

Veterinary.

Diseases of the Osseous System in Horses.

Ringbone.

This serious disease of the bony structure is exceedingly prevalent amongst the horses on this continent, and many an animal is rendered comparatively valueless from becoming affected with it.

Ringbone, as its name implies, is a ring of bony matter (exostosis) extending around the lower part of the limb, attacking the lower part of the large pastern bone, or the upper part of the small pastern bone, and involving the articulation below the fetlock, which is usually designated the pastern joint. In this disease, the same changes go on as in spavin, and, therefore, as well as the abnormal bony deposit, there is frequently ulceration (caries) of the articular surfaces of the bones, and osseous matter is thrown out both in and around the joint, until the articulation assumes one solid mass. Occasionally, the exostosis extends downwards into the foot, involving the coffin bone, and materially affecting the natural condition of both the sensitive and insensitive structures of the foot.

Ringbone may either affect the fore or hind limbs, and, in the most of cases, causes lameness, although exceptional cases are occasionally met with when ringbones have attained a considerable size without producing lameness, and apparently interfering but little with the animal's action.

The causes of ringbone, like those of spavin, are predisposing and exciting, and, so long as horses and mares affected with ringbones are kept for breeding purposes, this disease will prove a source of trouble and of loss to the breeder. Of course, there are exceptional cases, as, for instance, a good strong, well-formed animal may become afflicted with ringbone, the result of some well-marked exciting cause, as a sprain or other injury, and still may be perfectly safe for breeding purposes.

Horses with very upright pasterns have also a tendency to ringbone.

Percival, in writing of ringbone, says that form as well as breed is concerned in the production of ringbone. A coarse, or half-bred, fleshy or bony-legged horse, with short and upright pasterns, is, we have observed, the ordinary subject of this disease, and there exist satisfactory reasons why we should expect him to be so. The pastern or coffin bones constitute the nethermost parts, the pedicels, of the columns of bones composing the limbs; and, being so, they receive the entire weight and force transmitted from above. The pastern, when long and oblique in position, receives the superincumbent weight in such a direct line that, bending towards the ground with the fetlock, nothing like jar or concussion follows. The very reverse of this, however, is likely to happen every time the foot of a limb, having a short and upright pastern comes to the ground. In it, instead of the weight descending obliquely upon the sesamoids, and the fetlock bending therewith, it descends direct, or nearly so, upon the pastern, making this bone entirely dependent upon the bone beneath it, the coffin bone, for counteractive spring and, should anything occur to destroy or diminish this spring, or to throw more weight, or to throw weight more suddenly, upon the coffin bone than it can counteract, jar of the whole apparatus ensues, and an effort of nature to strengthen the parts, by investing them with callus and ossification, is likely to be the ultimate result. For we would view ringbone, disease though it most assuredly must be called, as frequently, in young horses, a resource nature seems invariably to fly to, whenever the (pastern) bone and joints are found unequal to the exertions or effort required of them.

The exciting causes are such as arise from hard and fast work, and especially in young horses before the bones and joints are sufficiently matured. Severe sprains may prove a cause, and also the great strain thrown upon the hind limbs, in particular when horses are forcibly backed when attached to a heavy load.

Ringbone, we believe, is sometimes the result, in very young colts, of being allowed to travel a considerable distance upon the hard road, day after day, as is the custom in some parts of Canada; of working the mare at all kinds of work during the greater part of the time she is suckling

her foal, the little animal frequently being compelled to travel miles every day. Such exertion must necessarily tell upon the upright pastern bones, and, more especially, if the system is weak from a want of a proper supply of nutritive milk.

A severe puncture to the foot sometimes proves the primary cause, either from direct injury, or from the continued strain thrown upon the sound limb when an animal is unable to bear the due proportion of weight upon the injured foot.

Ringbone is easily recognised as a hard bony enlargement, immediately above the hoof encasing the whole of the pastern joint, or it may be confined to one side. Lameness is generally present, which is most noticeable at starting and is easily increased by flexing the joint forcibly. When situated on the fore limb, and when both limbs are affected, the horse travels as if he was suffering from laminitis. He places his heel to the ground first.

In cases of long standing, in the hind limb, the nutrition of the whole limb is impaired causing a wasting or atrophy of the muscles of the haunch.

Ringbone is incurable in so far as restoring the part affected to their natural condition, but, if the treatment relieves the lameness, it is usually considered that a cure is effected. In its treatment, the patient should have complete rest, and, in an early stage, hot or cold water applications are beneficial, followed by blisters, or the actual cautery as recommended for spavin.

On this continent, a great many nostrums are recommended and operations practised for the removal of ring bones by a class of practitioners who pretend to perform wonderful and miraculous cures by using severe caustic preparations, and performing the operation which is called, "cutting out the feeder," whereupon the ringbone is said to die. The operation consists in cutting into the little pad situated at the back of the fetlock joint. This theory is an exceedingly plausible one to one not conversant with the structure of the limb, or the nature of the disease, but the operation is an absurdity, as any person can readily comprehend if he only takes a little time and trouble to investigate into the nature of the complaint.

Warts on Cow's Teats.

EDITOR CANADA FARMER:—Can you or any of your correspondents inform me the best method for removing warts from cows' teats. I have a cow whose teats are completely covered with large, long warts, forming one solid mass.

