

HORSES.

Avoid the stallion with the small effeminate head. He is not likely to be the sire of many of the largest geldings.

Convenience is a factor in selecting the sire to which to breed the mares, but it should never carry so much weight that a good mare is bred to a horse of inferior type, quality and breeding simply because he is "handy." Go a few miles further if necessary, and get the best horse.

A report of agricultural conditions, issued by the Ontario Department of Agriculture in April, contains a communication from a correspondent in a central county which reads: "So many of our best brood mares are being bought for the West, that it will likely tell unfavorably against us in a few years." Nothing is much surer than the loss of the best breeders will be felt by the districts depleted of them. The brood mare is a good investment, and properly managed will pay good interest on the investment.

On a cold, raw day in April a horse was observed with his back humped and his body quivering standing under a deciduous tree, which, while making heroic efforts to bud into new life, was still bare of leaves, and offered poor protection. The tender grass was short and watery, and, while a little of it might have acted as a tonic to the animal, he had to eat almost continuously to subsist, and the ground was too cold and wet to be even a suitable bed. He was an old horse. His younger, hardier and better-cared-for mates were busy tilling the soil and sowing the seed for the 1913 crop—work which, in his prime, he did faithfully day by day with a vigor and energy which young horse life shows. He had worked for his master hard, helped him prepare the land for and sow and reap a score or more crops, but now his usefulness, except for light and slow work, is over. He cannot take his place on the disc, the cultivator, drill or plow. His day is done. He would be better off if life would also desert him, but it does not. How many horses are there in the country in just such a condition? Surely the old horse deserves a warm stable and good feed until he dies, and it would be far better to remove him by some humane means than to force him to live in misery. Give the old horse as good care as the younger animals, or if this cannot be done and his usefulness is past, at least give him a decent burial.

How to Care for the Foal.

Between this date and the end of June a large number of colts will have been foaled. Volumes have been written on the care of young colts, but new conditions—conditions which have not been previously encountered by the average farmer—obstetrician—are ever cropping up and must be met almost on the spur of the moment, for parturition in the case of the mare means promptness—not undue haste, but quick and good judgment. The subject will never have too much light thrown upon it, and new points are brought out by nearly all good horsemen who write upon the subject. Dr. J. G. Rutherford in his last report as Veterinary Director General and Livestock Commissioner, devoted considerable space to a discussion of this most important question and his good advice we pass on to our readers.

"It is well-known among breeders that it is very difficult to catch a mare in the act of parturition, and that if the foetus is in its proper position, and everything else favorable birth occurs very gently and easily. Should you, however, happen to be on hand when your mare foals and the youngster is coming right, but not progressing as fast as he might, it will do no harm to rupture the membranes and help a little, pulling only when the mare presses and always in a downward direction or towards the hind feet of the dam. It would appear on the first impression that the breath is a necessary and indispensable adjunct to life; but in the unborn foal such of course is not the case—the first inspiration is taken upon the advent to the open air of the little animal, and it is of importance that nothing shall interfere with the supply of oxygen to the lungs as they begin to assume their vital functions. Many foals are lost through the nasal passages being occluded by the foetal membranes or otherwise, the first feeble attempts of respiration proving of no avail the blood fails to become oxygenated, the next effort is weaker still, the heart's action at the best is uncertain, owing to the sudden change in the course of the circulation, soon ceases entirely, and independent existence ends before fairly begun.

As soon as the foal has emerged, free the

head from the envelopes, see that the air passages are clean of mucous or other fluid, and lay the animal on his right side. If the umbilical cord or navel string is not ruptured at birth it may be tied with a stout cord a couple of inches from the navel and cut below the ligature, and to prevent blood-poisoning, or the absorption of septic germs, it may be dressed with a strong solution of carbolic acid, and care being taken not to injure the surrounding tissues, or it may be temporarily smeared with carbolic oil. Should animation appear to be suspended while the heart still beats an attempt may be made to resuscitate the little creature by pouring cold water in small quantities on the head, slapping the body with a cold wet cloth, holding ammonia to the nostrils, or even by what is generally more convenient, puffing a little tobacco smoke into them. Should these measures fail, a little blood may be taken from the navel, but when syncope is present there is no great hope of bringing about recovery.

"If there is any malposition of the foetus, not of a serious nature, you may, if you are at hand, be able to rectify it, using judgment and common sense, bearing in mind that a mare will not stand much rough handling, and, above all, keeping cool and endeavoring to avoid excitement, which at such times is very natural and very dangerous. Should you find yourself unable to remedy the evil, lose no time but send at once for professional assistance if such can be procured, and meanwhile, allow no interference save by some intelligent and thoroughly experienced stockman who understands the vital importance of absolute cleanliness and who will know, after making examination, whether he can do any good or not, and will guide himself accordingly. Great harm may result from well-meant but mischievous interference with these cases, and the veterinary surgeon often finds on his arrival a well-nigh hopeless subject which, if let alone, he might have handled with one tithe of the trouble and with far greater certainty of saving life.

"We will suppose that the foal is dropped safely and lying breathing and sneezing behind his dam, who has just had the gruel with which she ought always be rewarded after the termination of her labor. The mare will generally, on rising, turn around and begin fondly to nose and lick her progeny, a process by the way, of great importance and value to the latter; but young and nervous mares, especially if delivery has been protracted and painful, will often act in an entirely different manner, snorting, pawing and evincing fear and irritation at sight of their offspring. Under such circumstances it is well to protect the foal for a time by a small hurdle or gate placed across one corner of the roomy, airy, dry and warm loose-box, in which, it is presumed, he has first seen the light, to rub him smartly and gently with soft rough towels and to endeavor to induce the mare to begin the licking process by sprinkling the youngster with a little dry bran or meal and salt. Such measures are not, however, often necessary, kind, considerate treatment and judicious letting alone generally proving effectual in bringing about a reconciliation in the family.

