

# A Plan for Securing Greater Uniformity in the Quality of Cheese.

One of the requisites in maintaining the high standard of Canadian cheese, and retaining first place in the best markets, is *uniformity* in quality, as well as *fine* quality. If in any cheese district one half the factories make an inferior article, the sale of the product from the other half, where finer goods are made, will be injured, and the reputation of the whole lowered. So it is in the interest of those factories where fine goods are made to have the quality of the cheese made in neighboring factories brought up to as high standard as their own. To do this successfully there should be co-operation between factories, and a mutual desire to help one another.

Though the finest quality of Canadian cheese is made in many Western Ontario factories, yet all have not yet reached the proper standard. It will therefore benefit every factory, in that or any other district, if the general quality can be raised equal to that of the finest. To accomplish this, a uniform system of making must be carried out, and this can only be accomplished by a uniformity of instruction and inspection. We have an example of uniform methods of work in connection with the cheese factories in Prince Edward Island. The output of the factories there is said to be of a standard quality throughout. This has been brought about by having one skilled man supervising the methods of making in all the factories.

The Western Ontario Dairymen's Association has under consideration plans for bringing about still greater uniformity within its jurisdiction. As soon as these are perfected they will be submitted to the factorymen. The number of factories in Western Ontario is too large to admit of giving uniform instruction at all by one or two persons, so it is proposed by the Association to arrange them into five or six groups or syndicates. A thoroughly skilled maker will be placed over each combination, to visit the factories regularly and give instruction in making; while one or two competent men will be employed to look after and instruct those in charge of the syndicates.

To carry out such a plan of systematic instruction a considerable amount of money will be required. The present Government grant would not be sufficient to meet this extra expenditure. Therefore, to finance it successfully, the factories would need to contribute; in fact, if the Association cannot depend upon each factory in the several groups or syndicates to pay its share of the expenditure, the scheme proposed cannot be carried out. There are estimated to have been about 22,000 tons of cheese manufactured in Western Ontario in 1894. If each ton of cheese made were taxed, say, 15 cents, \$3,300, or an amount sufficient to pay for four or five instructors for syndicates, could be obtained, which would enable the Association to do a large amount of valuable practical work. There are about 340 cheese factories in that portion of Ontario. Another means suggested of raising this revenue would be to have each factory pay \$10.00. This would furnish about the same amount of money, but, for obvious reasons, would not be as fair a basis as the other. It would not be fair to tax a factory making 40 tons of cheese as much as one making 100 tons.

Copies of the scheme, when perfected, will be sent to the factory representatives, to be discussed at the annual meetings during the winter, and submitted to the patrons for their approval. If it meets with the co-operation of the factorymen, arrangements will be made to have it carried into effect next season.

The object in view is certainly most laudable, and can only be achieved by hearty co-operation. Canadian dairying for years past has been reaping a bountiful harvest from efforts in this direction. Systematic instruction in dairying has brought the business greater profits, which is the ultimate object of this new proposal. Whenever we begin to relax our efforts in improving the quality, just so soon will we begin to lose our hold upon the cheese markets of Great Britain. The English consumer is not so much concerned about the place where his food comes from as about its quality. With him the place that sends him the finest quality is going to get his custom.

## VETERINARY.

### Tuberculosis Among Cattle.

[A paper read by S. J. Thompson, Veterinarian for the Province of Manitoba, before the Manitoba Dairy Association.]  
"There has been so much said and written about this disease that it is not my object to give you a long history of the disease, but to give you, in as concise a way as possible,—

"First—To what extent I find the disease prevailing in this Province I speak after a careful inspection of a great number of cattle in different parts of the Province, and after having used the tuberculin test on about 120 suspected cases, of which 68 were found to be affected with tuberculosis, the greater part of which have been destroyed, and post-mortem examination made on the great majority (which helps to prove the value of tuberculin as an agent for detecting the disease in its earlier stages, while quite impossible to detect it by physical examination), and after a careful summing up, I believe I am quite safe in saying there is not more than three per cent. of our cattle affected; but there is no doubt we will find the great majority of those among our dairy cattle. We find there are many people who go to extremes

on almost every subject—this among others. Some will tell you there is little or no danger; that the disease is no worse than it was twenty years ago, and that the tuberculin test is all nonsense; while others will paint in the darkest colors the great dangers the people are exposed to by using milk or meat from tuberculous animals, and loudly call for the destruction of every animal affected, however slightly. I believe these are the two extremes. That there is danger from the use of tuberculous animals cannot be successfully denied, as many smaller animals and calves have been infected by its use in carefully made tests; yet we find that in 80 per cent. of diseased animals the milk is not infected; that is, none of the bacilli or germs can be found in it. We might say that in the majority of cases where the disease has been found in the milk, tuberculous nodules have been found in the udder, or the disease had so far advanced that it was disseminated through the system.

