

HORSES.

Diseases Resulting from Wounds.

(Continued.)

TETANUS.

Tetanus, commonly called lockjaw, is not infrequently seen as a result of wounds or operations. It may result from a very trivial injury, as a saddle or harness gall, cracked heels, etc., but is more apt to follow punctured wounds, and frequently occurs as a result of punctured foot. The operations which are most commonly followed by tetanus are docking, castration, operations for hernia, the insertion of setons, and it has been known to follow blisters. The disease is due to a germ which gains access to the circulation through the raw surfaces caused by injuries or operations. It may be described as a powerful and painful spasm of the voluntary muscles, which is long-continued and uncontrollable. The spasm of the muscles is that of rigid contraction, of a constant and non-intermitting character. There are several varieties of the disease, according to the muscles principally involved, and the word tetanus is used to denote it generally. When the muscles of mastication alone are involved it is called trismus, or lockjaw. When it chiefly affects the superior muscles of the neck and back, it causes an elevation of the head and a downward curvature of the spine, and is called opisthotonos. When the muscles of one side only are affected it causes a curvature of the body, drawing the head and hind quarter of the side affected towards each other, and is called tetanus lateralis or pleurosthotonos. The first two forms mentioned are those usually met with in horses, and we notice that, while the spasms involve some particular set of muscles more severely, all the voluntary muscles of the body are usually affected to a greater or less degree.

Symptoms.—The symptoms of tetanus appear in a variable period after an injury or operation, but usually in 8 to 12 days. There will be noticed a general stiffness and rigidity; the animal moves with difficulty, the head protruded and the tail usually elevated; the eye has a wild, excited, nervous expression; he will usually champ his jaws and sometimes grind his teeth, and there is often a flow of saliva from the mouth. The breathing becomes accelerated and the nostrils dilated, the eyes withdrawn within the orbits, which causes the accessory eyelid that is lodged in the inner angle of the orbit, and is called the membrane nictitans, to be pushed more or less over the eye. If the patient be suddenly disturbed, as by a slap of the hand on the neck, he becomes greatly excited, the membrane nictitans shoots suddenly over the eye, the head more protruded, the tail suddenly elevated, and the superficial muscles, especially those principally involved, become very hard and tense. The pulse is at first not much altered, but in the course of two or three days it becomes frequent and hard. The progress of the disease is usually somewhat slow, and a horse will sometimes continue to work for a few days after the first symptoms, but the symptoms gradually (sometimes quickly) become more marked, and when the spasms become general the position of the body will be regulated by the action of the most powerful muscles affected. The jaws usually become more or less firmly set, in some cases it being impossible to separate the incisor teeth sufficiently to introduce a fifty-cent piece; in other cases slight motion of the jaws remain. The limbs are extended, and difficult to move. The action of the bowels is checked, and urination is difficult. A husky cough is usually noticed when the patient attempts to swallow, which act is performed with a difficulty which gradually increases. The muscles of the abdomen are rigid, the belly looks small and hard, and breathing is performed with difficulty. Although the spasm is continued, its severity varies. Excitement, meddling attendance, strong light, noises, etc., causes paroxysms of great severity. In a modified light, when the animal is kept quiet, the spasms are usually diminished. In severe cases the symptoms continue to increase, until the animal can no longer keep his feet, he falls, and is unable to rise, and will struggle violently, and apparently suffer great pain until death ends the scene.

Treatment.—If the jaws become firmly locked there is little hope of recovery, but if even a slight motion remains which enables the patient to drink or suck fluids, recovery may take place under proper treatment. As it is a nervous disease, he must be kept as quiet as possible. If unable to stand, he should be placed in slings in a quiet, cool and dimly-lighted apartment, removed from all noise and excitement. If possible, a purgative should be given by the mouth, but where this cannot be done the bowels should be acted upon by the hypodermic injection of 1 to 1½ grams of eserine. If he can eat, he should be given sloppy food, with about 20 drops Scheel's strength of prussic acid, three times daily, but attempts to drench him should not be made, as the excitement defeats all benefit that may be

