

## Anthrax in Cattle

(Written for THE FARMING WORLD.)

Anthrax may be described as a fatal form of disease due to the presence of a microbe in the blood and all the tissues in which the blood circulates. The bacillus anthracis, a long, non-mobile rod, was familiar to veterinary pathologists long before its significance was appreciated. Splenic apoplexy was the ordinary name of the disease. It attacked cattle in plethoric condition, and, on the other hand, cattle that had been exposed to certain unsanitary influences.

Some years ago a practical agriculturist of large experience had no hesitation in saying that splenic apoplexy was not contagious, but was caused by an animal progressing too rapidly and making too much blood in a short time. He had seen it occur among poor cattle suddenly put on to good living, but more frequently among fat cattle put on to some fresh keeping. He had seen more than one instance where the same field in pasture had killed grazing oxen, sheep and horses, and when grown over hay, the hay had proved fatal.

### EXPLORED THEORIES

This idea that overfeeding was a

to note that the suggestion of contaminated land was so marvelously near the truth that a very slight extension of the theory could hardly have failed to dispel the whole mystery.

### A CONTAGIOUS DISEASE

It is hardly necessary in the present day to state what the real explanation should have been. Contaminated lands really meant lands which had become infested with the spores of the bacillus anthracis. Sudden outbreaks of anthrax among stall fed animals, in which only one or two animals suffered and died suddenly, clearly pointed to the use of some article of food contaminated more or less with the anthrax infective matter, so that the one or two animals which were unlucky enough to have the poisoned provender supplied to them were the victims. The same thing may be said in explanation of other outbreaks which were attributed to want of water, cleaning foul ditches or exposing the animals to any unsanitary conditions, and the fact still remains that while our knowledge of anthrax is so far complete that we can safely affirm with

geons, butchers and others—have had their hands and arms smeared with the blood necessarily crowded with the anthrax bacilli without suffering any harm; but now and then an unlucky individual happens to have a small abrasion, and the merest spot which permits the entrance into the blood stream of the organism is sufficient, and he becomes the victim of an attack which is serious and quite possibly fatal.

Recent investigations justify a strong suspicion that many outbreaks are caused by the introduction of the germs of anthrax in feeding stuffs, especially in linseed and cotton cake, but it is admitted that there is really no practical test to make sure of the freedom of any given consignment of such material from anthrax spores; consequently there seems to be little hope that anthrax will ever assume the position of a disease which once existed among the farming community.

W. R. GILBERT.

### Ottawa Winter Fair May Lose Grant

The Hon. Mr. Monteith, Provincial Minister of Agriculture, has notified the city of Ottawa that unless a permanent live stock show building were built as promised without further delay the government grant for the



Ampton Herefords at Ottawa, 1903. Female—Imported cow, Sunflower, bred by our late Queen Victoria. Male—Two-year old, Orion. Property of W. H. Hunter & Son, The Maples, Ont.

cause of splenic apoplexy was decidedly popular for years, but, in addition, the act of cleaning out ditches and carting the refuse material onto the land where it could be reached by the cattle was also considered a satisfactory solution of an outbreak.

In one case of the sudden appearance of the disease in a herd, a distinguished investigator came to the conclusion in the first instance that the animals had been overfed, but the owner explained to him his system of dieting, which did not err on the side of liberality, and went on to explain that he never allowed the animals any water. This induced the enquirer to report that the want of water was sufficient cause for the outbreak. It is particularly worthy of notice that all the causes which were assumed to be capable of producing anthrax were quite correctly stated. In other cases besides those mentioned, the cause of an outbreak was put down to the land being contaminated by excessive manuring. Outbreaks occurred, for example, on common lands which had been fed over for years by animals of all kinds. In other cases a particular meadow had been employed for feeding sheep, with the addition of abundant artificial provender, so that meadows in their natural state would only support one sheep to the acre would be made to support six or more. It is interesting

regard to any single case that the animal that has suffered has been in some way inoculated externally or internally with the germs of the anthrax organism. It is frequently impossible to do more than guess at the channel through which the organism has been conveyed. It is not an exaggeration to say that there is hardly anything that can be brought upon a farm or in any way come in contact with animals that may not contain the microbe which will produce the disease. In some parts bones bought for manurial purposes have brought an attack of the disease, and it is a well known fact that contaminated wool is responsible for the outbreaks of the wool-sorters' disease, which is anthrax of the human subject.

Under these circumstances it is a wonder that the disease has never assumed the epizootic character, like cattle plague and pleuro-pneumonia, but it fortunately happens that the infective power of the anthrax spore is limited by an insurmountable condition. To be injurious it must find a part of the system of the invaded animal which will allow it to enter the blood stream, otherwise its presence is absolutely harmless. Cases have been recorded from time to time of the fatal inoculation of persons engaged in post-mortem examinations of animals dead of anthrax, but thousands of people—veterinary sur-

Winter Fair would be withdrawn.

Three years ago the contract was let for the erection of a building at Lansdowne Park, for the accommodation of the Eastern Ontario Winter Fair, which had been started in Ottawa a year or two previous. The work was begun and in a fair way to completion when the structure collapsed. A year elapsed and another attempt made, only to meet with the same misfortune when nearing completion. In the meantime temporary buildings, not altogether suitable for a winter show, were provided. This year there has been some hesitancy in going ahead with the erection of the building and the government have announced their intention of withdrawing the grant, which amounts to nearly \$20,000, unless assurance is given that a suitable building will be built.

It will be a real loss to the farmers of Eastern Ontario if the Winter Fair in the Capital City is discontinued, as it assuredly will be, if a suitable building is not provided and the government grant withdrawn.

Here's to the ships of the ocean;  
Here's to the women of the land;  
May the former be well rigged,  
And the latter be well manned.