

Veterinary Department.

DISEASES OF THE HORSE'S FOOT.

Thrush.

Thrush is a very common disease and often seen in the hind feet. It consists in a discharge of a purulent matter, with a very offensive odour from the cleft of the frog. The discharge is the result of a diseased condition of the sub-cuticular covering of the frog, and particularly the cleft.

The great exciting causes are wet and filthy stables, or farm-yards, or any acrid moisture whatever. In the fore feet it is occasionally a sequence of sub-acute laminitis, and navicular disease.

In the treatment of this disease it is of the utmost importance that the foot be kept scrupulously clean, and the cause removed by placing the horse in a comfortable box or stall, all semi-detached pieces of horn should be carefully pared off, and the parts afterwards dressed with a solution of carbolic acid or chloride of zinc lotion. The dressings should be carefully applied to the bottom of the cleft. When it is necessary to work the horse, introduce into the cleft of the frog a pledget of tow saturated with Barbadoes tar, which should be renewed every second or third day.

Punctured wounds of the foot, as pricks, gathered nails, etc., are very common, and often attended with very serious results, which vary according to the parts injured. A foreign body may penetrate a considerable distance in the region of the frog without doing any great harm, but when coming in close contact with the coffin joint, acute inflammation is set up in that part, which is exceedingly difficult to subdue. In other cases, the body penetrates so deeply as to wound the bone, which is often followed by gangrene of the foot and limb, causing constitutional fever and death in a few days.

The symptoms of these injuries are in most cases well marked and severe. There is sudden lameness, which gradually increases. If the fore foot is the seat of the injury, the animal when standing points the foot and flexes the limb. In a short time there is great heat around the coronet; and in all cases the lameness is greatly increased when the horse is made to turn round—the weight being then thrown upon the injured foot. When the hind foot is affected, he takes a very long step with the injured foot, bringing the toe carefully and cautiously to the ground, a symptom at once shewing that the cause of lameness is situated low down. Whenever the foot is suspected as the seat of disease or injury, a further and more careful examination should be made by cleansing out the foot, when the offending body may be detected. In many cases, however, owing to the substance penetrating deeply, and becoming buried in the sole or frog, it is necessary to remove the shoe, and carefully cleanse the sole and frog with the drawing-knife, because in such cases without making a careful examination the nature of the injury may be overlooked, and irreparable injury the result.

The position in which an animal suffering from a severe puncture of the foot keeps the limb, is very apt to mislead the inexperienced as to the true seat of the disease. We have often met with cases where blisters had been applied to the hock and stifle when the poor animal was suffering from an injured foot. If the irritant remains for any length of time in the foot, extensive inflammation is produced, which speedily results in suppuration, and whenever matter forms within the foot, the pain is increased tenfold, and if it is not allowed to escape through an opening in the sole, it gradually extends upwards, a swelling appears on the coronet, which is hard and hot, and painful, soon however becoming softer, and speedily bursts discharging matter freely. Very extensive disease may arise from the foot being punctured without the body becoming lodged in the sole, when a very careful examination is required to detect the injury.

Punctured wounds of the foot although apparently trivial require careful and judicious treatment. In the first place, the source of irritation must be removed. In recent cases it may not be necessary to pare out the foot, but it is generally advisable,

immediately after removing the irritant, to cleanse the parts thoroughly and apply a pledget of tow saturated with tincture of benzoin or carbolic lotion, with the view of preventing dirt or moisture getting into the wound. If the pain and lameness disappears in the course of one or two days there is little danger to be apprehended, but if the pain continues or increases, the shoe should be removed, and the foot enveloped in a poultice of bran, turnips, or linseed meal, and when matter is suspected to have formed, the sole must be carefully cut down, and the matter allowed a free means of escape. The foot should then be immersed for an hour in a pailful of warm water, and afterwards poulticed. In some instances proud-flesh appears, which must be reduced by a mild caustic. In all cases where the irritation and fever is great, the horse should be given a moderate dose of purgative medicine, and the general comfort of the patient be well attended to, by placing him in a well littered box or stall. In severe and tedious cases, if the horse does not lie down, it may be necessary to use slings, which is especially the case when the hind foot is affected, as the whole weight of the animal being unduly thrown upon the sound foot extensive disease may ensue, and it not unfrequently happens that ringbone and laminitis results from that cause. Whenever the acute symptoms are relieved, a shoe may be applied and the sole protected by a leather sole, with a padding of tow and tar.

Ticks on Sheep.

I find that many small flock-owners are complaining of the presence of ticks on their sheep. It is usually the case that ticks are more prevalent in small flocks than in large ones, owing to the fact that owners of large flocks take pains to dip the lambs in a decoction of tobacco, two or three weeks after the flocks are shorn. But when only fifteen to twenty-five lambs are raised, the trouble of dipping the lambs seems out of proportion to the size of the flock, and as a consequence, the ticks have a free run. Ticks can be killed in cold weather, but it takes some time and patience to do it without injuring the health of the sheep. At the same time it is necessary for the health of the sheep that the ticks should be killed before the wool begins to start in spots, or the animals become so reduced in flesh that they become liable to succumb to the change from hay to grass in the spring. There is no excuse, really, for the great loss of wool and of sheep from the presence of these voracious parasites.