derived from medicines. The most successful treatment has probably been the hypodermic injection of about a dram of equal parts carbolic acid and glycerine three times daily. When recovery is about to take place, the symptoms gradually disappear; the jaws become relaxed and the nervousness decreases. It usually takes from six weeks to three months for a complete recovery to take place. When the case is going to prove fatal, the symptoms increase in severity despite treatment, and a few days usually ends the scene after the severe symptoms are noticed. It must be borne in mind that in the treatment of tetanus quietude is probably of more value than medicinal treatment, hence none but the attendant should come near the patient, unless a veterinarian be in attendance. Many drugs are recommended and have been tried, but the above treatment has probably given the best results.

"WHIP."

Precautions in Buying a Horse.

Dr. A. S. Alexander, of the Wisconsin Experiment Station, believes that the selection of a horse is usually not given the serious consideration that the matter deserves, and offers some suggestions as follows:

There are said to be tricks in the horse-dealing business, but whether that be true or not, it is certainly important for the would-be purchaser to understand what he wants, what the work to be done requires, and what constitutes a sound, serviceable horse for the place to be filled. It is also absolutely necessary to consider every horse unsound until proved the contrary, no matter from whom he is to be purchased. Friends and relatives, when it comes to a horse deal, are

For the first few steps the hind legs will be jerked higher than normal, but when he is trotted, or even walked, there may not be a trace of this unsoundness to be seen, except, possibly, when he is suddenly turned.

After the "at rest" examination, he should be placed on a level floor. Watch him for a few minutes, and if he is sore-footed, the foot that causes pain will be stuck out in front of him, or the hind feet will be eased, turn about, persistently. Walk around him and form a general idea of his shape and quality, and suitability in size, weight and bone.

If all these things are satisfactory, next have him walked and trotted, and note his gait, with any departures from normal, free, open or sound action.

If he stands these tests, the serious examination commences, and this must be a most critical one if the price asked indicates a valuable animal and absolutely sound. If a cheap horse, and only sold "serviceably sound," the examination need only be for wind and lameness, and then a search for anything that will be likely to make him useless, either temporarily, during busy seasons, or permanently, at once or in the near future.

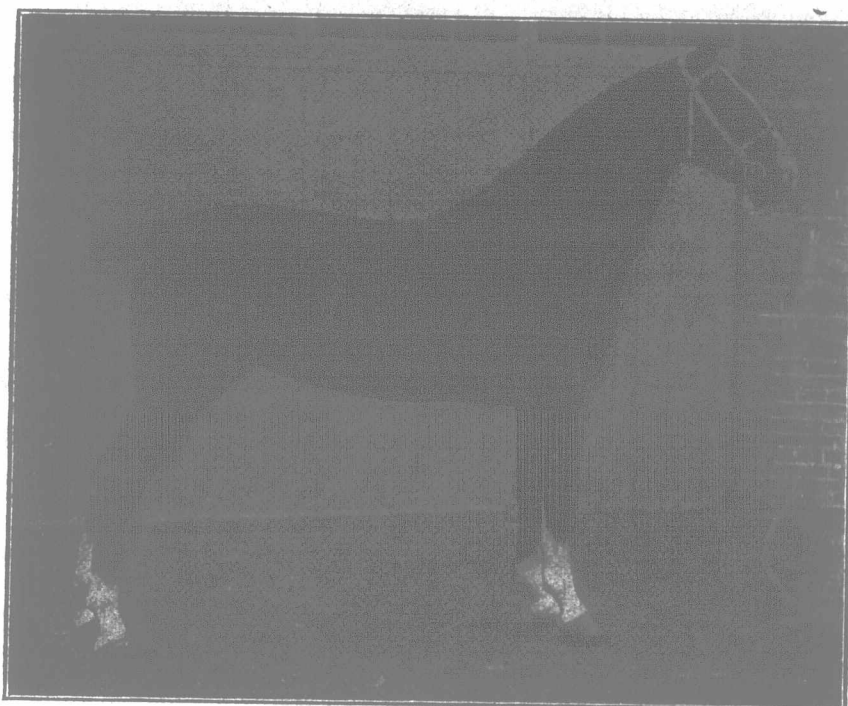
Commence at the head and examine the teeth for age; parrot mouth, which makes a horse unable to graze; diseased molars, which are indicated by foul odor; discharge from the nostrils or a wad of food in the cheek; injured bars where the bit presses on the floor of the mouth; lacerated tongue, or ulcerated tongue and gums. Glance at the nostrils for discharge, red spots, ulcers or tumors in the false nostril. Now test the sight by slightly lifting the hand, as if to strike the eye, which will make him wink if he can see. Look at the eye and the lids. Where a horse has had several attacks of periodic ophthalmia (moon blindness) the lids will be wrinkled, and a bluish tinge appear over the eye, or irregularity of the contour of the cornea, while white spots may tell of cataract or merely of injuries that have not affected the eyesight. Examine the bones of the lower jaw for departures from normal, also those of the face under the eyes for enlargements, possibly showing disease of molar teeth or chronic catarrh.

