

Veterinary.

Disease of the Organs of Respiration in the Horse—Catarrhal Fever and Sore Throat.

During the past month or six weeks, the horses of Canada have again been affected with a mild catarrh and sore throat, somewhat similar in character to the disease which originated in the district of Toronto, and very soon spread over the Northern Continent, in the fall of 1872.

The disease at that time created a great deal of excitement and alarm, and owing to the severity of the attack in many cities, a great deal of inconvenience and loss was sustained from many horses being unable for work.

The disease in question was then generally known as catarrhal fever of an epizootic character, and was technically designated "The Epizootic." This season the same name has usually been applied to it. The present outbreak has generally proved of a very mild character, and when horses have been moderately worked and otherwise well cared for, they have suffered but little.

The exciting cause of the malady is no doubt atmospheric influences. In the beginning of September, the temperature was extremely variable, and at that time the respiratory organs of the horse are exceedingly liable to become affected by sudden changes in the weather. The disease appears suddenly, and one of the first noticeable symptoms is a dry husky cough, easily excited by pressure upon the throat, or when the horse comes out of the stable. The pulse is quickened and weak, the coat dry and staring, the appetite more or less affected. In the course of twenty-four hours, a slight watery discharge comes from the nostrils, which discharge gradually increases. The lining membrane of the nose is reddened, the breathing is very slightly increased, and the temperature of the extremities is somewhat changeable. In more severe cases, rigors or chills are noticed, more especially after drinking. And, now and then, when animals are greatly exposed and abused, the lungs become involved, when the characteristic symptoms of lungs diseased are specially developed. The breathing then becomes very much quickened and oppressed, the pulse is quick and also oppressed, the ears and limbs are cold, and the mouth hot and clammy. A quickened movement of the flank can be easily perceived, the appetite fails and the horse generally returns to the standing position.

The prevailing epizootic is easily treated, the horse may be kept at his usual work, if not too hard. He should not be allowed to stand for any length of time exposed to cold or draughts. He should be allowed, once or twice a day, some cooked food, such as boiled oats or barley with bran. If there is much discharge from the nostrils, the nostrils should be sponged frequently with tepid water, but steaming the head should not be resorted to. Stimulate the throat externally with mustard or any mild embrocation, and give a few doses of chlorate of potash.

A termination of the prevailing disease has been what is technically termed *purpura hemorrhagica*, when the limbs begin to swell to a great extent, the breathing becomes greatly increased and little red patches appear on the mucous membrane of the nose. The lips also swell, and the swelling soon extends to the nostrils and head. A bloody discharge issues from the nostrils, the swelling of the limbs continues and not unfrequently a swelling appears under the breast and belly and along the neck. It is with the greatest difficulty the poor sufferer can be made to move. Matter will also exude from the heels and hocks, and the nostrils swell to such an extent as to seriously interfere with respiration. When it assumes this condition the animal becomes a pitiable looking object.

CLACKING AND OVERREACHING IN HORSES.—I have found a most effectual mode of treatment, viz: to shorten the toe of the hind shoe and raise the heels of the hind shoes to nearly an inch. This takes the ground sooner in the horse's stride and consequently brings the toe to the ground before it reaches the forefoot. To prevent the weight being increased, the extreme heel of the shoe may be reduced to half the usual width and eased with steel to prevent its wearing too rapidly. The front shoes will require no alteration.—J. F. W., Exeter, England.

Malignant Anthrax.

As this disease is raging so near us as New York State, the following particulars about it, from Clater's "Cattle Doctor," will be read with interest:—

CARBUNCULAR ERYSIPELAS (*Erysipelas carbunculorum*), *Anthrax of the Extremities*: known in the vernacular as *Black Quarter*, *Quarter-Evil*, *Quarter-III*, *Joint-III*, *Black Leg*, *Speed*, *Hasty*, *Puck*, *Shewt or Shoot of Blood*, *Inflammatory Fever of Youatt*; *Mitbrand emphysem of the Germans*; *Charbon of the French*.

This disease is called by a great number of other names; but as they all indicate the same disorder, it would be of no advantage to the reader here to repeat them.

