

Veterinary Department.

Nasal Gleet in Horses.

In a former number we mentioned that one of the causes of Nasal Gleet was neglected or improperly treated catarrh, or cold in the head. This affection may also be the result of injury, directly or indirectly, to either the frontal or maxillary bones; and perhaps the most common indirect cause is disease or injury of the molar or grinding teeth. It often happens that the teeth become uneven on their grinding or table surface, and this uneven motion sets up disease in the roots or fangs, which ultimately extends to the alveolar processes, and the bone becomes carious. When this occurs in the upper jaw, there is a bulging of the frontal or maxillary sinus; this symptom is soon followed by a discharge from the nose of a thick glairy matter, having a very offensive foetid smell, plainly telling that the bones are diseased. In these cases the horse experiences considerable difficulty in masticating his food, and he soon loses condition. In all such cases the mouth should be carefully examined, when the remote cause will generally be found. We recollect one case, where the second molar in the upper jaw had become diseased, the surrounding bone also became implicated, and finally the tooth wrought its way into the frontal sinus; and when that sinus was opened, therein was found the missing tooth. In all cases of Nasal Gleet, when of long standing, and the sinuses much diseased, a cure cannot be effected without an operation, as those sinuses, owing to their situation, cannot be injected by the nostrils. An opening should be made where the bone is bulging, and this is best done by means of an instrument called a trephine, which removes a piece of bone about the size of a shilling. After opening, inject the sinuses twice a day, with tepid water, and a weak solution of the sulphate of zinc; also feed the horse liberally on boiled oats, barley, and, if in summer, cut green food. Tonics should also be given, as some of the preparations of iron or of copper; and this treatment must be persevered in for some time. When the tooth is diseased, it is also necessary to remove it; and this is most easily accomplished by means of a large tooth key. In mild cases of nasal gleet, when the result of catarrh, a cure may be effected by means of tonics, &c., and a generous diet, together with regular and gentle exercise. In some cases the lymphatic glands under the neck enlarge very much, and occasionally run on to suppuration, and it may be necessary to open them freely. When the enlargement is more of a callous nature, either Iodine, or the Biniodide of Mercury Ointment may be used.

The following is an account of nasal gleet which appeared in the *North British Agriculturist* lately, written by Professor Varnell, of the London Veterinary College:

"The affection is characterized by the discharge of a thin greyish matter, chiefly water (hence the term), from one or both nostrils—very likely only one; the visible mucous membrane of the nasal passages will have a pale, slate-coloured, soddened appearance, and the pulse will, as a rule, be weak and fewer in number than natural. The discharge is usually more copious at one time than another, but it seldom ceases altogether.

"CHARACTER OF THE DISCHARGE.—In these particular cases the discharge from the nostrils will be thin; and, as before stated, it will be of a light greyish colour, and, if not of very long standing, free from fetor. But, if, on the other hand, the matter should have been long retained in the sinuses, it may have changed its colour, and also have become offensive to the smell. If there is much discharge coming from the nasal mucous membrane, it will possess a tenacious sticky character, which is not the nature of that issuing from the sinuses only.

"I have previously explained why the matter contained in the sinuses cannot wholly escape, and why, when they are nearly full, the small opening leading to the nasal passage would become still further diminished, or even altogether closed, thus prohibiting its

escape, except, perhaps, under some peculiar position of the horse's head.

"TREATMENT.—The pathology of the disease under consideration suggests the treatment best calculated for its cure. Speaking generally, the management of such cases should consist in improving the health and tone of the system of the horse, and in evacuating the sinuses of their contents.

"To accomplish these objects, the horse should be removed from all depressing influences, and placed in a cool but comfortable stable. For a time at least his food should be soft but nutritious; he should daily take some sulphate of iron and gentian in his food, and his kidneys should be occasionally excited by small doses of nitrate of potash.

"This treatment may be continued for a week, or even longer, before the sinuses of the head are opened; the object being to improve the horse's health before the operation is performed, which is a consideration; after which, and the cavities having been washed out as above suggested, the horse should continue to have a fair allowance of soft nutritious food, and his tonic medicine should be continued. If a tendency exists for the sinuses to refill again, it may be advisable to wash them out again, and to inject them with some astringent lotion, such as weak alum-and-water, or a solution of tannin, or in some instances a weak solution of sulphate of copper."

TREATMENT OF RINGBONE.—We have received from a subscriber in Bayfield the following account of a most absurd treatment of so-called ringbone:—"A two year old colt, late last fall, received some injury to the off hind fetlock joint, from which it went a little lame. This spring, a man who professes to cure ringbone pronounced it affected with that disease, and undertook to cure it as follows. He made an incision where the tuft of hair is, above the pastern joint, and took out a small sac or bag, about the size of a hickory nut, and gave me something in a bottle to rub on it. Now, what I want to know is this, if it be ringbone, was the treatment he followed correct or not?"

