Sheep Husbandry.

Sheep Eating Tobacco.—We have heard it said that no creature upon earth, except man and one nasty-looking worm, would eat tobacco. We are very sorry to learn, from the following statement by Dr. Randall, in the *Rural New Yorker*, that the Improved American Merinoes are accused of so filthy a practice:

In the winter of 1864 we stated the seemingly wonderful and anomalous fact that several flocks of Merino sheep had been found to be fond of eating the small or damaged dry leaves left on tobacco stalks, and of peeling off and eating the dry bark or external skin, from those stalks. We do actually and seriously find that the cases we gave are the rule and not the exception—that it is a serious fact that *all* Merino flocks (so far as we have heard of its being tried), will thus *eat* tobacco thrown out to them in winter. They commence nibbling it at once, and soon consume it habitually and quite freely. We have received this statement from numerous reliable tobacco growers. Perhaps other breeds of sheep would feed upon it as freely, but our informants have all been Merino flockmasters. Not the least injury appears to accrue to sheep from actually eating this powerful vegetable narcotic, which contains a principle (*Nicotia* or *Nicotin*) so deadly, that a drop of it in the state of concentrated solution will kill a dog. Few human tobacco chewers can swallow much of it with impunity. We knew a case last winter where it was regularly fed to breeding ewes, (by Chester Baker, Lafayette, N. Y.,) and it produced no injury to the lambs. They came strong and were healthy. This corresponds with the experience of all the feeders of it whom we have conversed with. Most of these gentlemen regard it as nutritious food to sheep, so far as they eat it—and some fancy that their sheep are healthier for having it! We confess that, to us, this is one of the most paradoxical facts in natural history. Well, we hope our Merinoes won't take to smoking next, for if they do they will set all the barns afire. They are already accused, by their enemies, of setting a good many men's brains afire!

A Sheep Story.—Clinton Willis of Charlmont, Mass, recently sold three yearling sheep the lambs of one ewe, at one birth, for $35. The lambs weighed 370 pounds. The product of the ewe the past year, is as follows. Wool sheared from herself and lambs, 21 pounds, $21—price of lambs sold, $35—total, $56.

Veterinary Department.

On the use of the Cautery.

Cautery is of two kinds *actual* and *potential*. By the first is meant the red-hot iron, by the second, any caustic application.

The use of the cautery, to the credit of our art be it said, is on the decline. The farriers of former days, had ever in their hands their cautery or firing-irons; with them they opened abscesses and penetrated tumors, introduced setons, stanched hemorrhage, cleansed sores, and scored the skin over enlargements and lamenesses of almost all descriptions, indeed, even nowadays, we occasionally meet with some luckless wight of a horse that has gone through this ordeal, bearing marks of having been scored over almost every joint in his body.

This barbarous and unnecessary practice is, however, much diminished, the improvements of modern times have shown us that we can, in very many of these cases, afford the same relief in a much simpler, and more humane manner. Not that I am one of those squeamish or chicken hearted mortals, who would hesitate, as its medical attendent, to put an animal to any pain, short of actual torture, which I was thoroughly convinced was necessary for its cure or relief, at the same time, if I thought I could effect by mild means that for which were commonly employed harsh and painful measures, I should feel it my duty to adopt the former in preference to the latter, even though the process required a somewhat longer interval of time.

In fact, I hold it up as one of the proudest boasts of modern veterinary surgery, that the red-hot iron—that terrific though potent remedy—is in many cases superseded by comparatively painless but equally efficacious measures; and let us hope the day is not far distant when we shall require its aid even less than we do at present.—*Percival on the Disorders and Lamenesses of horses*

Diseases of the Horse's Foot.

(CONTINUED.)

Thrush or frush, a very common disease of the foot, consists in a muco-purulent discharge from between the clefts of the frog, arising from congestion or inflammation on the surface of the sensitive parts. Frush, although a very common occurrence, but seldom interferes with the horse's usefulness, and very little notice is taken of it. However, it is occasionally the cause of lameness. A frush is not considered an unsoundness, unless it produces lameness.

The most common cause of frush is continued exposure to wet and dirt, or the acrid moisture arising from dirty stables. It is absorbed by the horny frog, and therefore becomes an irritant to the sensitive frog. Disease of the internal structures of the foot, as navicular disease, also gives rise to frush, and cutting away the frog too much, as is often done, has a great tendency to produce it. So also has shoeing with high-heeled shoes.

Frush, in some cases, may be said to be constitutional, as young horses in high condition are sometimes disposed to it.

In the treatment of frush, unless it is causing lameness, it will not be necessary to lay the horse up from his usual work. The parts affected must be cleaned out, and all diseased horn removed. In bad cases, a poultice of linseed meal or bran should be applied for two or three days, and dressed daily with the sulphate or oxide of zinc. In slight cases, after cleaning out the parts, a mixture of Barbadoes tar and salt will often effect a cure.

