

1866

FORTY-SEVENTH YEAR OF PUBLICATION

1912

FARMER'S ADVOCATE

AND HOME JOURNAL

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT, 1875

VOL XLVII

WINNIPEG, CANADA, AUGUST 28, 1912

NO. 1040

Nature and History of Foot-and-Mouth Disease

For many years no occurrence has so adversely affected the live stock world as the late outbreak of foot-and-mouth disease in Great Britain and Ireland. Though happily free from its ravages for so long a period, Canada is intensively concerned in the situation created, not only because of its effect upon trade, but because of the peril arising from the extremely contagious nature of the ailment, which is otherwise known as Aphthous Fever, Epizootic Aphtha, and Exzema Epizootica. It is a virulent, contagious and inoculable malady of animals, characterized by initial fever, followed by the formation of vesicles or blisters on the tongue, palate and lips, some times in the nostrils, fourth stomach and intestine of cattle, and on parts of the body where the skin is thin, as on the udder and teats, between the claws, on the heels, coronet and paster. The disease begins suddenly and spreads very rapidly. A rise of temperature precedes the vesicular eruption, which is accompanied by salivation and a peculiar "smacking of the lips." The vesicles gradually enlarge and eventually break, exposing a red, raw patch, which is very sensitive. The animal cannot feed so well as usual, suffers much pain and inconvenience, loses condition, and, if a milk yielding creature, gives less milk; or, if pregnant, may abort. More or less lameness is a constant symptom, and sometimes the feet become very much diseased, and the animal is so crippled that it has to be destroyed. It is often fatal to young animals. It is transmitted by the saliva and the discharges from the vesicles, though all the secretions and excretions are doubtless infective, as well as all articles and places soiled by them. The disease can be produced by injecting the saliva, or the lymph of the vesicles, into the blood of the peritoneal cavity.

If we were to judge, observes a writer in the new Encyclopaedia Britannica, by the somewhat vague descriptions of different disorders by Greek and Roman writers, this disease has been a European malady for more than 2,000 years. But no reliance can be placed on this evidence and it is not until we reach the 17th and 18th centuries that we find trustworthy proof of its presence, when it was reported as frequently prevailing extensively in Germany, Italy and France. During the 19th century, owing to the vastly extended commercial relations between civilized countries, it has, like the lung plague, become widely diffused. In the Old World its effects are now experienced from the Caspian Sea to the Atlantic Ocean. Hungary, Lower Austria, Bohemia, Saxony and Prussia were invaded in 1834. Cattle in the Vosges and in Switzerland were attacked in 1837, and the disease, extending to France, Belgium and Holland, reached England in 1839,

and quickly spread over the three kingdoms. At this time the importation of foreign animals into England was prohibited, and it was supposed that the infection must have been introduced by surplus stores, probably sheep which had not been consumed during the ship's voyage. This invasion was followed at intervals by eleven outbreaks and since 1902 Great Britain has been free of foot-and-mouth disease. From the observations of the best authorities, it would appear to be an altogether exotic malady in the west of Europe, always invading it from the east, at least, this has been the course noted in all the principal invasions. It was introduced into Denmark in 1841, and the United States of America in 1870 from Canada, where it had been carried by diseased cattle from England. It rapidly extended through cattle traffic from the state first invaded to adjoining states, but was eventually extinguished, and does not now appear to be known in North America. It was twice introduced into Australia in 1872, but was stamped out on each occasion. It appears to be well known in India, Ceylon, Burma and the Straits Settlements. In 1870 it was introduced into the Andaman Islands by cattle imported from Calcutta, where it was then prevailing, and in the same year it appeared in South America. In South Africa it is frequently epizootic, causing great inconvenience owing to the bullocks used for draft purposes becoming unfit for work. These cattle also spread the contagion. It is not improbable that it also prevails in Central Africa, as Schweinfurt alludes to the cattle of the Dinkas suffering from a disease of the kind.

Though not usually a fatal malady, except in very young animals, or when malignant, yet it is a most serious scourge. In one year (1892) in Germany, it attacked 150,929 farms, with an estimated loss to the owners of 7,500,000 sterling. It is transmissible to nearly all domestic animals, but its ravages are most severe among cattle, sheep, goats, and swine. Human beings are also liable to infection. The treatment of affected animals comprises a laxative diet, with salines, and the application of antiseptics and astringents to the sores. The preventive measures recommended are, isolation of the diseased animals, boiling the milk before use, and thorough disinfection of all places and substances which are capable of conveying the infection, together with the deep burying or burning of diseased carcasses.