The symptoms are in many respects similar to those of the murrain or pestilential fever, described in page 133. It is, however, highly necessary to discuss this malady in a separate section, as it does not appear to be either infectious or epidemic, but is almost wholly confined to young cattle from one to two years old. The quarter-evil chiefly affects such as are in the best condition. Milch cows, or lean cattle of all descriptions, are seldom seized with this disease, and during the winter it is not known. The summer season is the time when it makes its appearance, and very often proves destructive to great numbers of young cattle in different parts of the Kingdom. When the vegetable creation springs up in all its perfection, the young animals are not able to stand against such luxurious living, particularly those which have been much reduced by bad keeping and scanty food during a long and severe winter.

The cause proceeds from a redundancy or overflowing of the blood, which is very great, and frequently occasions them to drop and die suddenly in a state of putrefaction.

The symptoms are a sudden depression of the whole animal frame, as if seized or struck with the palsy. A swelling takes place immediately in some part of the body, as on the legs, shoulders, under the belly, or on some part of the back; when it is on this last part toward the loins, it will be attended with the most danger. It is first discovered by the crackling noise made by the swelling when the hand is pressed upon it, and owing to a quantity of air being collected between the skin and flesh. The mouth and tongue are full of blisters from the violence of the fever.

Carbuncular erysipelas is very common among calves throughout Britain. It is the "Black Spauld" of young sheep. It rarely appears in animals of mature age, the system being then proof against the morbid conditions which produce anthrax.

Nature. Extensive sub-cutaneous extravasation, as well as general infiltration of blood and lymph beneath the skin, &c., and ecchymosis as a result of blood poison.

Symptoms. All the forms of anthrax are remarkable for the paucity of premonitory signs, except as far as the condition of plethora is concerned. Usually, the first intimation is the discovery of one or more dead carcasses in early morning. When opportunities for observation occur, the signs are as follows: Costiveness, frequently attended with bloody stools (*proctorrhoea*); deficient and highly-colored urine, slight excitement, protruding eyes, and injected visible membranes; hot mouth, slight frequency and fullness of the pulse, and accelerated respiration. These constitute the *first stage*, and are seldom noticed.

Second stage. Lameness or stiffness is now added to the previous signs. Respiration and circulation are notably disturbed, the pulse being full and rapid. The head and neck are protruded, eyes bloodshot, appetite lost, intense thirst, urine darker in color, and the creature stands gloomily away from all his companions. Lameness increases every hour; other signs also rapidly suffer aggravation, and the animal utters low moans, particularly when disturbed. Diffused emphysematous swellings (containing air) appear upon the sides, quarters or extremities, which crepitate, or crackle like tissue paper, when the hands are pressed over them.

Third stage.—The power of standing is lost, breathing difficult, pulse small, feeble, or imperceptible; swellings have increased, and the sufferer lies upon one side with outstretched neck, stomach painfully distended with gas (*Hoven*), tongue protruded, eyeballs retracted and covered by the jaw (*membrana nictitans*). The ears, horns and extremities are cold, and insensibility (*coma*) and death speedily follow, the whole train of symptoms frequently terminating within twelve hours.

In protracted cases the animal continues for several days, when opportunity is thus given for the swollen parts to slough extensively, and smaller spots to appear on the tongue, buccal and other membranes, which at first form apparent blisters, and afterwards slough, exhibiting very tardy healing powers.

Post-mortem Appearances.—Emphysema (air) in all available spaces, as beneath the skin and membranes, between muscles and in all closed cavities, as a result of early and rapid putrefaction, by which the abdomen is greatly distended. Black exudations of blood form extensive patches, which may be confined to one limb or quarter. Similar exudation also occurs between muscles which are more or less gangrenous, and the vessels of the locality in a state of extreme turgescence; the blood, however, being dark and fluid. The lungs are congested, one, the lower, being always the worst; frothy mucus

always fills the bronchial tubes, extensive ecchymosis covers the serous membranes, and free transudation occurs beneath this covering in many organs; the heart is soft, flabby, and filled with blood that is black and semi-fluid, and numerous blood-stains are seen, formerly believed to be an evidence of inflammation. Cadaveric rigidity is slight, and observed only immediately after death.

