

as a sire, that his owner this year has paid out over \$12,000 for his last crop of colts in the County of Norfolk. The mares to which he was bred were of promiscuous size, breeding and temperament. He is certainly a diamond.

Don't expect everything from the horse; there must be some susceptibility in the mare to produce a colt from the stallion as desired. The mares most likely to respond to the impress of the Norfolk trotter are those mares full of the blood of the same, the American trotter. Their veins are overflowing with Bellfounder blood, and it only requires a little leaven to leaven the whole lump. Then will one find action and quality combined. This is not the visionary imagination of a dreamer, but simply a mathematical problem, combined with the faith that is within one to whom all the problems of breeding have not been vouchsafed, but to one whose opportunities of watching various breeding schemes have been most unique on this continent.

The Mare at Foaling.

As the season has arrived when most brood mares are expected to produce their foals, perhaps a few suggestions from my experience may not come amiss.

In the first place, I would say breed your very best mares. Find out where they are lacking in conformation and quality, and match with a horse strong in these points. Be honest with yourself and the groom in charge of the stallion, by returning your mares regularly. Do not breed to a horse simply because he is imported and is high-priced, in preference to a pure-bred Canadian-bred horse that will suit your mare.

Now, there are two ways by which the mare and colt may be lost: One is by misdirected kindness, the other by abuse; and I believe most loss is caused by the former. In winter be sure to make your mare take exercise. Do not be content with turning her into a barnyard and leaving her there while you read the paper; you will find her standing at the warm side of the strawstack or barn, and all the exercise she will take will amount to very little. If you have a comfortable stable keep her in, and when you want a little work done use her, and when spring work starts she will be in better condition for work or breeding than if she had not seen her collar since fall. I prefer working the mare right up till she foals; not at hard, strenuous work, but at general farm work, in moderation. If you drive her yourself you can put her on the tongue, being careful turning in soft ground. Give her a little boiled flax once a day with her grain for a few weeks before her time is up. At foaling time, by all means stay near her. She may not need assistance. If not you are lucky, but if she does need you, and you are there, then she is lucky. Some men say they are not mean enough to ask anyone to sit up at night with a mare, but when their mare loses her foal, somehow, they are mean enough to ask the horseman to give them another for nothing, and consider him mighty mean if he don't. I consider any man very foolish to risk a young mare at this period without watching her closely. I used to turn my mare into a box stall, and made a bed for myself in a narrow stall, but experience has taught me to change with her. Very often the mare would lie down in such a position that one could not get behind her to help when required. Keep her in a single stall until you have removed the foal to the box stall, then lead her in gently. Now, as to giving a foal a physic. I know some good authorities are opposed to it and tell us it is not natural and all this, and when they lose a colt it is attributed to some other thing. I admit I know nothing about the make-up of a horse, but I have raised quite a number of colts, as also has my father. He used to give them a physic, I always do so, and neither of us ever lost one. We never had one of that kind that had to die. We give about a cupful of fresh butter, melted, before the foal gets up, and we have no trouble afterwards. I always consider them in danger, though, until I see their dung yellow. If you see the foal in pain, see that it has a passage at once. I have never had any trouble when they got the physic. I do not maintain that a colt will live under all circumstances if given a physic, nor do I say that a colt will die if he does not get one, but I do maintain that seventy per cent. of the mares have leaked the milk that nature intended to physic the foal, and in order to be on the safe side, I think it wise to be sure it gets one. Keep an eye on your colt for a few days; it will pay you. If you have a horse colt, see that he can urinate. If he cannot, throw him gently, and you will find his yard turned back in the sheath. Get a little sweet oil, pour a little on your hands, and gently turn it right. I have often received great help from letters written by others and published in the best of all farm journals, the "Farmer's Advocate," and I hope this may do the same for others. D. W.

Peel Co., Ont.

