## ENTOMOLOGY

## A Cattle Tick.

To the Editor FARMER'S ADVOCATE:

SIR,—The specimens sent with your letter of 16th inst. are, as you surmise, true ticks. The finding of these on a horse at Chilliwack, in the Fraser River Valley, British Columbia, must, I think, be an unusual occurrence. From the crushed specimens, it is not possible to be positive of their exactidentity, but I think there is hardly a doubt that they are the well-known cattle tick of the Southern States, Boophilus bovis. This has been found occasionally on cattle and horses in the West, and it would be interesting to learn if the animal upon which these were found had been recently imported, or had been running recently with animals imported into British Columbia from the Northern States. In Texas and some others of the Southern United States, the cattle tick is a serious pest. When, as is frequently the case, it is very abundant, it rapidly reduces the condition of animals upon which it occurs; but its worst injuries are due to the fact that it is the immediate means of conveying infection of the Texas cattle fever. These ticks have the power to fast for a very long time—several weeks—and after gorging themselves on an animal, they drop to the ground, and then, after a considerable period, climb up on to grasses or bushes and attach themselves to any passing animal. When they have bitten an animal suffering from cattle fever, they convey the infection to the next animal they attach themselves to. Of course, in districts where there is no fever, they cannot convey the infection to animals they bite. I do not think there is any likelihood that this tick will develop into a serious pest at Chilliwack or in British Columbia. Specimens have been occasionally sent to me from various places in the Northwest and British Columbia; but they have never been very abundant except upon an occasional animal which was in poor health.

In our country it is not a very difficult matter, as a rule, to free animals of this parasite. Several applications have been found effective. Almost any greasy or oily substance applied to the parts affected will destroy the ticks. A mixture of lard and sulphur, ‡ of sulphur in 1 lb. lard, or sulphur and kerosene, will kill them. The ticks, as a rule, are found on those parts of the animal where the skin is thin. When the parasites are numerous, washing, brushing, spraying or sponging the animals with one of the several well-known commercial sheep dips gives the greatest satisfaction. They are efficient, cheap, easily applied, and are not poisonous or irritating either to the skin or eyes. If these are not obtainable, the ordinary kerosene emulsion will answer. On a few animals they may be applied with sponges, mops, brushes, or a syringe.

J. FLETCHER, Entomologist.

Central Experimental Farm.

## OUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to the Farm er's Advocate are answered in this department free.

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2nd.—Our purpose is to give help in real difficulties; therefore, we reserve the right to discard enquiries not of general interest or which appear to be asked out of mere curiosity.
3rd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer, as a guarantee of good faith, though the name is not necessarily for publication.

4th.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies can-

## Veterinary. LAME MARE.

I have a nice Standard-bred mare, 6 years old, that is lame in the left fore foot or leg. years ago she got lame in the right foot or leg, and was taken to the best vets. convenient, but none of them could locate the lameness She was blistered from shoulder to foot without any apparent benefit, but she finally got better, and is nowsound in that foot. About six months ago she got lame in the left I had her shoes taken off, and she got better, but limped a little occasionally, and sometimes appeared altogether well. About three weeks ago I got her shod, and have been driving her some, and she has been getting more lame every time I drive her. I drove her a few miles last night. She was pretty lame when she started, but got over it after driving a mile or two, but this morning she is very lame. It appears to be difficult for her to put her foot ahead, and the muscles of her neck, from the point of the shoulder up, raise out as large as a man's arm when she steps. The temperature of that foot is about the same as the other, and unless she is very lame she stands as firmly on that foot as on the other. There does not appear to be any soreness or swelling. She is in foal. R. H. HAWLEY.

Middlesex Co., Ont. |From symptoms given, I think your mare has navicular disease, and a cure, in all probability, cannot be effected. Repeated blistering around the coronet, and a long rest, will help her, and possibly effect a cure. If she become so lame that she is useless, you can get a veterinarian to perform neurotomy (removing the nerves of the foot). This will cure the lameness, but not the disease, and she will be liable at any time after the operation to become entirely useless, while, on the other hand, she may J. H. REED, V. S.

WORMS IN COLT-LYMPHANGITIS

1. I have a colt, twenty months old, which passes worms about an inch long. He is in fairly good order, but is not growing much. When he is let out he will eat the dirty straw that is around the What will clean him out?

