or nurse cow, the milk being mixed with the saliva of the mouth, which greatly aids digestion. If care were taken to keep them clean, there is no doubt that the ideal way to feed calves would be by the use of artificial teats of rubber on the spout of the feeding vessel, but if fed little and often while young, say for the first month or six weeks, and never overfed at any age, the other conditions as to cleanliness, etc., being observed, there will seldom be any need for medi cines. But as before said, do not neglect the case when diarrhea occurs, but at once remove the cause; make a change in the feeding by giving less milk for two or three days, and in the best condition, and give one to two ounces of castor oil, according to age, in a little warm milk, from a bottle. If taken early, and the other precautions observed, this will generally end the trouble, the irritating cause being removed. A raw egg broken and put into the calf's mouth, shell and all—its head being held up till it has swallowed the contents of the shell at least—will be found helpful. If a cure is not soon effected, give a tablespoonful twice a day for a few days in a little milk, from a bottle, in which is also a beaten egg, of the following mixture: tincture of ginger, four ounces: tincture of opium, three ounces; tincture of rhubarb, two ounces: and

essence of peppermint, two ounces. In very bad cases, give a dose every two hours until the discharges become more natural. If the calf is very small and young, half the dose of oil and of the mixture will be enough. The calf should be kept warm and dry.

## A Plea for the Standard-bred Trotter.

I have seen articles from time to time in the FARMER'S ADVOCATE on the horse, and the editor seems to always have a knife into the Standardbred trotter, and in the March 1st number he comes out with a sweeping condemnation of them, and by what I can gather from the tone of his writing, I am of the opinion this gentleman has had little or no experience with the Standard-bred trotter or his offspring. He says: "Major Dent strongly condemns the Standard-bred sire"; also, "Horses with long backs, weak back ribs, and small bones below the knee, are looked upon by him as entirely unfit for army purposes, and these weaknesses in many Canadian horses he attributes to the Standard-bred trotting sire." These are points and weaknesses that are not characteristic at all of the Standardbred trotter, and how can he, or why should he, produce such points or weaknesses such as he neither inherits nor possesses? A good Standardbred trotter is very hardy, of great endurance and power. I am also of the opinion that if the Standard-bred trotter had been of English, Scotch or Irish production, he would be looked upon by Major Dent with much more favor. I am strictly a Canadian, though I love a good unbiased Englishman, Scotchman, or Irishman, and some of all that blood flows through my veins. My father was naturally fond of domestic animals, and grew into the breeding of all kinds of pure-bred stock, and we exhibited stock at all the old provincial exhibitions but three. He also did a large business (for those days) in the sawmill line for many years, some years manufacturing over ten million feet of pine lumber, which required a great deal of the hardest kind of horse labor, which gave him a great experience, and we worked every description of horse in Canada at that time, from a Thoroughbred to a Clydesdale. He was the first Clydesdale man in the County of Halton, and over twenty years of this time was while I was with him, and the best team he ever owned—a team that could outwork, outdraw and outtravel any of them-did not stand over 15.3, and would not weigh over 1,200 pounds each. One was the stallion, Coates' Eclipse (see Wallace's American Trotting Register, vol. 2), a horse that would be in the Standard-bred class if he were alive to-day. He killed himself, when twenty three years old, by getting loose and eating a large quantity of chopped barley, in the fall of 1863. He was the sire of the dam of old Caledonia Chief, a horse that had the fastest Canadian stallion trotting record in his day, and his mate was sired by a horse called Sir Henry, that was brought from the States, and his dam was a pure-bred French-Canadian mare. I have owned some of every breed of horses that we have had in Canada, except the Hackney and Percheron, and too many of the very kind that Major Dent advises our Canadian farmers to breed from—the Thoroughbred. I have kept for over forty years from one to six stallions annually, standing for service, of nearly all breeds. At present I have only three, viz., two Clydesdales and a Standard-bred, and when a friend comes and asks me candidly which of these stallions he had better use to likely produce a good, useful, docile, hardy and reliable animal, if his mare is at all suitable, I tell him unhesitatingly to breed her to the Standard-bred, Arka. Arka is no pony; he is a Standard-bred trotting carriage horse, stands 16.2, and weighs 1,260 pounds, and can trot a little as well as work. I must say there were far more weedy, ill-tempered, worthless ponies sired by my Thoroughbreds than by any of my other stallions, yet five (5) out of the lot of Thoroughbreds I had were 16 hands high and over, with a good deal of substance. Some of this I attributed to the class of mares that was often bred to them, as was too often the case with both them and the Standardbred trotter

Frequently, when a person has a little switchtailed vixen of a mare, she is the one chosen to breed to that class of horses, and four times out of five disappointment is the result, and especially if bred to the Thoroughbred sire, because he cannot overrule that propensity in the dam, as they are apt to be a little ill-tempered themselves. I have had at least two Standard-bred trotting sires that could overrule the ill-temper in the offspring of any dam, and my convictions are, from long experience and close observation, that the Standard-bred trotting sire with good style and good natural speed and action, large, and bred large (do not overlook the fact that they can be bred large without impairing their speed proclivities: the world's fastest record to-day is held by a large, useful horse), and the more of the blood of Mambrino Chief (.11), George M. Patchen (.30), Royal George (.09), and some others, they carry, the more likely they are to be large and the larger they will throw their stock, and they are the most useful and the most satisfactory sire that the farmer can breed from, if he selects his mares properly. The mare should have good size and fair style. There is no stallion of which I have had any personal knowledge that has been as remunerative to the farmers and others of this district as old John E. Rysdyk 5721 (the first

Standard-bred trotting stallion that was imported to this part of Canada in 1871) and his sons.