[NOTE.—The above letter, read in connection with the article headed "Constipation in Foals"

in the "Farmer's Advocate" of April 20th, and that by the same writer in this issue, on "Diarrhoea in Foals," should prove very helpful, as both are seasonable.—Ed. F. A.]

Diarrhoea in Foals.

All young animals while at the teat are subject to a specific form of diarrhoea, which usually proves fatal, and is due to a specific virus. Fortunately, this form of the disease is not common in foals, and we do not propose to discuss it here. We propose to discuss the ordinary form noticed in foals, and due to different causes. Diarrhoea in foals is in all cases serious, but by no means necessarily fatal, and in most cases can be prevented by careful attention. It is frequently caused by the too common practice of administering purgatives soon after birth, from the idea that nature needs medicinal assistance in establishing peristaltic action in the young animal, in order to rid the intestines of their contents at birth, the fallacy of which was discussed at length in a previous article on "Constipation in Foals." In other cases it is caused by allowing the foal to partake freely of the milk of the dam when she is heated and the foal hungry after a long fast. It is also, in some cases, caused by administering purgatives, especially aloes, to the dam for different causes. There are conditions in which it is necessary to act upon the bowels of a mare when her foal is quite young, but in such cases raw linseed oil should be given, as aloes is largely excreted by the lacteal apparatus, it contaminates the milk, hence is very liable to create serious diarrhoea in the foal. Again, it may be caused by some abnormal condition of the milk, which is hard to explain, and as there is usually no marked alteration in the appearance of the fluid, the real cause is often not suspected until too late. When due to the last mentioned cause it is always very serious and hard to combat, as it is necessary for the little animal to have nourishment, and the mother's milk is always hard to substitute, and especially so for a sick foal.

The symptoms are not hard to detect. The first indications usually are a moist and soiled condition of the tail, and a more or less marked indifference on the part of the foal to partake of nourishment. Weakness is very marked, the young thing seems suddenly to lose strength, lies most of the time, watery faeces, often foetid, escapes from the anus with considerable force. When the foal gets up it staggers about, is indifferent to surrounding objects, the eyes are sunken in the orbits; saliva often flows from the mouth and there is no attempt made to swallow it, and it wets the throat and breast. It partakes of little nourishment, emaciation is usually rapid, and the hair is dry and erect. There is usually little pain manifested, the belly is not painful to pressure, as there is seldom any considerable inflammatory action. The patient usually lies stretched out. Towards the end the anus often remains dilated, as if it were paralyzed, and the faeces escape without apparent effort on the part of the animal, while the air passing into the anus produces a peculiar sound. He lies immovable, and dies without a struggle.

TREATMENT.—Preventive treatment is, of course, the most important. When we know the usual causes of the malady, prevention consists in avoiding them, but when the disease occurs, curative treatment must be prompt and energetic, else a fatal result is imminent. On general principles, diarrhoea may be said to be due to some irritant in the digestive tract, and theoretically speaking, it is necessary to remove that irritant by the administration of a laxative of raw linseed oil, castor oil, or some other mild purgative. But experience teaches us that in a case of diarrhoea in any animal that has reached that stage where the patient is manifesting well-marked weakness and debility from the ravages of the disease, it is unwise and unsafe to administer laxatives or purgatives which will further deplete the patient, and this is especially so in very young animals that have not gained sufficient strength and vitality to withstand a debilitating disease. Hence, we must at once direct our attention to checking the diarrhoea and sustaining strength and vitality by nourishment and stimulants. Many drugs are recommended for these cases, but I think none so serviceable as opium. Some writers tell us we must be very careful in the administration of opium to foals, but my experience has taught me that nothing else gives as good results. Opium is not an astringent, but it exerts astringent actions by checking secretion of the glands of the intestines, hence checking the outpouring of liquid into the canal. It also checks the tendency to inflammation where such exists, and induces general quiet. The foal should be given from 2 to 4 drams (according to size) of the tincture of opium (laudanum) in a little of the dam's milk every two hours until diarrhoea ceases. This, to some, may appear excessive doses, but it is astonishing what large doses a foal in this condition can tolerate. If the patient will still partake of a reasonable amount of nourishment from the dam, the above treatment is all that is