"Plenty of dry, clean bedding should be furnished, the shorter the better, for the foal will soon begin to tumble about in repeated attempts to get his long and shaky legs under him. If he does not succeed after a reasonable time in getting on his pins, a little assistance may be given, and his dam proving friendly, he will soon, if let alone, find his way to the maternal font; but if he is unable to stand, or the mare is touchy and restive, she ought to be held while he is guided to the teat and allowed to obtain nourishment. If the foal is weak and quite incapable of supporting himself, the mare may be milked and the fluid thus obtained given to him slowly and very carefully, it being a matter of great importance that the little chap obtain if possible some of the very first milk secreted by the mare. When once friendly and confidential relations have been established between mare and foal, they should be left alone for some time, care, however, being taken to remove the placental membranes from the stall as soon as they are dropped.

"If the mare has gone much over her time and especially if she has lost much milk, it will be necessary to watch the foal closely for symptoms of constipation, which will be manifested in the first place by continued elevation of the tail accompanied by straining without the passage of faeces. This will be succeeded by dulness and then by evidence of pain, the abdomen will become bloated, the little animal will show great uneasiness and begin to perspire and the pulse and respiration will be accelerated. In the early stages a few ounces of soapy warm water or a little raw linseed oil introduced by a syringe into the rectum will generally afford relief, but should acute pain and distress make their appearance, the administration of two or three ounces of castor oil with twenty or thirty drops of laudanum and half a teaspoonful of turpentine well shaken up, will be in order; a small enema should also be given from time to time, and the abdomen covered with a woolen cloth wrung out

being replaced by internal gills, and the tadpole breathes by taking water in at the mouth and nostrils, passing it over the gills and out at an opening at the left side. When the tadpole is about six weeks old the hind legs begin to appear as little round knobs. They develop rapidly, and are soon used to aid the tail in swimming. In a couple of weeks more, the front legs suddenly appear. They have in fact been growing for some time, but have been concealed from view by the membrane covering the gills. The small, rounded mouth is now replaced by the wide mouth of the adult toad. The tail is now gradually absorbed and the tadpole emerges from the water as a toad. If the weather is dry at this time, the little toads hide in cool, moist places during the daytime, but if it is damp weather, we see them hopping about in thousands near the ponds and marshes. This is the origin of the belief in the "shower of frogs" of which we hear. People have said "There were no frogs here yesterday, to-day we had a heavy shower and there were the frogs! They must have rained down." It is not a very long step from "must have" to "did" and there is the belief established. When they leave the water they are perfectly smooth and less than half-an-inch in length. In about six weeks warts are beginning to appear behind the eyes, and on the under surface of hands and feet. At this time in their existence their enemies are extremely numerous, and snakes, crows, hawks and owls, capture them in large numbers. Hence we see the reason for the large number of eggs which are laid, for, in spite of enemies, a good number of young toads are left to burrow down into the ground, hibernate for the winter and emerge in the spring. During the summers of the next two years these toads make their homes in field and garden, and not until they are three years old do they resort to the water to breed.

While growing rapidly the toads shed their skin every few weeks and the older toads moult four times a year. The old, outer skin splits along certain definite lines and is gradually drawn into the mouth and swallowed.

Toads, if they escape accidents, have a long spell of life, probably about forty years, as one is known to have lived thirty-six years and to have been killed accidentally. But we often hear of toads which are popularly believed to be several hundred or even several thousand years old. In these instances they have been found in the middle of stones, and the finders declare that there was no entrance hole and that the toad must have lived in the stone since the stone was formed. As a matter of fact, in these cases, there is a small hole through which the young toad crawled when very small. It found here congenial quarters and remained there feeding on the insects which frequent such places until it grew too big to get out, and here it continued to live until found. The English naturalist, Buckland, tested the ability of the toad to live for long periods sealed up. He confined toads in limestone and sandstone boxes and buried them three feet deep. At the end of two years all the toads were dead. So much for the antediluvian toads.

Another popular fallacy in regard to toads is that touching them will produce warts; of course this is simple nonsense. The toad has however a secretion which it pours out of its skin, and particularly from the two swellings behind the eyes, when it is in great pain. This fluid has a most disagreeable effect upon the mucous membrane of the mouth and acts as a protection to the otherwise defenceless toad. Thus we find it is very rare for any but a young dog to molest a toad. To a human being this secretion is entirely harmless unless it gets into the mouth, nose or eyes.

The toad feeds in the evenings and as long into the summer's night as its large eyes enable it to see. It feeds on cut-worms, tussock-moths, caterpillars, tent caterpillars, May beetles and other injurious insects. Eighty-eight per cent of its food consists of pests of the field and garden, and it has been estimated that a toad eats 9,936 injurious insects in three months, and, that out of this number, 1,988 are cut-worms, so that if the injury done by a cut-worm be put as low as one cent then the toad is worth \$18.88 per year to the farmer.

Favors Bank Inspection.

Editor "The Farmer's Advocate":

We have read with great interest your articles regarding Bank inspection. We agree with the stand you take, and feel sure that you have the sympathy of the agricultural community. Hoping that you may succeed in arousing the country to the need of a thorough inspection of all banks.

Bruce Co., Ont.

JOHN MCINTYRE.