

Veterinary Department.

Bone Spavin in Horses.

IN a former number of the CANADA FARMER we noticed some of the diseases of the hock joint, as hog spavin, thorough-pin, &c., but perhaps the most common disease affecting this important joint is the disease known as bone spavin. By bone spavin is understood a bony enlargement (*exostosis*), usually situated upon the antero-internal part of the joint. This is generally known "in common parlance" as a jack spavin. Of bone spavin there may be said to be two kinds, the difference consisting in the part or parts which are principally involved. One kind of spavin is the result of inflammation being set up in the periosteum, and this is confined mostly to the external part of the joint, and in fact is somewhat analogous to splint. In the other description, the disease is confined to the internal structures of the joint, and accompanied with ulcerations. This is the more serious of the two, and may exist with very little external deposition of osseous matter. In the first kind of spavin, which is trivial in comparison with the other, the small cuneiform bone and inner splint bone are the parts mainly implicated, and this has been so plainly accounted for by Blaine, in one of his first editions, that we cannot do better than give his words on this particular kind of spavin. He remarks that "the bones of the leg, the shank bone, and the two little splint bones behind, support the lower layer of the bones of the hock, the cuboid rests principally upon the shank bone, and in a very slight degree on the outer splint bone, the middle wedge bone rests entirely upon the shank bone, and the smaller wedge bone rests only in a slight degree on the shank bone, but is principally situated upon the inner splint bone, therefore the inner splint bone sustains a very unequal degree of concussion and weight," and is liable to receive injury on any violent exertion, as in leaping, galloping, or backing. It also frequently happens that a bony deposit is thrown out and extends around the greater part of the joint, and very often between the various articulations, and the cuneiform or wedge bones become firmly united by the ossific process, and the joint between the wedge and shank bones will also be completely destroyed, and in severe cases the true hock joint articulation will also be encrusted with bony substance of abnormal growth. When spavin is confined chiefly to the inner splint bone, it is seldom productive of harm, and it is not an uncommon occurrence to observe horses with a very large bony enlargement on that part, and yet go perfectly sound. Therefore, in a well formed hock this kind of spavin is not a very serious detriment to a horse; but if occurring in a narrow weakly formed hock, it is very likely to terminate in disease of the inner structures. The enlargement in some instances may be very small, and the animal exceedingly lame; and this lameness may continue for months, or even years. In those cases there is ulceration going on within the joint, and this continues until the bones become either partially or completely ankylosed. The causes of spavin may be arranged under two heads, predisposing and exciting; the former may be either constitutional or local, by the conformation of the joint, or by the breed. Experience tells us that certain breeds are very liable to spavins, ringbones, &c., and these are frequently transmitted from the sire or dam to the progeny. The exciting causes of spavin are hard work and injuries.

Concussion.

DERANGEMENT of the nervous functions may be a remote result of concussion, occasioning disease, the progress of which is so insidious that it may escape detection for a considerable period after the date of the original injury. The effects of concussion, however, are not confined to the nervous system; bones, cartilages and tendons are frequently implicated, both directly and secondarily, in the shock received in consequence of the application of violent force—not necessarily to the structures which suffer most, but probably to a part at some distance from them

In this way a blow, which first impinges upon the terminal portion of one of the extremities, may cause injury to the bones, or cartilages, or ligaments of a joint at the upper part of the limb; or a sudden shock, which seems to be confined to the upper part of the head, may produce derangement of joint structures in the middle or lower portion of the spine. In fact, it is impossible, from the mere observation of the direct action of a concussive force, to determine what may be the nature and extent of injury to various parts of the body.

Upon the hard textures concussion exercises an influence which may be direct and temporary, or remote and permanent. To make this obvious, it may be supposed that a horse during a journey steps suddenly upon an elevated surface, or into a hollow, of the existence of which he was at the time unaware. The immediate and direct consequence of this unconscious movement may be a sprain of the ligaments or tendons of the extremity, and after a certain (generally short) period the injury may be repaired, and the effects entirely cease. But it is also possible that, instead of a sprain, there may be an extension of the shock upwards, and concussion to the articular surfaces of the shoulder joint. The horse may give little indication at the time of having suffered harm; perhaps after a few struggles he escapes from his position, and performs the rest of his journey without difficulty. Weeks or months may elapse before it is observed that the action of one limb is defective. By and by the defective action becomes decided lameness. An examination is made, but no palpable disease is discovered to account for the symptoms. Much difference of opinion may exist as to the actual seat of the mischief. Remedies are, however, applied to some part of the extremity, rest is enjoined, and considerable improvement takes place. On returning to his work, after long idleness, the horse again fails; and this may be said of him over and over again.