necessary, but if it be very weak and refuses to suck, it must be artificially sustained, by adding stimulants, say 1 ounce whiskey to the dose, and drenching frequently with some of the dam's milk, unless the nature of the milk is the cause of the trouble, in which case the milk of a freshly-calved cow diluted with its own bulk of water may be substituted. If the patient be a few weeks old, it is well to add to the opium about two drams powdered catechu, and the same quantity of prepared chalk.

"WHIP."

Horse Breeding for the Times.

The season is at hand when horse-breeding commands more than ordinary consideration. Too much importance cannot be attached to the necessity of due consideration and judicious selections on the part of the owners of mares. The policy of patronizing any stallion so long as he is cheap, is penny wise and pound foolish.

The most can be made from horses, as a rule, when the breeder raises and breaks his colt, and gets sufficient work out of them to balance the feed bill while the colt is maturing, or while waiting for a favorable market, as the case may be. This gives the breeder two issues to face, viz., the most suitable breed for his own use, and the most suitable for the market. By all means, when the breed and individual sire are decided upon, be sure to procure the same, even if there be inconvenience and a few dollars extra outlay to meet in the beginning. Begin well, and half the battle is won. Another of the greatest hindrances to improving the horses of the country is the disposition, on the part of so many, to use a horse which one's friend happens to own. Thus we have some of the most unwarrantable crosses and mixtures imaginable, and the product of a mongrel that will probably never sell for what his raising has cost. My advice would be, if your neighbor or friend owns the horse best suited to your needs, use him, and if not go to the one that does. A cheap-selling horse will cost just as much to raise as one that will sell for twice as much money and the difference is too much to sacrifice for a bit of sentiment. Horse-breeding in these times is too important a business to Canadian farmers to be dealt with in any other than a businesslike manner.

Waterdown.

J. R. H.

STOCK.

As to Dehorning.

To the Editor "Farmer's Advocate":

In reading your issue of April 13th I came across an article headed, "Against Dehorning," and having had nearly twelve years' experience with dehorned cattle, I felt it almost a duty to my brother farmers to express my opinion in favor of dehorning. In reading that anti-dehorning article, one would naturally take it for granted that the caustic operation for preventing the growth of horns is very simple, merely a touch being sufficient. This is a great mistake, for that operation may be and often is botched. To be successful it requires at least two or three applications, and I have heard of calves being tortured by this system, more than are older cattle by dehorning with saw or clippers. If not properly applied the potash will eat holes into the little heads, and in some cases I have known, the acid has run down into the calf's eyes, causing them to become totally blind. It is easy to see that the writer has not handled many dehorned cattle, or he would not try to lead us to believe that there would be any serious damage done by the masterful members of any herd of dehorned cattle. We should not condemn the work done by all who follow this profession of dehorning because a small percentage of operators make a botch of it. We find botches in all lines of business. Leaving one horn a little long and taking the other off too close is not the fault of dehorning, but rather of the dehorner.

Now, I would infer from the article in question that the system of dehorning used in Wentworth County is quite a primitive method, if, after the operation, the animal is turned loose with the blood running down its head and the wound unprotected. When dehorning is properly done, it does not seem so barbarous or inhuman.

In this part of Ontario we use a system which seems to be very satisfactory, the work being done with clippers manufactured in the State of Michigan, the manufacturers of which do not allow a machine to leave their works without a full code of instructions. They furnish a most complete holder, which holds the animal to be operated upon very securely. The horns are then clipped off, making a clean, smooth cut—no crushing of bones that we hear so much about. The veins are then corded, stopping the blood instantly. Then the wound is covered completely with a plaster and smeared over with a healing salve. The cords are removed in the course of twenty-four hours or so, and by this time the plaster