The school inspector of this county, a gentleman who is very fond of a good horse, told me that he saw a carload of horses being shipped a short time ago from Chatham to Scotland, and in the lot there was only one that was not a grandson or grand-daughter of old John E. Rysdyk 5721. Another gentleman told me that he saw two carloads going from the same place to Scotland, and only three of the lot were not grandsons or granddaughters of John E. Rysdyk. Mr. James McKenzie, of Union, Ont., a gentleman who has bought, handled and sold a very great number of high-steppers and other high-classed horses, while here some three or four years ago, told me that during his partnership with Mr. Adam Beck (the first four years of his horse yentures) the host host years of his horse ventures), the best horse they owned was sired by Verus, a son of John E. Rysdyk 572l, and his dam was by my old Davis' Black Hawk Morgan. I was in Texas four years, and returned to Wardsville in the fall of 1878. In the spring of 1879, Doctor Sumerville, of Buffalo, who was our greatest horse-buyer for many years, forwarded me some posters stating he would be at Wardsville on a certain day to buy horses for the English market, from 15.2 to 16.2, suitable for carriage and hunting purposes. Late on in the day of his visit I went down town to see how he had got on, but he had not bought a horse, and nearly the first remark he made to me was: "Where are those Black Hawk horses that you bred here? My reply was: "You or your men picked up all that I know of except one mare and two geldings, that cannot be bought for what they are worth." His reply was: "Well, we got a lot of them, but I thought I might pick up a few more of them. Some of them were sold for carriage horses, and many turned out great hunters, and after the Englishmen found that out, they sold like hot cakes. Why, they would jump anything that they could, and some of them would try to jump a barn if you headed them for it. One mare, that must have been bred near here, and bought in Bothwell for \$150, was sold at Liverpool, before she was fairly landed, for £150 sterling, and lots of them sold for £100 and £125 sterling each." The great jumping horse, Bronte (the highest jumper in the world in his day), was sired by Black Hawk Warrior, a son of Davis' Black Hawk Morgan, when I had him in the County of Halton with John E. Rysdyk Jr., in 1881 or 1882. One of the greatest hunting mares owned at Montreal was bred by your townsman and friend, Dr. Tennent, and was sired by O. A. C. 2072, an intensely bred Standard-bred trotting sire, and her dam was by McKerlie's Grey Warrior, Standard blood on both sides, and after she became noted, her Montreal owner sent to Dr. Tennent for her pedigree. He sent it as it was. They wrote him asking he could not make it with Thoroughbred strains He wrote them that that was her true breeding and that was all he could do for them, and, no doubt, to-day she is being passed off as sired by some Thoroughbred, yet there was not a Thoroughbred cross near her; and of the horses that went from here to South Africa, that you say "won such reputation for us," I have no doubt that over half of them were sired by Standard-bred trotting sires or by sires that were a little short of Standard-bred, and that their owners claimed nothing but Standard blood for their superiority.

I do not for a moment say, if I were aiming to breed a fast runner or a great hunter, that the sire I would expect to produce it from would be a Standard-bred trotter. No, far from it; but, strange to say, they very often do produce the latter. But if I wanted to breed a good, useful, hardy and durable horse, then I would go to the large-sized, large-bred Standard sire with lots of natural trotting speed, and by selecting fair or large sized mares, with good constitution, I would hardly make a miss. A horse is an animal that I think should never be bred for a mountain of flesh (though I am in the swim, and have that kind); we do not eat their flesh, and they are strictly servants. In this country, I think they should be bred as much as possible for all purposes. My Standard-bred trotter, Arka, some days draws his share of a two-ton load of manure to the farm when the roads are reasonably good, and our road is not graveled, either. The next day he goes to Ridgetown and returns (forty miles); the next day the cattle get out, we throw the saddle on him and after them we go and bring them back on the doublequick. The next day we hook him up and go down town and have a little spin with the boys, and are not always hindmost, either. The next day away we go to the woods, swamping out logs and wood, and don't take light loads, either; and to morrow my son is going into the country thirty miles and return. Now, this is just the way we use our Standard-bred trotter, and that is the way we used his father before him, that took twenty-eight first prizes in the show-rings (one second and one third), and they do it cheerfully, without fatigue. Now, could we do it with our Thoroughbreds, and could

or dare we attempt it with our heavy drafts? I never did any writing for the press before, and assure you I do this very reluctantly; but I have had quite an experience with nearly all the breeds of horses on this continent, even the mustang, in his native clime, and when I see articles written so erroneously and prejudicial to the Standard-bred trotters, I thought it my duty to tell a little of the good qualities which I know they possess, in order to try at least to partly set right the minds of those who have had little or no experience with the O. A. COATES.

Standard-bred trotter. Bothwell Co., Ont.