2. About a month and a half ago, one of my horses took a sore leg. He was all right the night before, but in the morning one of his hind legs was swollen twice its natural size, and so sore that he could not put his weight on it for three days; it then got better, but the swelling did not come all out, although I bathed it with hot water and rubbed it well with spirits of camphor. Three weeks after the first attack, he took the same thing again, and was lame for three days. He is not lame now, but the leg is still swollen. What shall I do for it?

Pictou Co., N. S. [1. If the worms are about the size of a knitting-needle, pointed at one end, and from 1 to  $1\frac{1}{2}$  inches long, they are pinworms, and confine themselves to the rectum or back bowel. Horses affected with this rub their tails, and generally show a white slimy substance around the anus. Give a physic of Barbadose aloes, 8 drams, and one teaspoonful each of baking soda and ginger, mixed in a pint of warm water as a drench. Now give an injection of warm water to clean out the bowel, and follow it with one of salt and water, one ounce of salt to two quarts of water, or a decoction made by boiling half a pound of quassia chips in one gallon of water. The eating of dirty straw indicates indigestion, for which the colt should have, after the above physic has operated, soft food three times a day, to which has been added a teaspoonful of the following mixture: Ground gentian root, baking soda, ginger and sulphate of iron. It would be well to get a quarter pound of each thoroughly mixed, which should be enough to tone up his system. If the colt passes any long, round worms, give after the physic and before the tonic, raw linseed oil one half pint, mixed with one ounce of spirits of turpentine

2. The swollen and sore condition of the legs points to lymphangitis, big leg, or weed, due generally to overfeeding, lack of exercise, or sudden changes from work to idleness, or from a poor to a rich diet. A horse once attacked is liable to have the trouble recur, and, as a consequence, a chronic enlargement or thickening of the limb. The treatenlargement or thickening of the limb. The treat-ment should consist of limiting the feed and giving Give Barbadoes aloes, 8 to 10 drams, and ginger, 1 tablespoonful, in a pint of warm water. Bathe the leg for an hour with hot water in which the hand can be borne, rub thoroughly and band-A teaspoonful three times a day of saltpetre sulphur and gentian, for two weeks, will improve the condition of the blood.]

CHRONIC CONSTIPATION IN COW.

I have a well bred Jersey heifer, three years old, which had her first calf three weeks ago. She seems to have trouble to pass her manure, strains, and forces her parts out very much while straining. What she does pass comes away in small quantities, and often. I noticed it first last fall just before she went into the stable for winter. She then seemed constipated. We have fed her ground oil-cake and ground flax at times with her chop and cut cornstalks and oat straw, with some hay. Her hair has not looked right all winter, and since she has started milking, she is coming down in flesh. She eats fairly well, and gives about twelve quarts of milk per day, which all goes to the calf. Could you suggest a remedy? Her skin seems tight, especially across her loins. She gives promise of being a valuable dairy cow.

A. C. M.

Montreal. Your cow has chronic constipation. I would advise the following treatment: Give one pound Epsom salts, dissolved in one and one-half pints of warm water, and given as a drench. Feed nothing but a little bran for twenty-four hours after giving drench. Then get the following mixture: sulphate of iron, powdered gentian, powdered ginger, bicarbonate of soda, of each three ounces; powdered nux vomica, two ounces. Mix, and make into twentyfour powders. Give a powder every night and morning. If she will eat them in her dampened food, it will be all right; but if she will not take them that way, you will have to shake one up with one-half pint cold water and give as a drench. It will be better to repeat the prescription. If at any time the feces become dry and harder than normal, give a dose of Epsom salts, say about one-half pound.

J. H. REED, V. S.

LUMP IN THROAT OF COW. I have a young cow which is swollen on the glands of the throat near the jaw. The swelling broke and ran for some time, and then left a calloused lump. Now the other side of the throat is swollen, but going down without breaking. It seems to be just under the skin and not attached to the jaw. Would you advise blistering? Do you think in time it would turn to lump jaw? Do you think her milk fit for use, or had I better fatten

Middlesex Co., Ont. [It is probable your cow has actinomycosis, but the bone is not as yet affected. A cure can be effected by dissecting carefully out with a knife. If the trouble be an ordinary abscess, nature may effect a cure, but it is probable the trouble is lump In cows suffering from this disease, neither the milk nor flesh is considered fit for human food, and a person offering either for sale is liable to a heavy fine. If the cow is cured either by the use of the knife or otherwise, her milk and flesh are both good, as she is then a healthy animal. J. H. REED, V. S.

DIARRHEA IN CALVES.

