

Veterinary.**Diseases of Animals**

IN RELATION TO THE PUBLIC HEALTH, AND THE DUTIES OF HEALTH OFFICERS IN RELATION THERETO: BY T. V. HUTCHINSON, M. D., MEDICAL HEALTH OFFICER, LONDON.

[Read Before the Holstein Breeders' Association.]

When we take into consideration the extremely high death rate among children, especially of those under one year of age, and that milk forms a very large portion of their food, the importance of having a wholesome supply from clean, healthy animals cannot be over estimated. London, I believe, was the first city in the Dominion to establish a system of periodical inspection of herds, cow byres, and places where milk is kept for sale, and to control and regulate the sale thereof in the city.

For this purpose the City Council enacted a by-law which provides for inspection and examination by the inspector, that any person offering milk for sale shall first obtain a certificate from the health officer that his animals are clean and healthy, that his stables and premises are also clean, that his wagon has his name and number painted upon it, and that he has complied with the requirements of the by-law. Upon this certificate a license is issued by the city treasurer for one year, subject to be withdrawn any time for infraction of the by-law. The fee paid for the license is one dollar annually. Like liberty, eternal vigilance is the price of wholesome milk, and in order to accomplish this the health officer or other sanitary expert should make periodical inspection of the animals, their stables, food and water, also frequent examination of milk taken from the wagons, the places where it is kept, and the people who keep it. The health officer or a competent veterinary surgeon should visit the herds twice a year, preferably in the spring and autumn; he should see that the stables are well ventilated and clean, and the drainage good; examine each animal carefully for tuberculosis, tumors, or cancers, especially in the spring of the year. The herd should have daily exercise; no cows can give wholesome milk that are tied up for weeks and months in the year, as is frequently the case. Many herds near cities are fed almost wholly upon brewers' grains, which produce a large quantity of watery milk; such animals become feverish, the milk unwholesome, and in two or three years are fattened and killed. Pure water is absolutely necessary, and milk from cows having access to foul pools, or streams contaminated with sewage, should not be permitted to be sold. The health officer should keep a register in which to enter the names of all vendors, their places of business, the number of cows, their condition, source of water, kinds of food used, with column for entering the specific gravity, the percentage of butter fat of the samples from each wagon, and a very good way also is to take samples from the herds and compare the genuine with that obtained from the wagons and shops, and a column for remarks, with the date of inspection. He should see that no milk is allowed to be sold from dairies or dwellings where there is any infectious disease, and lastly, to make assurance against tuberculosis and other diseases doubly sure, the milk should be boiled before using, as there is probably nothing which has a greater affinity for disease germs. To give an instance: A milk

vendor in one of the suburbs of London, a few years ago, had five customers to whom he carried the previous night's milk every morning. This man had scarlet fever in his family. Of the five families to whom he sold the milk, scarlet fever appeared in four, with two fatal cases, and one in his own family. There was no scarlatina anywhere else in the village or neighborhood. It might, perhaps, be supposed that he carried the disease germs in his clothing to these families, but he did not. Having to go to his work early, he left the milk in vessels placed outside their doors, before the people were up. This system of inspection has been followed in London with the result that for two years no case of infectious disease has been traced to impure milk. That impure milk has much to do with infant mortality will easily be seen from last year's mortality statistics. In one of the large cities of Quebec, where there is no system of inspection, or at least a very imperfect one, out of every one thousand deaths, four hundred and seventy were of children under one year, while in London, under a rigid system of inspection, the ratio per one thousand of infants under one year was only two hundred and thirteen. A few weeks ago thirty cases of typhoid fever occurred in the town of Waterbury, Conn., which caused an examination of the milk to be made. It was found that all the cases had been purchasing milk brought into the city from the farm of one man. This man was ill with typhoid fever—his hired man was sent to the hospital, where he died of the disease. A small stream ran by the house, into which it is quite possible some of the germs were washed, and as the cattle drank from it, and the milk cans were washed in it, that stream was an excellent channel for spreading the disease. The facts in this case show again that the dairy herds and farms from which milk is brought into a city to be sold should be inspected frequently by sanitary experts. The owner of the cows, or some member of his family, may be ill with an infectious disease, or the cows themselves may have tuberculosis, or the milk may have been exposed to infection from polluted streams or wells. Cattle are raised in vast numbers in South America, yet there is no part of the world where less milk is used. Cattle are raised almost entirely for beef, as it appears that consumption among cows is more common in tropical countries than in temperate or northern climes, and the germs or bacilli of consumption have given rise to so many cases of this disease that the people have almost ceased using it. The Waterbury case has been taken up by some of the Montreal papers as accounting in a great measure for infant mortality in that city, and the heavy death rate annually reported. One writer says the mortality is high, but if it were not for the large number of infants who die under one year their death rate would be as low, or lower, than any other city. What kills so many of these young children? Milk kills them. They are fed principally upon milk fresh from the cow, and of these cows which supply Montreal with milk a large number are fed indoors the year round. Considering how largely milk enters into the food of the people, particularly of children, the necessity of periodical inspection by competent persons, of the cow byres, and bringing the vendors within the pale of proper control, is self evident. Municipalities should take the matter in hand, and see that the purveyors of that class of food are licensed, and compelled, under pain of having their license cancelled, not only to keep their cows clean and sweet, the animals in good health and condition, but that the fatty matter which constitutes the chief nutritive part of milk should be ample in quantity. The diseases of cows, which the health officer should look for and guard against, are the following, given in the order of frequency: Tumors, tuberculosis, anthrax, actinomycosis,

