

*Notes on Experiment No. 2.*

As in the preceding experiment two horses were procured (one having served as control in Experiment No. 1), and a quantity of hay that carried a high percentage of bracken.

One animal received the hay after the fern had been picked out of it, the other received the same hay plus the fern. Average daily feed: control horse twenty-four pounds of clean hay; experimental horse, thirteen pounds of hay and eleven pounds of fern.

Both horses were kept in adjacent box stalls and allowed no exercise.

June 1.—Feeding commenced.

" 23.—Supply of fern ran out, had to resort to cutting and drying freshly cut bracken, which could not be properly cured owing to continued wet weather.

" 24.—A small amount of hay was received that contained a little bracken. It was not until July 6th, however, that a sufficient supply of dried fern could be obtained; therefore from June 23rd until July 6th the material fed was a poorly cured sample.

" 29.—Fern horse shows yellowish red conjunctivæ.

July 1.—A careless attendant was caught giving the fern horse green clover; this, coming on top of our difficulty in procuring properly dried bracken, did not look any too hopeful for our experiment.

" 8.—Fern horse was noticed to be staggering badly. When the head was raised the animal was inclined to fall.

" 9.—Fern horse worse. Pulse soft and weak, forty per minute. The urine was examined and found to contain no albumen nor sugar.

" 10.—Fern horse progressively weaker. Shows distinct signs of intoxication. The eye has an intoxicated look. When the animal is pushed it sways to and fro. Appetite unimpaired.

" 11.—Fern horse about the same. Pulse forty-two and weak. Intoxication marked.

" 12.—Fern horse was found down in the morning, but was helped up. Pulse fifty-nine, weak and irregular. Respirations forty-seven per minute. Pupils slightly dilated. When head was raised a few inches the animal nearly fell.

" 13.—Fern horse pulse fifty-five, weak and irregular. Head carried low.

" 14.—Fern horse pulse same as yesterday. Pupils more dilated. Head carried very low.

" 15.—The fern horse went down between 7 and 8 a.m., and could not be made to stand. Animal has nervous spells, twitching of the muscles, more especially of the face. Animal getting badly bruised.

" 16.—Fern horse battered up badly. Pulse seventy-two and weak. Visible m.m.s yellowish red. Temperature 99.5. As the animal was moribund, the carotid was severed at 11.7 a.m. Blood taken at 11.9 a.m. had set by noon (when it was first noticed).

*Autopsy.*

General condition, emaciated. Lungs normal but for some emphysema of long standing. Trachea and bronchi, congested. Heart normal. Kidneys, cortex congested. Bladder normal. Spleen normal but for some old adhesions. Liver contained a few chalky deposits (degenerated parasites), and was congested. The duodenum contained bile and thick frothy mucous. The large intestines were normal. The most noticeable changes were found in the stomach, brain and spinal cord. The brain and cord were greatly congested. The stomach contained about a gallon of