

when I say there was equivalent to  $4\frac{1}{2}$  tons of hay. I make the ensilage come to  $11\frac{1}{2}$  tons. The advocates of the system, and the best qualified chemists, who have examined and compared the feed with hay say that it takes 2 tons of ensilage to equal 1 ton of hay, my  $11\frac{1}{2}$  tons ensilage therefore, would equal say 6 tons hay which is  $1\frac{1}{2}$  tons better than the hay I should have got off the 2 acres, for this  $1\frac{1}{2}$  tons of hay I had to pay  $10\frac{1}{2}$  days work for a man and 10 days work for a horse, which in July when we did the work cannot be reckoned at less than \$20, and wages are at least \$1, and board and horses to be hired at 50 cts, and feed, or \$13.60 ton, rather a high price where hay can nearly always be bought for \$10 a ton in the winter, delivered at the barn.

The only advantage I can see in the system of curing is in case of continued stormy weather at haying time, when it is no doubt difficult to cure clover in the ordinary way. Again, it is possible that with corn, of which a much larger weight per acre can be grown and in the curing or ensilage of which no doubt there would not be so great a difference, the result might be different.

I had intended to complete my experiment, refilling the silo with fodder corn in September, but the absolute impossibility of procuring labor prevented me, and I had to cut up and stook my corn in the ordinary way, thus illustrating what I said above in regard to the labor.

I do not pretend that this is a conclusive proof, either way, as to the value of the system, as it only deals with the ensilage of one kind of fodder; but it may throw some light on a subject greatly agitating the agricultural community, and its publication may lead to some discussion on the question, and perhaps I may obtain some information which may enable me to conduct another experiment to a more satisfactory issue.

I will however take the liberty of advising my fellow farmers of the Province, not to be in too great a hurry to invest any large sums of money in the erection of stone or cement silos, but rather to let the present enthusiasm for the new system give place to some more thorough trials and favorable results than I have been able to procure.

Trusting that we may see more in the Journal on this question, and that the further experiments may be more successful and accomplish even all that is claimed for ensilage,

I remain etc

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NOTE.—Our remarks on the foregoing article are necessarily deferred to next month.—ED.

### VETERINARY DEPARTMENT.

Under the direction of D. McEachran, F. R. C. V. S., Principal of the Montreal Veterinary College, and Inspector of Stock for the Canadian Government.

#### Diseases of the Horse's Foot.

**CORNS.**—A corn may be defined to be a bruising of the sensitive sole at the heel, it being compressed between the wings of the *os pedis* and the horn forming the heel of the hoof. Some feet are from their form, or from the softness of the horn covering them, particularly liable to corns.

The form of foot most subject to corns is the flat thin foot with low heels and bulging quarters. Such feet usually are covered by a soft porous quality of horn, and the heel is, to use a common expression of grooms and farriers, fleshy. Badly fitting shoes are the most common exciting causes of corns, by causing too much pressure on the heel, the tendency being increased by undue paring of the heels and bars, rendering them thin and weak, and consequently liable to suffer from any undue pressure. Corns are also produced in cases where the blame does not rest with the farrier but with the owner or his groom; by allowing the shoes to remain too long on, they become embedded in the heels and cause bruising. Sometimes also the insinuation of stones or gravel between the

shoe and the heel bruise it, and may give rise to a simple contusion, which disappears with the removal of the cause, or it may give rise to inflammation, which will end in suppuration. From whatever cause a corn arises, it is very apt to produce pathological changes in the vascular structures covering the wing of the *os pedis*, and not unfrequently the bone itself becomes diseased, and is found porous and laminated, the inflammation in some cases extending till the whole wing and its lateral cartilages are involved in ossification, constituting side-bone.

Such cases are usually incurable.

The common seat of corn is on the inside heel of the fore foot, although they are also seen on the outer, or on both.

The inner side is most subject, because through it the centre of gravity passes constantly; it has to sustain proportionally a greater weight than the outer, and on account of being easier to cut away, it suffers more at the hands of the unthinking farrier.

Corns are also seen on the hind feet, but much more rarely than on the fore ones, as the latter are the weight carriers while the former are the propellers, and consequently the weight is thrown on the toe.

The symptoms of corns are, heat of the foot, which is pointed, the weight being thrown off it when standing; tenderness of the heel when tapped by a hammer; in walking or trotting the weight is thrown off the weak heel on to the toe and opposite quarters. The degree of pain and lameness will depend on the severity of the bruise, its duration, the condition and degree of hardness of the hoof, the tissues involved, and the stage of the inflammatory process in which it is examined. When suppuration has set in the pain is very great, and it is intensified by tapping the foot with a hammer; in many cases the suppuration detaches the horn at the heel, or it may lead to the formation of sinuses, and *quittor* results.

On removing the shoe and paring the heel, the horn is found red from extravasation of blood. This redness may be diffused, particularly in old cases, or it may be dark in colour and confined to a small spot. Sometimes, in flat feet with thin horn, it becomes laminated, and openings form in the heel through which mud finds its way into the heel, acting as an irritant causing suppuration; this is the condition spoken of by farriers as a *gravelled heel*. In some cases especially in old horses the heel of the bone becomes diseased, of its *caries* under surface ensues, and the case becomes hopelessly incurable; the reparative process is very deficient, and we are apt to have imperfect nutrition and consequently defective secretion of horn immediately covering the seat of corn, while the surrounding secreting surface is stimulated, and we have a growth of thick strong horn in the wall forming the heel, which from its unyielding thickness, compresses and bruises the heel, thus aggravating the symptoms.

**TREATMENT.**—The first thing to do is to remove the cause: the shoe must be taken off and the heel pared out; remove the horn which covers the bruised heel, reduce the heel beyond pressure of the shoe or floor, then immerse the foot in hot water for half an hour, and apply a soft linseed-meal poultice.

Free opening of the heel is indispensable, the surrounding thickened wall must also be thinned. All pressure from the enclosing hoof or any other cause must be removed.

If suppuration exist, a free opening must be made for the pus to escape by. If the vascular structures are diseased, the direct application of pure carbolic acid, nitric acid, or butter of antimony, may be necessary to stimulate it to a healthy condition. The foot should be poulticed till all pain and suppuration ceases, when dressings of tar ointment should be used. In reapplying the shoe, the severity of the case and the nature of the foot will guide the farrier as to what kind of a shoe should be applied. Thus, for a slight bruise of the heel, it