and other diseases not so dangerous to man, such as scarlet fever, small-pox, pleuro pneumonia and blood poisoning. Tumors should always be regarded with suspicion, until such time as a correct diagnosis can be made. Tuberculosis bovis is far from being a rare disease. Those of you who remember the struggle and hardships of our fathers thirty or forty years ago, while clearing the land, may call to mind the number of cattle that died of the "hollow horn," the same disease under another name; and no matter how well the animals were fed, toward the spring emaciation steadily progressed, till one day the herd would return from the woods, for there was no pasture in those days, with the weak one missing.

Quarantine Again.

At the last moment, as we were closing, word was received that Mr. Secretary Rusk had removed the quarantine against Canadian sheep and swine.

Poultry.**The Cure for Roup.**

Mr. Robert Wightman, chemist, druggist and seedsman, Owen Sound, Ont., writes as follows:—"In looking over your journal for last month I noticed an article headed 'Lice on Hens and Chicks,' in which you recommend coal oil and blue ointment as the remedies to be used against the ravages of these pests. At the same time you warn the public of the great danger that might occur by applying either too freely, as it might be death to the chick as well as the lice. Now, I am advertising in your journal a preparation which is a certain cure for these pests, and will not injure either hens or chicks, but rather improve them, viz., 'Little's Patent Fluid Sheep and Cattle Wash.' It is just as good for fowls as it is for sheep and cattle, and perfectly non-poisonous, so that it is perfectly harmless to the birds themselves, and a thorough eradicator of all classes of vermin. It will also cure roup in its worst form, which is a very infectious disease in fowl. I may say I have sold large quantities to breeders; they use it in their coops, wash the perches down, and apply it to the birds themselves. I drop you these few lines thinking you may not have thought of the preparation, or not have known it was as good for birds as for animals."

Mr. J. C. Benner, Owen Sound, Ont., sends the following:—"It affords me great pleasure to testify to the good qualities of 'Little's Sheep and Cattle Wash' for diseases in fowls. I keep a large stock of thoroughbred Brown Leghorns. This last spring they were attacked with roup in its worst form, caught from some imported birds. I tried all the old remedies, such as kerosene, turps, roup pills, and everything I could think of, but found nothing to give relief, until I was persuaded to try a tin of 'Little's Sheep and Cattle Wash,' which I used with water, injected into their throats, and gave it them to drink, bathing them in it. In two or three days I noticed a great change for the better. In ten days a thorough cure was effected. Had I known of this remedy before it would have saved me \$50. I cannot speak too highly of it, and can strongly recommend it to all breeders."

A Fat Stock Show.

At a meeting of the Agriculture and Arts Association, held on June 24th, the above Board was waited on by a deputation from the Dominion Live Stock Association, asking them to use their influence in promoting a permanent live stock exhibition to be held in the city of Toronto in the spring of each year, providing the accommodation be furnished. The objects and aims of such an exhibition to be similar to the Chicago Fat Stock Show. The deputation withdrew, and a resolution was passed embodying the above.