Abscesses under the jaw will be easily found, if present, and indicate "strangles" in quite young horses, but are suspicious in old ones, indicating diseased molar teeth, and possibly something worse. The hand is run over the poll, where "poll evil" is located, under the mane for skin disease, along the jugular groove and at the throatlatch for abnormalities. Then the with-

ers are examined for "fistula" or sores, and the shoulder for sweeny, collar boils or fibroid tumors, and the elbow for shoe boil. The fore limb is next examined carefully for broken knees, splints, bowed tendons, grease or scratches, and any other things that depart from sound condition. The foot has to be examined very carefully for departures from good shape, founder, thrush, corns, quarter-cracks, quittor, sand crack, ringbones, sidebones and nail-prick or stonebruise.

Never accept a horse with leather sole on foot. Have him unshod before deciding that there is nothing wrong. This applies to fore and hind feet, and, as a general rule, it is safest to have the shoes removed where the horse is valuable. The body is next looked at carefully for ruptures, sore back, weak back, sagged back, and washy coupling. The state of the scrotum is to be looked to in geldings, and the udder in mares. Lift the tail to see if it is strong, not false, and not newly docked or affected with melanosis tumors in white animals. At the same time the anus is inspected, and the vulva in mares. Paralysis of the anus is not uncommon, and lacerations of the perineum in mares constitute a "gil flirt." The hind limb is next to be gone over for unsoundnesses similar to those in the fore limb, including spavin, ringbone, thoroughpin, etc., while the stifle will come in for a careful look, and the contour of the hips be noted for injury to the points of the ilium, caused by running in at a narrow door.

Next, test the animal thoroughly for wind, and the work will be fairly complete. In conclusion, it may be added that each limb must be examined in succession, as above advised.



Boquban Sunrise (16469).

Hackney filly. Winner of first prizes at the London, the Royal, and other English shows in 1906.

to be considered the same as strangers until the business has been completed. Even the deacon is not to be given any credit unless the horse he has to sell corroborates in appearance and performance the qualities he claims for him. There is to be no sentiment in the matter—simply business sense.

For the above reasons, when the neighbor has a horse for sale, and our reader goes to inspect the animal, he should go unawares, if possible, and see the horse, first in the stall, and afterwards in action. This is necessary, for the reason that when a horse is at rest in his stall some things will show up that would disappear when he is trotted, or be overlooked were he first seen out of doors. For instance, when looking at a horse in his stall, the flanks should be watched for abdominal breathing, indicating "heaves"—a trouble often temporarily alleviated by drugs when the visit of the intending purchaser has been anticipated, and at the same time a glance will show whether a strap is buckled tightly around the neck back of the ears, indicating that the horse is a "wind-sucker."

We next step up beside the horse and examine the manger, which is always chewed a great deal if the animal is a "cribber," and, finding such evidences, it is but a moment's work to open the mouth and find if the incisor teeth corroborate the suspicion. Next, the horse is made to "stand over" in his stall. If he has a spavin and is lame from it, he will jerk the affected leg as he steps, and this may also be done as an evidence of chorea (shivers or crampiness). The latter disease, which is incurable, is still better seen as the animal is made to back out of the stall.