I have had a good deal of trouble with calvessome last spring, but it has become general this spring. I have lost two-thirds thus far—8 out of 12. Calves are strong and seem all right when calved. At 24 hours old, first symptoms are sudden and severe diarrhea, and in 24 hours more they are generally dead. Cows are in apparently healthy condition, bowels normal, are fed and watered and stables cleaned regularly; stables large and fairly ventilated. Ration: Fed on wheat straw, cut, mixed with good ensilage, with a little oat chop and have good out straw, to nick over at night, with bran; good oat straw to pick over at night, with hay after calving. Some of the cows had no ensilage, but the same results. The silo is in the middle of barn. Calves have been tried on whole milk. Have also mixed one-third water with a little Soda and cornstarch, but with no better results.

Norfolk Co., Ont.

WM. J. W. Norfolk Co., Ont.

[This epidemic of diarrhea in calves must be either contagious or due to local causes. It may be due to impure water taken by the cows. If the water you use contains any liquid manure from the barnyard, it might cause the trouble, but if the water and food are above suspicion, we must conclude that the disease is due to contagion. not mention whether you allow the calves to suckle their dams or feed them out of a pail. It is very hard to get those writing for causes and treatment for diseases in stock to give full particulars. We should have all particulars in such cases. You state that you diluted the milk with water in some cases, and from that, of course, we gather that the calf referred to was fed out of a pail; but you do not state whether it had been allowed to suckle at all or I would advise not allowing it to suckle, and to dilute the milk with about one-sixth part of lime water—that is, 1 part lime water, 5 parts milk. If diarrhea commence, give about 1 dr. laudanum, mixed with a little milk, every 3 hours until the diarrhea ceases. It would be good practice to give cows about to calve, for 2 or 3 weeks before calving, about 25 drops of carbolic acid, mixed with half pint water, twice daily, and give each calf the milk of its J. H. REED, V. S.

Note.—Dr. Reed seems to have overlooked the fact, as stated, that these calves were only 48 hours old at time of death, and only 24 hours when the trouble began, so that they were practically living abortions, as there was too little time to apply an effectual remedy. This is surely something different from either ordinary or epidemic diarrhea, and is a serious difficulty.—EDITOR.]

LAME STALLION, ETC.

I have a seven-year-old stallion, one of whose fore knees has a lump on it that is just as hard as the bone itself, and he is lame when he trots. What can I do for this? I have also a mare, seven years old, that is very dull. When she was five, she was smart and lively, but now is slow and dilitary. She only had one foal, and is with foal this year. One of her hind legs swells up in the fetlock, and will stay swollen for a week at a time. What can I do for her? She keeps her head down to the ground, and can hardly be made to trot.

Can a male pig be drugged so as not to breed, as bought one and can raise no stock?

Northumberland Co., N. B.

[1st. From symptons given, I would say that your stallion has an inflammatory disease of the knee, which causes an exudation of soft material which is becoming converted into bone and joining some of the bones of the joint together. It is possible the lameness might be cured by firing and blistering the joint, which should be done by a

2nd. There may be something wrong with your mare's teeth which prevents her eating enough to give her the spirits you desire. Have her mouth examined, and if the teeth require dressing have them attended to, but you should remember that a pregnant mare becomes more and more sluggish pregnancy advances. Regular exercise and bandaging the leg while in the stable will prevent the swelling. 3rd. No.

J. H. REED, V. S.] LAMPAS IN FILLY.

I have a fine young mare, rising three years, due to drop her foal in June. She is in good condition, but since a few days ago does not eat her hay well. My blacksmith says she has lampas; the gums are swollen out past the upper front teeth. What is the cause and cure for this disease? I receive your valuable paper, the Advocate, and should like to see it in the hands of every farmer in this

country where agriculture is so much neglected and less understood.

WM. MACKINTOSH.

Antigonishe Co., N. S. The filly has lampas, which is not a disease, but simply a swelling of the gums just inside the upper front teeth, caused by the shedding of the first teeth and the introduction of the new ones. Some authorities claim to believe it is a provision of nature to protect the young teeth from injury. The frequent treatment administered by blacksmiths and others, of cutting the affected parts roughly or burning them with a hot iron, is barbarous and useless. The feeding of corn, peas or whole roots as a treatment to break down the swelling is also cruel and useless. Ordinary cases need no treatment, as a cure will come of its own accord when the new teeth are well grown out. When the swelling projects below the table of the teeth, incisions may be made close to the teeth in order to relieve the conjection. An incision made back in the roof of the mouth is liable to dangerous

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