Treatment.—The great secret in diseases of this kind is to limit or destroy the power of the operating cause. Every possible precaution cannot be too strictly adhered to in preventing so destructive a disease among young cattle, for, if once attacked, their cure may be doubtful. Such as thrive most are in general first attacked, and in the greatest danger. As soon as this disease makes its appearance upon any one of the herd, while in the pasture, let them all be brought out in the evening into a fold-yard, when from two to three quarts of blood may be taken from each, according to its size, condition and strength. Let them be kept there till next morning, and then give to each beast one of the following drinks:

Take of crude antimony in powder..... ½ oz.
Brown sugar candy, and nitre in powder, of each..... 1 "
Myrrh, in powder..... 1 "
Flowers of sulphur..... 2 "

Mix for one drink. This drink must be given fasting in the morning, in a quart of warm gruel; two hours after the beasts may be turned into the pasture. Or the following may be given, if thought more proper:

Take of nitre and madder, of each in powder..... 1 oz.
Alum in powder and flowers of sulphur, of each..... 2 "
Treacle, table-spoonfuls..... 4

Mix for one drink. This must be given in a quart of warm gruel and a wineglassful of common gin added to it. Two or three of these drinks, with bleeding, are in general deemed sufficient to protect them against the future approach of this disease, if given every third morning. By adhering to the treatment laid down as above, the disease may not only be cured, but its ravages may also be prevented.

THE EPIZOOTIC.—This is what Adirondack Murray recommends as treatment for horses that have the epizootic influenza. The best remedy for the epizootic is to feed the horse with soft food, blanket warmly, bandage his legs loosely, give him two or three table-spoonfuls of ginger in his feed morning and night, and keep the horse doctor of the neighborhood at least half a mile off. If your horse dies under such treatment send the bill to us, and we will think it over!

BLOAT OR HOVEN.—Solutions of ammonia are commonly administered in France as a remedy against distension among ruminants. The accident is most prevalent during the season of young and succulent forage. The difficulty hitherto has been to enable the ammonia to reach at once the paunch, and so combining with the carbonic acid gas, the hoven, reduce the distension. M. Salles has patented a trocar, having at the end an India-rubber ball filled with the solution and communicating with the trocar by means of a cock; when the trocar is inserted in that part of the animal formed by the turgid and abdomen, the ball is pressed, the liquid enters the stomach, and the inflation at once disappears; the gas can even be let off by the trocar. The animal has only to be kept on a low diet for a few days till the little wound heals.

REMOVING THE TAIL. Mr. McCormick's colt has a habit of rubbing the tail. What will stop it? "Soap and water," he says, "are useless." He probably suffers from worms. Clear out the bowels by giving a pint of raw linseed oil, with an ounce of oil of turpentine (half the above for a two-year-old, or one-quarter for a yearling), and follow this up by giving every morning fasting two drams sulphate of iron, two drams santonium, and five grains arsenious acid for six days. Follow this again by a dose of oil. It should be added that it is often impossible to rid a horse of the most common species of the pin-worm, as the immature worms inhabit small sacs in the mucous membrane and even the interior of the blood vessels. The symptoms therefore may re-appear and require renewed treatment a short time after the intestines have been cleared. —*New York Tribune.*

THRUSH.—The present stoppage of thrush is seldom difficult, but to prevent its recurrence is not so easy always, for the part, having once taken on this morbid action, easily falls into it again. Almost all active astringents will check the suppurative action of the vascular frog, as cold saturated solutions of white, green, or blue vitriol, alum, common salt, &c. A mixture composed of one part finely powdered white vitriol (sulphate of zinc), with four parts of pine tar, is one of the best applications we know of. Before the introduction of this preparation, the frog should be carefully inspected, and all decayed parts removed, so that the introduction of the mixture may be facilitated, and the dispositions to harbour filth and moisture prevented. The whole frog may then be smeared over with the mixture, but more particularly a small piece of tow should be charged with it, and, by means of a small wooden spatula, pressed to the bottom of the cleft of the frog, and also every other fissure that may exist. The dressing should be repeated about twice a week.