"Second—Measures to prevent the spread of the disease:—(a) By testing every thoroughbred animal coming into the Province. This I consider very necessary, as cattle breeders in other parts are getting to understand enough about the disease to want to get rid of any animal showing the least symptoms of it, and as it is so prevalent in other places we cannot be too careful in admitting cattle into this Province. (b) By testing with tuberculin all thoroughbred cattle sold in this Province for breeding purposes, especially males, as the disease is often introduced into healthy herds in this way. (c) By the destruction of all animals showing physical signs of the disease; that is, piners or wasters, cattle that become emaciated, having a cough and discharge from the nose, or with enlarged glands of the throat, flanks or udder, or a combination of symptoms. (d) The thorough cleaning and disinfecting of all stables where affected animals have been stabled. I wish you to distinctly remember there is little or no use destroying animals if you put healthy animals into the same stable without thoroughly cleaning and disinfecting it. There is no doubt that 90 per cent. of the disease is caused by the inhalation of the bacillus tuberculosis in the form of fine dust; therefore our great care should be not to allow any of the discharge to dry on the mangers, stalls or floors, or to rise in dust. Sprinkle your stable floor thoroughly before sweeping. (e) By allowing no person affected with tuberculosis to feed or care for cattle, as there is no doubt that the disease originates in some herds in this way. (f) By careful isolation and branding of all animals that react with tuberculin test.

"I will be asked what is the use of isolating them if they have tuberculosis? I answer, to slaughter as food for man, or for breeding purposes. The question will be asked, Is meat from tuberculous animals fit for human food? I answer in the affirmative; that is, where the disease is localized in the lungs, liver, or some of the smaller glands. After a careful study of the many tests made by Professors Nocard, Bangs, Williams, and the Professors of the Bureau of Animal Industry at Washington, and others, I have come to the conclusion that there is little or no danger from the use of meat from animals with localized tuberculosis, and positively none if the meat is well cooked. Therefore, when we have a herd with a number of young animals slightly affected, as we sometimes find the case, I do not think it right or necessary for stock raisers or dairymen to be at the loss of their cattle, but all that are not required for breeding purposes should be at once fattened and killed.

"Breeding from tuberculous cattle. If I had a herd of dairy cattle that to all appearance was healthy and strong, with a few exceptions, I would feel it to be a very great grievance and wrong if I were forced to destroy them unless I was fully recompensed. It would be quite right and just to prohibit me from selling milk or butter from such a herd, but to prevent me keeping my cattle isolated that I might increase my herd with their progeny, 90 per cent. of which, with judicious care, I would expect to be free from this disease, I would consider a great hardship; therefore, if I had a herd of cattle that I had cause to suspect were affected with tuberculosis, I would have them tested with tuberculin. Those that showed physical signs of the disease, besides reacting with test, I would destroy; the others that reacted I would isolate. I would go on and breed them as usual, taking away their calves as soon as they are born and feed them on boiled or sterilized milk. I would again test those calves when about a year old, with the full expectation of finding them free from tuberculosis. And I believe, under certain circumstances, I would go further; that is, where I wished to isolate my cows in a distant pasture, where it would be very inconvenient to milk the cows and feed the calves, I would allow the calves to run with their mothers until time to stable them in the fall, then, before stabling, I would test the calves with the expectation of finding very few, if any, affected by the disease. There is one thing more I wish to mention and to lay a great deal of stress upon, namely, I believe it should be made a criminal offence to sell milk or its products from tuberculous cows, or to sell an animal that is tuberculous (or has been branded as such) without informing the purchaser and also notifying the Department of Agriculture, so that the continued isolation could be insisted on. Where sold to butchers to be slaughtered, it should be inspected by a qualified man. These are some of the means I would take to hinder the spread of this disease and minimize its effects on our dairy cattle, and through them on the human family."

## APIARY.

### North American Bee-Keepers' Convention.

(Concluded.)

