

were inflamed; the lungs engorged with large quantities of black blood; the trachea and bronchi filled with frothy spume. In most cases the villous parts of the stomach presented isolated patches of increased vascular action; and in all cases the intestines, and especially the large ones, were inflamed.

Where animals are poisoned from eating the actual metal which, as before stated, becomes converted in the stomach into an oxide or active salt, the disease runs its course in a few hours or days, according to the amount taken into the body. The following account of such a case is that of an animal of Mr. Weir's that died from the effect of lead poisoning in a field at the end of South Street, Halifax, N. S. One Sunday in July, 1878, I was requested to go and see a calf of five months that was reported as very ill. I must here relate a tale that is told of this said field, viz., that at a certain spot in it any animal that happens to eat the grass would be sure to die, and notwithstanding this knowledge of the fact some twenty or thirty animals have been permitted to die from the *unknown cause* within a very few years. I am quite satisfied now that lead poisoning has been the cause in every instance, as you will see by the following account of this calf's case:

The calf was not on the *deadly spot*, but tethered in the same field about one hundred yards from it, and showed the following symptoms:—The animal was standing with his legs stretched out to support himself, the coat was very rough, the head thrown back toward the off shoulder, with rigid contraction of the cervical muscles, a great discharge of saliva from the mouth, and peculiar moan. The eyes were covered over with a film, and the teeth were constantly grinding. Paralysis of the hind quarters was present, and great pain on pressure to the stomach (paunch). I at once diagnosed it as a case of poisoning from lead, and having heard the story of the fatal spot so often, I determined to unravel the mystery. While talking to the owner of the calf I picked up a piece of white-lead weighing about a pound within twenty feet of the calf, which evidently had been the bottom of a paint pot. I treated the animal with the usual antidote for cattle, viz., sulphuric acid, which would necessarily convert it into the insoluble white sulphate, but the animal died next day despite all treatment, and the following was the result of the *post mortem*:—The lungs and trachea were inflamed, the lungs engorged with large quantities of black blood, large patches of inflammation on the villous portion of the stomach. The other organs were little affected, but on analysis of parts of the stomach and intestines, lead to a large amount was traceable.

Taking these facts into account, there

can be little or no doubt that at some period a large quantity of some of the compounds of lead has been deposited in this field, and on that particular spot, and that portions of it have been carried to other parts of the field, as proved in this case.

In cases of lead poisoning among the lower animals, the metal usually enters the body in the food or water which the animal consumes. Lead poisoning sometimes occurs from drinking water conveyed through leaden pipes or allowed to stand in leaden cisterns. The conjoined action of the air and moisture soon produces on the surface of the metal a crust of hydrated oxide, which unites with carbonic acid drawn from the air, and crumbles away as a crystalline powder, partly dissolved and partly suspended in the fluid.

Leaden vessels, or vessels with lead solder, should be used with great caution for holding water for any length of time, or other fluids likely to affect a solvent action on the metal. This caution is especially applicable to the softest waters, as distilled rain or snow water. Hard waters, however, are not so liable to be contaminated with lead, for their carbonates, sulphates, phosphates, or other salts are decomposed; and the carbonic, sulphuric, phosphoric, or other acid, unites with the lead, forming slowly an insoluble crust, which effectually protects the metal from any further action of the air or water. This view was generally entertained by the best authorities, but seems now to require some modification; for several cases of lead poisoning have occurred where lead cisterns have been acted upon by waters decidedly hard. A bit of iron, a patch of soft solder, or even a few carbonaceous or other impurities in the lead, appear, in such cases, to set up a galvanic action with the metallic lead, thus inducing its solution. Such facts should make persons exceedingly careful to prevent lime, mortar, nails, or in fact any foreign body from getting into leaden cisterns, and to empty and clean them out occasionally, especially when new.

Yours faithfully,

CHARLES BYRNE,
Vet'y Surgeon.

Halifax, Sept. 13th, 1878.

The following Ayrshires were transferred in April and May to Mr. John A. McCurdy, Onslow:—

Primrose, 128, formerly owned by Mr. C. P. Blanchard, Truro.

Lily 3rd., 132, formerly owned by Mr. Henry Burrell, Yarmouth.

Harry Moore, 139, formerly owned by Rev. H. P. Almon.

The Digby Agricultural Society intends holding an Exhibition this Fall. The Society owns three thorough-bred Bulls, 2 Devons and an Ayrshire, and a Grade Bull by General Grant.

The Ayrshire Herd of John A. McCurdy, Esq., Onslow, consists of the following thorough-bred animals:—

Lily 3rd., (from H. Burrell, Yarmouth).

Primrose.

Harry Moore, 139.

May Queen, 295.

Lady Mary, 296.

S. H. DUCHESS, 353, belongs to Mr. Ross Chipman, Cornwallis.

Pedigrees of Cattle purchased for the Board, in England, by Mr. Simon Beattie, and expected by an early steamer, will be published so soon as they come to hand. The importation will consist of

Two Short-horn Durham Bulls,

Two Short-horn Durham Cows,

Two Ayrshire Bulls.

Two Heifers of the same breed,

Two Shropshire Down Rams,

Six Shropshire Ewes,

One Medium Yorkshire Sow.

BRONZE TURKEYS.

A FEW very fine Bronze Turkeys, hatched in May, 1878, for sale. These Chicks are from the celebrated Mattocks Prize Stock.

Also—Some fine W. F. Black Spanish Fowls for sale.

W. H. BLANCHARD.

Windsor, Sept., 1878.

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FOR SALE.

A SHORT-HORN Durham bull, purchased from the St. Andrew's Agricultural Society, viz., "Peter 2nd," calved August 9, 1874—Sire "Lord York" (imported from England); Dam "Gasporee"; g. d. "Favourite"; g. g. g. d. "Young Favourite"; g. g. g. g. d. "Young Favourite." The above was imported from Kings County about two years ago, has proved himself an excellent Stock getter and very kind. The attention of Agricultural Societies is directed to this sale. Further information on application to

D. D. CHISHOLM, Merchant.

St. Andrew's Antigonish County,
September 20, 1878.

CLEMENTS AGRICULTURAL SOCIETY offers for sale, very cheap, registered Bull "LORD GOWAN," No. 234, Ayrshire; two years old; brown and white; girls five feet six inches; very good for his purpose, and offered for sale because Society is overstocked. Apply to JOHN POTTER, the keeper, Clementsvale, or to

W. M. GODFREY, Sec'y C. A. S.

Clementsport, Annapolis Co., Sept. 4, 1878.

THOROUGH-BRED AYRSHIRE STOCK.

THE subscriber will have on exhibition and for sale at the Truro Exhibition grounds, during the first week of October, five young thorough-bred Ayrshire bulls—the get of BISMARCK. They are large for their age and handsome, and not inferior to any ever imported into this Province.

C. P. BLANCHARD,
sepl Hillside Farm, Truro, N. S.

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