Canker is an exceedingly loathsome disease of the foot, and may be defined to be a diseased condition of that portion of the sensitive foot which secretes the horny sole, sometimes spreading to a great extent, and causing entire separation of the insensible sole. A fungus growth springs up somewhat of a cauliflowered appearance, and from it exudes a thin and offensive discharge. Canker occurs oftenest in the coarse and heavy breed of horses, and particularly those that have much hair on their legs. The hind feet are oftener affected than the fore. A common cause of canker is the continued application of heat and moisture, as is the case with horses standing in foul, damp stables. The most frequent origin of this disease is a neglected frush, which, penetrating beyond the sensitive frog, sets up inflammation in the vascular sole, causing an unhealthy and abnormal secretion.

Canker is a very intractable disease, and both time and attention are required to perform a cure. Take off the shoe, have the sole thinned out, and remove all pieces of dead, as well as any living, horn, which may be in immediate contact with the cankerous parts, so as to lay open completely the diseased surface. All communication between the sound and unsound parts must be cut off before any dressing is attempted. After the cankerous parts are exposed to view, dress well with the chloride of antimony, which must be introduced into every crevice. After thus dressing, apply pledgets of tow and tar, have the shoe put on, and stuff full with tow, putting pieces of wood between the shoe and foot, so as to cause as much pressure as the animal can withstand. Any of the preparations of mercury, arsenic, zinc, or copper, may be used in place of, or alternately with, the chloride of antimony. The dressings should be repeated every two or three days, and except in very bad cases, it is not necessary the animal should be kept off work, as from the motion and pressure given to the foot by exercise, a cure often proceeds more rapidly.

The Apiary.

Bees and their Queens.

Experiments were tried by Huber to ascertain how a hive of bees would behave to a strange queen, after they had lost their own. He removed the native queen, and after a few hours he introduced a strange queen into the hive. The bees which mount guard at the entrance of the hive, immediately seized her and made her a prisoner, precisely as they would have done if their queen had still been among them. They did this each time the experiment was repeated. An interval of sixteen hours was suffered to elapse from the time they discovered the loss of their queen, and then a stranger queen was introduced to the hive. She was treated precisely as the others had been, as were also her successors in similar experiments; but in some instances, where they survived the pressure, want of air, and hunger for several hours, they were allowed to assume the position of queen of the hive. Twenty-four hours were then suffered to elapse after their queen had been taken away, before a foreign queen was put into the hive, and instead of being made a prisoner she was welcomed with every sign of joy, and at once accepted as their queen; evidently they had arrived at the conclusion, that, from the length of time that had elapsed there was no chance of their own queen coming back. It must have been from the reasoning of this way, because it was always the case, that if twenty-four hours had passed since she disappeared, the new queen was received with respect and obedience. A very striking instance of this is related. The lawful queen was removed at a time when she was busily engaged in laying eggs. After a time the news spread through the hive and the usual consternation prevailed. They were left in this condition a great many hours, their agitation being the greater that no new queen was ready for release from her cell; in fact, none of the royal cells had been built. They therefore proceeded to enlarge some of the cells containing the eggs of workers. A stranger queen was then introduced, and directly she entered the hive, those who guarded the entrance, instead of making her a prisoner, received her with the greatest respect and satisfaction; they approached her, and touched her with their antennæ, and gave her food. The news began to circulate through the hive that a new monarch had arrived, and the bees kept pouring in, all of which drew near in succession, and performed the same ceremony.—*All the Year Round.*

"Why did the Bees die in my Hive with plenty of honey?"

To the Editor of The Canada Farmer:

Sir,—The above is a question often asked me, and especially this winter, which has been one of remarkable severity, especially for bees wintered out of doors. I will therefore answer the question, with your consent, through The Canada Farmer, which should find a welcome in every household.

There are several reasons why bees die in a hive with plenty of honey. but the principal reason is this: their stores of honey, which are in the outside combs and outside edges of the combs, and especially at the top of the combs, become frosted by the freezing of the vapor which arises from the bees. The bees are thus prevented from reaching their stores, and perish for the want of food; for they would as soon enter the fire as frosty combs.

Now this frosting of the combs takes place when the weather becomes very cold, and if it continues cold a length of time, the bees become starved for the want of honey and are easily frozen to death. Animal heat sufficient to keep them from freezing, can only be kept up by their having sufficient to eat. It will then appear clear why there are more such cases in this section of the country this winter than formerly. The cold weather has not only been very severe, but continuous, hence many colonies have perished. If occasionally there had been warm sunny days, the combs would have been cleared of frost by the combined heat of the bees inside and of the sun outside, and the bees would then have been able to reach their supplies often enough to have kept them