The Rev. L. L. Langstroth gave an address on "The First Importations of Italian Bees." The Commissioner of Patents in the United States gave a commission to Mr. S. B. Parsons to secure the Italian bee; and after much trouble, the Italian bee secured a footing on the American Continent. Mr. Langstroth stated that the drones from these queens were black; they found, however, that pure Italian queens, purely mated, could have Italian drones; the color in queens and drones was not decisive but in the workers.

"Introducing Queens.—Mr. S. T. Pettit, Belmont, Ont., followed upon this subject. Mr. Pettit stated that many queens, apparently introduced safely and surely, were accepted under protest, and were often superseded or killed. He liked to introduce a queen to a weak colony; they were less liable to object. An excellent plan was to make up a colony of combs of hatching brood; the bees were then all young, and the queen perfectly safe.

"The Bee-Keepers' Union.—Doctor C. C. Miller, Marengo, Ill., and Thos. G. Newman, Chicago, Ill., introduced the question of the union of the Association with the Bee-Keepers' Union. The Bee-Keepers' Union is noted for having taken hold of cases where, out of ill-feeling, ignorance or other cause, bee-keepers have been prosecuted, or bees have been prohibited, by ordinance or by-law, from towns, cities, villages, etc. The Union has shown that such prohibition is illegal and unconstitutional, and cannot be enforced; if they lost a case in a lower court they invariably won it in the higher. From the discussion, it is likely that the union will take place; the question was put in the hands of a committee.

"Something of Interest to Bee-Keepers.—G. M. Doolittle, Borodino, N. Y., gave an interesting address. In it he said bee-keepers had made a mistake to speak so much of adulteration; the right way was to go to the Legislature or Parliament and quietly have an Act passed putting heavy penalties upon adulteration, and then enforce the law; such methods would soon stop adulteration. Mr. Doolittle's remarks fell upon a sympathetic audience.

"Address by the Hon. John Dryden.—Thursday evening was one long to be remembered, and members felt themselves honored by the presence of the Hon. John Dryden, Minister of Agriculture, and Dr. Mills, President of the Ontario Agricultural College. Mr. Dryden spoke in his usual pleasing, forcible and instructive way, pointing out the great resources of the Dominion and Province of Ontario, instances of the Acts passed for the protection of bee-keeping, the grants of money allowed for its development. In closing, he said: "I wish you every success in your enterprise. You represent a large industry. It is composed of very small drops, but taken together it means a great deal. Our people in this country and the people in the United States do not realize what it means, but you can add wealth to this country and to your country by paying attention to this industry. We who represent the Province believe we help all the people when we help the bee-keepers of Ontario; and therefore it is that we give grants year by year to this Association, and assist as far as we can to help them in their work." (Applause.)

Jas. Mills, M. A., LL. D., President of the Ontario Agricultural College, followed in an address which showed careful thought, and from which those present could derive, in the application, much profit. Doctor Mills said that success in farming, more than any other calling, depended on a number of uncertain and uncontrollable conditions or circumstances; he would venture to say, in his judgment it was not advisable for a farmer to concentrate his whole attention to any one line or branch of his occupation; that it is not wise for him to put all his eggs into one basket. President Mills then spoke of the Ontario Agricultural College and the experiment in bee-keeping which had been started, in which a keen interest was taken by those present. Different experiments were suggested.

At the close both gentlemen received the rare honor of being elected honorary members of the Association.

Mr. R. L. Taylor followed upon the subject of "Experimental Agricultural Stations," asking that greater interest be taken in the work.

Mr. Allen Pringle followed upon "Some Mistakes of Bee-Keepers and Bee Journals." Amongst other things, Mr. Pringle said: "In the first place, when a man gets by mistake into the wrong business (for him) of tending bees, it is another mistake not to get right out of it again before his money and himself have parted company.

To have a little fortune out of bee-keeping (saying make a little fortune out of bee-keeping and patient, nothing about a big one) takes time and patience, persistent work, as well as special aptitude and ability; and, in addition to all this, an extra locality for the abundant yield of nectar. But a little fortune may undoubtedly be made under the favorable conditions noted."

Mr. R. McKnight, Owen Sound, followed upon "Legislation for Bee-Keepers"; this elicited nothing very new.

The following officers were elected:—President, A. I. Root, Medina, Ohio; Vice-President, Wm. McEvoy, Woodburn, Ont.; Secretary, Dr. A. B. Mason, Auburn, Ohio; Treasurer, W. Z. Hutchinson, Flint, Mich.

Adjourned.