D. B.

If the warts have well-defined necks, cut them off with scissors and touch the places with lunar caustic (nitrate of silver). Or, if horse-hair or silk thread be tied tightly around them, they will fall off in a few days. If without well defined necks, wet them and touch with lunar caustic. In a few days, cut off the dead, blackened parts, and touch again. If the places be sore after the warts are removed, moisten the surfaces with tincture of aloes and myrrh; and if ulceration set in, wash with a solution of sulphate of zinc of the strength of one drachm to a pint of water.

The presence of warts shows a disorganized state of the system. When the cause of them is removed, they will disappear of themselves. They may proceed either from a lack or a redundancy of vital force. Where warts are present in such numbers as our correspondent mentions, it will be best to try to obliterate them a few at a time.

Film on Eye of Colt—Veterinary Works.

EDITOR CANADA FARMER:—Will you give me the best method for removing film from the eye of a horse? And will you mention some of the best veterinary works.

Barkerville, B. C.

W. B.

A film on the eye, or opacity of the cornea, is due to effusion between the layers of that transparent membrane, the result of some injury to the eye, causing irritation and inflammation. Generally, when the inflammation subsides, the effusion gradually becomes absorbed; and its removal may be expedited by touching the eye every second day with an eye wash composed of—nitrate of silver, ten grains; distilled water, two ounces; to be applied by means of a small feather or camel's hair brush.

The best works on veterinary practice are Percival's, Williams', and Gamgee's. These are expensive works, ranging from \$15 to \$20. Among cheaper works are Blane's, Youatt on Veterinary Materia Medica, Finlay Dun's Materia Medica, Morton's Pharmacy, Dadd's Horse Doctor, and Dadd's Cattle Doctor.

Worms and Bots.

EDITOR CANADA FARMER:—Please state what you recommend to give to horses for worms and for bots. I have seen my horses pass both of them.

Ellerslie, Ont.

SUBSCRIBER.

Turpentine is a very good remedy for worms in horses, but must be cautiously administered. It may be given in doses of one and a half ounces, and should be mixed with five or six ounces of raw linseed oil, and the same quantity of tepid water. The drench should be well shaken immediately before given, as if the turpentine is not mixed with the other ingredients it is apt to injure the mouth and throat. Two doses may be given at an interval of two days, and, three days afterwards, administer an aloetic purge. It is also advantageous to change the food for a few days.

In cases where the animal seems debilitated, a course of tonics has a beneficial effect in restoring the system, and hereby causing the removal of worms.

The same remedies will sometimes expedite the removal of bots, but it is questionable if we possess any drug that will cause the removal of bots, at certain stages, without proving injurious to the horse, so firmly do these parasites hold on to the coats of the stomach. Bots are not very hurtful to horses, and do not cause so many complaints, etc., as is sometimes attributed to them.

Colt with Diseased Ear.

EDITOR CANADA FARMER:—I have a colt that has inside its ear a lump the size of a marble. It breaks and runs, and then heals up. Can you tell me what will take it away.

Angus, Ont.

A. T.

The colt appears to be affected with a fistula, due to some irritant. The parts should be well opened, and injected with a strong astringent. In all probability a cure cannot be effected without an operation, and we would recommend you to consult a qualified veterinary surgeon.

Mange in Pigs.

To a correspondent whose pigs were troubled with mange, the *Live Stock Journal* says:—

Mange is supposed by many to be merely a roughening of the skin, like chapping of the hands or face in human beings, arising from uncleanness, or some carelessness; but this is a mistake. It is caused by a minute parasitical insect known as *acarus*, under the skin, hence washing will not rid the insect, or cure the pig. This same disease attacks our domestic poultry, and is known as the "scab" leg, or "scurvy" leg, scales of large size forming on the legs and feet, these underlaid with a yellowish substance resembling corn meal.

In combating this disorder, cleanliness is first, for too much heating food, with scanty water, and a dirty pen, invite the insects. When an animal is suspected of having the mange, remove it from the rest, and commence by applying to the skin a mixture of flower of sulphur and fresh lard. If the animal be constipated, which often results from feverishness induced by the presence of the mite, give from a teaspoonful to a tablespoonful of the sulphur in a feed of slop. This will gently open the bowels, besides working through the pores of the skin, and as it does, will materially assist in destroying the parasites. A strong solution or decoction of tobacco juice is a very good remedy, but is not superior to the other. If the disease has been of very long standing, mercurial ointment is sometimes used; but as this is poisonous, we would not recommend its use. Where an animal has become imbecile to the influence of sulphur, I think it best to remove him from his suffering, unless he is very valuable; and very valuable ones rarely, if ever, get it, for they receive such good treatment, that they seldom or never contract it. As a preventive, the utmost cleanliness, and a free use of whitewash in the pens and yards, and proper feeding at regular intervals, are recommended.

Mange is infectious, and very soon spreads through the entire herd if the animal is not removed. Some claim it to be hereditary, but this is not proved.

DESTROYING LICE ON CATTLE.—To remove lice from cattle, make a salve of fresh lard ground up with fine sulphur (one ounce of sulphur to four ounces of lard), and raw linseed oil mixed with kerosene oil in the proportion of four parts of linseed to one of kerosene. These should be rubbed from between the ears all along the backbone to the root of the tail, about twice a week. Two applications are generally sufficient. They are not in any degree hurtful if they are rubbed on the cattle. Lice which have been placed in contact with a small quantity of either of these mixtures were immediately killed, while mercurial ointment and carbolic acid failed to kill them in several hours.