Ultimately he is destroyed as incurable, or dies from some disease unconnected with the injury. Dissection reveals caries of the cup-like cavity of the shoulder blade, or of the rounded head of the arm bone. From certain appearances it will be evident that the disease has been going on for some time, and also that it commenced in the internal structure of the bone, as disease of articulations often does, instead of on the articular surface. That such has been the case may be safely inferred whenever there is a large cavity or a number of cavities in the bone, while only a few spots of caries are to be seen on the articular cartilage; or when the latter, still preserving its healthy appearance, is found to be crushed in, having given way in consequence of the removal of support from beneath it. Instances such as we have described are not unfrequent, although it seldom happens that the discovery of extensive disease in the shoulder or hip joint leads to reflections upon its probable cause. The owner, in whose possession the horse may have been for a long time, will hardly think of looking back some months for the origin of the disease which has deprived him of the animal's services.

Treatment cannot be directed to the prevention of the probable consequences of concussion, nor to the cure of effects which are not yet apparent. Symptoms which immediately present themselves may be met by appropriate remedies; but contingencies must in such cases be left unprovided for, in the absence of means of ascertaining their position in the future. The immediate effects of concussion, which may be recognized and treated, are varied according to the seat of injury. Concussion to the head causes, in many instances, loss of consciousness more or less complete, and this is sometimes accompanied with stertorous breathing, suggestive of pain, which, however, if we may trust the experience of persons who have themselves recovered from such a state, the animal does not feel. Insensibility, however alarming, does not necessarily presuppose very severe injury, unless it is prolonged, as in cases of fracture and depression of the cranial bones, or rupture of the superficial vessels or sinuses and extravasation of blood. Application of cold water to the head will assist the recovery, and the animal should be placed in a comfortable position, with the head slightly elevated. Bleeding is unnecessary in most instances, and in some it would be highly objectionable. No attempt, under any circumstances, should be made to administer fluids to an animal until he has recovered his consciousness. There is no objection to sponging the nose and lips, and allowing a little water to run into the mouth; indeed, the attempt to swallow the small quantity thus introduced will be the first sign of recovery.—*London Field.*

WEAKNESS AND TREMBLING IN HORSES.—George F. Williamson, of Princeton, sends the following statement and enquiry:—"I have just lost a valuable colt, from a very peculiar disease, and two more horses are just taken with similar symptoms. The complaint is one which has puzzled the best skilled in this neighbourhood to cure, or even know what the disease is. The animals are first taken with weakness and trembling in the hind parts, but eat tolerably well for two or three days after they are taken. Can you, or any of your readers give me any information as to what the disease is, and if it can be cured?"

ANSWER.—Weakness and trembling of the hind quarters are symptoms of several diseases, and from that symptom alone it is impossible for us to arrive at a correct opinion as to the cases above related. Weakness of the loins, as evinced by a staggering action when the horse is made to walk, is a symptom often attendant on Influenza, which has been prevalent this winter in different parts of Canada.

The Dairy.

The Cheese Factory System in England.

CHEESE factories, now so common on this side of the Atlantic, are still novelties in England, and like all novelties are viewed by John Bull with a degree of suspicion and distrust. Yet the conviction is beginning to force itself upon not a few intelligent British agriculturists, that there must be something in a system which yields results in the market of so satisfactory a character. The perusal of a circular like that issued by Messrs. Morrell & Co., of Liverpool, the first week in March, containing the following quotations, cannot fail to produce an impression in the dairy districts of England:—

FACTORIES.		FARM DAIRIES.	
	per cwt.		per cwt.
Fine factory.....	52s. to 55s.	Very good.....	42s. to 44s.
Very good do.....	47s. to 50s.	Good.....	38s. to 40s.
Good do.....	42s. to 46s.	Medium.....	30s. to 35s.
Medium.....	38s. to 42s.		

At a meeting of the Central Farmers' Club, March 2nd, the cheese factory question was the subject of discussion, but though previously announced, the attendance was not large, showing both want of interest and want of faith. Those present, however, entered with much spirit into the matter. The topic was introduced by Mr. George Jackson, of Tattenhall, Chester, who has become a thorough convert to the factory system, thanks to a visit from Mr. X. A. Willard during his tour in Britain. Mr. Jackson's view of the matter is thus expressed: "My scepticism as to the inapplicability of the cheese factory system to English dairy districts has been exchanged for a deep and increasing conviction that there is every reason for believing, with our advantages of climate, the contiguity of farms, better roads and shorter distances for moving milk, with good home markets, that English factories must ultimately triumph. They will secure a great improvement in the make of our cheese—be a boon to the producer, and so become a national blessing, by preventing an enormous waste of good milk from being made into bad cheese, and set free our dairy slaves. No doubt cheese factors will here, as they had in America, have to contend with obstacles arising from inexperience, prejudice and jealousy; but the prejudice with us against American cheese is fast breaking down, if it has not already done so; and the secret why there is no market for common English cheese is, that the public prefer paying a reasonable price for good American; and unless we are content to be beaten in our own markets, there appears for us only Hobson's choice—fight America with her own weapon, cheese factories."

We observe that the admission is freely made by English dairymen, that there, as here, fine cheese is everywhere the exception, and inferior cheese the