One common remedy for use in cold weather is good snuff. If the wool is opened in spots along the back, shoulders, belly and sack, and a very small pinch of snuff is put in with the thumb and finger, in contact with the skin, most of the ticks will get killed in a few days. Particular attention should be paid to the neck and shoulders in using this remedy. The principal objection to snuff is, that the wool remains more or less discolored until shearing time. Besides this a few ticks usually escape—enough to infect the flock for another year.

Another remedy is mercurial ointment (*unguentum hydrargyri*) mixed with hog's lard—one part of the ointment by weight, to eight parts of lard. This mixture is to be applied in the same way as directed for snuff, using in each spot only just as little as will adhere to the tip of the forefinger. After using mercurial ointment, the sheep must be rigidly protected from cold winds and from getting wet for at least four weeks. Half an ounce of the mixture will usually be sufficient to go over an ordinary-sized lamb, and if the ointment was of full strength, every tick will soon disappear. The remedy is usually thorough, but dangerous, unless special care is taken of the flock.

There is another remedy which I once saw used by a neighbor, an Englishman. He made a strong decoction of tobacco, and put arsenic into the liquor at the rate of a pound to one hundred sheep; this was poured along the back and sides of the sheep, the wool being opened by an attendant, an old coffee pot being used for convenience and economy in pouring. The remedy was used primarily to cure the scab, which disease was not only permanently cured in the flock, but every tick was killed at the same time.

Either of the above remedies can be used in cold weather, due care being taken to protect the flock from cold or wet storms; and they will save ten times their cost in improvement of condition of flocks, or in fodder saved. If any reader of the *Journal* has his sheep infected with ticks, the time to kill them is now.—*Eric, in Live Stock Journal.*

Entomological Department.

Insects at Fairs.

If there is any one branch of natural science of which the cultivators of the soil are more destitute of knowledge on than another, it is that of Entomology. We doubt if one man in a hundred knows that the white grub which works such sad devastation to meadows and gardens, and the common large May Beetle which flies into our rooms during the early part of the summer, is one and the same insect, only in different stages of existence; and the same rule will hold good all through the catalogue of our injurious and beneficial insects. We have had books written in goodly number which give valuable and interesting information in regard to the habits of our common insects, but they are necessarily expensive, and very few persons will buy and read them, even if they are able to, and have leisure for study. We must devise some other method of attracting the attention to the subject of insect life. We do not know a better plan than to offer prizes for insects to be shown at every town, county and state fair. If young persons could once see even a small collection of insects correctly named, it would attract their attention, and we should soon have hundreds and thousands of observers in this great and almost unexplored field of science. A few men, here and there, are doing an immense amount of work in this field, but their labors are not appreciated, owing to the ignorance of the masses. Three States of the forty do pretend to pay an Entomologist a small sum to make a meagre annual report or talk to those who will listen to what they have to say on this all-important subject. We say "all-important," because millions of dollars' worth of grains, fruits and vegetables are annually destroyed by insects, and a greater part might be saved if the masses knew anything of the life about them, as seen in the insect world.

Agricultural and horticultural societies are now, or soon will be, making up their lists of premiums for the coming season of fairs, and we hope their officers who have this department in charge will see that liberal premiums are offered for collections of insects. Let this thing once be fairly begun and we will soon see splendid exhibitions of entomological specimens, and our ladies and gentlemen will not be calling every little fly, beetle, grasshopper or spider a "bug"—*Rural New Yorker.*

The Radish Bug.

This insect *Nysius raphanus*, has not hitherto been described; the reason, we suppose, is that it has not hitherto attracted the notice of farmers and gardeners as a destructive insect. We have noticed it this season, for the first, attacking radishes, mustards and lettuce; some have noticed it on cabbage, others on grapevines, and in Kansas it is doing great damage to the potato crop, and we are informed that a very similar, if not the same species, attacks corn to an alarming extent; but, as we have not as yet seen the species from corn, we cannot say that they are identical, but suppose that they are. It seems to be almost a general feeder, as it is not confined to any particular order of plants for its food, though in this locality it seems to confine its ravages mostly to *CRTICIFERÆ*. They will congregate on the plant as long as there is room for one of them and continue sucking the life-supporting juices, which soon causes the plant to wilt and die. They are very active, and, when disturbed, swarm like so many gnats, which they more resemble, when flying, than any thing else. In the morning, while the dew is on the plants, they are found concealed in the shrivelled up leaves, and are rather sluggish; and by plucking them and putting them into an old tin pail, with live coals of fire at the bottom, many of them may be destroyed. Lime has been tried to a slight extent, but seemingly without effect. We have not discovered either the eggs or the young, yet, like their cousin the chinch bug, wet weather is unfavorable to their production, and after a heavy rain it will be difficult to find many of them for several days. We give herewith the first description of this insect, to our knowledge, that has been written. The specific name, *raphanus*, was given it from its food plant, the radish, upon which we first noticed it. It belongs to the sub-order *Heteroptera*; and, like most insects of that order, is not by any means destitute of that unpleasant "bed buggy" smell. We hope by the end of the season to be able to procure the eggs and young, and to be able to write a more complete history.—*Wm. R. Howard, Forsyth, Mo., in Canadian Entomologist.*