Ans.—We have often noticed in previous numbers that a useless and barbarous operation is often practised on horses for the cure of ringbone. We have no hesitation in saying that the treatment your colt has received is not only absurd, but highly injurious. Ringbone is a disease of the osseous structure, and should be treated with rest and soothing applications until the acute inflammatory action is somewhat abated, when repeated blisters should be applied. As a general rule, when ringbone is not producing lameness, it is much better to leave it alone than have recourse to any treatment whatever.

WEAKNESS AND TREMBLING IN LAMBS.—A subscriber writing from Columbus, says:—"A neighbor of mine, this season, had a number of lambs that shook and trembled as if they had the palsy when they were dropped, and they are now a month old and they still continue to shake. Their dams are in tolerably good condition, having been fed on pea straw and turnips. Any information as to the cause or treatment of this affection will oblige the writer."

Ans.—We would recommend the ewes to have a complete change of food; many of the ailments of lambs come from the quality of the mother's milk.

Entomology.

The Squash Bug.

Most persons who cultivate that rather popular vegetable, the squash, have no doubt sometimes observed several of the leaves to be strangely withered, and on looking for the cause, have been greeted with the sight of a number of disgusting blackish bugs, of all sizes, from tiny little baby-bugs to big patriarchs more than half an inch long, all crowded together on the under side of a leaf.

The scientific name of this insect is *Coreus tristis*. De Geer—"the sad squash-bug," so called probably from its dull, sombre colour. The full-grown insects that manage to survive the perils to which their lives are exposed during the summer, retire into winter quarters on the approach of cold weather, and conceal themselves in some chink or hole where they can escape the full rigour of the frost. When warm weather returns in May they issue forth to seek their

mates, and as soon as the squash vine has put forth its first few leaves, they take shelter under them and lay their eggs, that will produce the future destroyers. This takes place late in June, or even in July if the season is backward, but the eggs are soon hatched, and from them emerge the little bugs, very like their parents, only rounder and shorter, and rather paler in colour. Each is furnished with a long slender beak or sucker, with which it punctures the leaves and draws up the sap, causing the former to shrink up and wither away, to the great injury, of course, of the plant.

True bugs—that is, members of the order *Hemiptera*—like all other insects, have their three grand stages of existence, but, unlike the others, they vary so little at the different periods of their lives that it is difficult at first sight to say when the larval state ends and the imago begins. The young look like walking scales at first, but every now and then they throw off their skins, and assume new ones, making each time a perceptible advance to the winged perfect state. The young squash-bugs are ash-coloured at first, and have large flattish antennae; by degrees they become darker above and paler beneath, and change from their rounded form to an oblong oval, the head being almost triangular. As the eggs are laid at intervals, fresh broods keep coming out all summer, and thus specimens of all ages and sizes are generally found together on the same vine.

The best mode of preventing their ravages is to pick off and burn the leaves on which they are collected, or shake off the insects and crush them under foot. It is well also to examine carefully the under side of all the leaves of an affected vine, and destroy any eggs that may be found attached to them. Hot water, we should think, might be applied to the bugs with good effect. The use of liquid manure and cultivation in a good rich soil is recommended, for when the plants attain a vigorous growth, the loss of sap occasioned by these insects is not so much felt.

We are not aware that the squash-bug is ever injurious to other plants; we discovered a large specimen the other day, however, crawling over a grape vine that is in leaf under glass. It may have merely been brought out of its winter quarters by the continuous warmth of theinery, and not have been present with any evil intent; but whatever may have been his motives, innocent or not as far as the grapes were concerned, he had to pay for his intrusion with his life. Should any of our readers have observed this bug on any other plant besides the squash, we shall be glad of some information on the subject.

The Apiary.

More About the Queen Bee.

GENERALLY within five or six days after emerging from the cell, the queen leaves the hive for a meeting with the drone, which takes place on the wing, and usually high in the air. She commonly leaves the hive between the hours of twelve and three o'clock, p.m., when the drones are on the wing. If she does not meet with the drone she returns to the hive, and in a short time goes out again: this she continues to do every day until she mates with a drone and becomes impregnated, when she returns to the hive, to leave it no more until she goes off with a swarm. Having mated with a drone, she becomes impregnated for life, and under favourable circumstances commences to lay within forty-eight hours. In some cases it may be much longer, extending to five, six, or even ten days; such cases, however, are rare. Another peculiar characteristic of the queen is, that if she does not meet with the drone within the first twenty-one days of her existence, she becomes incapable of being impregnated, and hence never makes anything more than a drone-laying queen. We here see the wisdom of the Creator in the provision of so many drones. The chances of the queen to be destroyed are numerous, the time for impregnation short, hence the necessity of her meeting with the drone as soon as possible, that she may retire to the hive, where the chances for her destruction are greatly lessened. An unimpregnated queen may easily be known by her slim, tapering abdomen, shy and rapid move-