

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE. *

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EDITORIAL.

The Cheese and Butter Branding Bill.

The new Canadian Cheese Branding Bill, of which a correct summary was given in our last issue (page 274), has passed the House of Commons and received its third reading in the Senate. It will become law as soon as the Governor-General's assent is secured, which will be but a short time, so that factory and creamery men will do well to get their brands ready for use. The word "Canadian," "Canadienne" or "Canada" must be stamped in a legible, indelible way, in letters not less than three-eighths of an inch high and one-quarter of an inch wide, upon the box or package containing cheese or butter, and in case of cheese upon the box itself. It is not necessary to put on a factory number or the date of manufacture.

U. S. Butter Abroad.

The U. S. Department of Agriculture has got returns from its two experimental shipments of creamery butter to Great Britain, but the results were not very encouraging from a financial standpoint. Unless the product can reach the British consumer at a low cost of transportation so that better net prices can be realized than at home, eastern U. S. creamerymen are not likely to consider for some time the question of exporting butter. It is difficult to reconcile this conclusion with the fact that large quantities (some 240,000 packages) were last season shipped from the States to England. One lot from the Ames (Iowa) College creamery was reported "firm, bright, and in sweet condition throughout," but was not up to standard in flavor, contained too much brine or water, and was all too salt; but the New Hampshire lot was more satisfactory. The Government has evidently "discovered" what private enterprise learned long ago in Canada, and in the Republic as well probably, regarding light salting and coloring, the use of the square 56-lb. package, and other points. To ensure the exporter ample modern transportation facilities at reasonable changes would seem a more needful field for Government activity.

The Tuberculin Test Once More.

The FARMER'S ADVOCATE took occasion a couple of issues ago to dissent from the recommendation to a Parliamentary Committee of Dr. McEachran, Chief Veterinary Inspector for the Dominion, that the Government set aside \$100,000 to inaugurate a campaign of tuberculin testing, slaughter, and disinfection. The country is not ready for any such drastic procedure, nor is it necessary. It would, furthermore, involve endless trouble, though, no doubt, as long as the supply of appropriations held out it would prove a perennial plum for needy veterinarians, a good many of whom, by the way, are probably ill-prepared for the critical work of applying the test. Judging from his speech at the time, we apprehend that Hon. Mr. Fisher, the Minister of Agriculture, will set his foot down firmly and promptly upon this needless and unwise "plan of campaign" and encourage instead an educational course by which the best, most economical and permanent results can be secured.

Our position is confirmed by a recent letter from Prof. H. L. Russell, Entomologist of the Wisconsin Experiment Station, where a great deal of practical attention has been devoted to the subject, published in *Hoard's Dairyman*. He says:

"Serious attempts have been made in certain parts of the country to eradicate the disease by destroying all reacting animals. Such a course is undoubtedly too drastic, and it has met with persistent opposition. It is a question whether such methods are warranted or not. Certainly, such a course is sure to defeat the very end desired: the co-operation of all in eradicating the disease." Prof. Russell further indicates what is now generally conceded among scientists, that tuber-

culosis is not what is called a hereditary disease, and also the course that should be taken in case of a herd where the trouble may have made its appearance. He observes:

"From experiments already made under different auspices it is evident that the progress of the disease can be stopped by the isolation of all reacting animals. The least affected animals can, with care, be used for breeding purposes, and if the calves are separated at birth and fed on boiled or pasteurized milk it is possible within a relatively short time to build up a strictly healthy herd from affected parents. Under these conditions a valuable animal in a herd, even though she reacts to the test, often may be kept for a considerable time for breeding purposes. Tuberculosis is rarely hereditary. It is contracted, in almost all cases, after birth by breathing contaminated air or consuming diseased food. If the source of contagion be removed the young stock will remain healthy."

"For the past year the Wisconsin Agricultural Experiment Station has been working with a herd under these conditions. The results already accomplished justify us in believing that it is entirely possible to take a herd in which a large percentage of the animals react to the test and from such an affected herd build up one that is free from tuberculosis. Not only is it possible to stay the progress of the disease, but the condition of the reacting animals can often be actually improved if nature is allowed an opportunity for recuperation. Such a method requires time and patience, but it will result in saving the good qualities of a herd at a comparatively slight expense, whereas the stamping out method necessitates beginning again at the bottom. Even if the herd is entirely destroyed it is necessary to thoroughly disinfect the infected barns and also test all new stock purchased before starting a new herd."

In view of the foregoing considerations those who have been inspiring the tuberculosis campaign (with "appropriations") can have no difficulty in coming to the conclusion that it does not commend itself to the good judgment of the country and will not be tolerated.

"Agricultural Business Science" for the O. A. C.

Some time ago President Mills of the O. A. C. wrote a letter to the FARMER'S ADVOCATE, replying to members of the Ontario Legislature who had been criticising the conduct of that institution on the floor of the House. As Mr. D. M. Macpherson, M. P. P., of Lancaster, had, after careful investigation into the matter, taken an active part therein, he now writes us a long letter replying to Dr. Mills in order to make clear to our readers the object of the criticisms. He takes exception to the following statement by Dr. Mills: "I hope it does not follow from this that our bookkeeping is defective or that we need a special accountant to put things in proper shape."

He (Mr. Macpherson) states that the system of keeping the accounts is "insufficient to give the students or public an insight into the comparative value of work done on the profitable direction of labor." He adds:

"I find that there is no accurate account kept of the labor cost of production, capital cost of production, or even incidental expense cost of production (such as maintenance, wear and tear) for any one farm product. The farm produces wheat, oats, barley, peas, hay, corn, ensilage, roots, and milk, etc., etc., yet no subdivision of charges is kept either in the labor, capital or maintenance, and hence the cost of production of any one individual crop is not known. I find in the feeding of animals for experiment only is there evidence of a proper individual debit and credit observed." Mr. Macpherson concedes that the College is well equipped and managed, for on this point he says: "I have every reason to believe that the work done in the College proper as to the scientific teaching of agriculture and discipline of the students is all that could be wished for, and the practical work done on the farm and in the experimental plots is artistic and as near perfect as can be. The yield per acre on the farm proper is equally successful, but for the systematic keeping of farm accounts and economic results per acre or per crop, the management of the farm is not all that can be desired, and I assert that

these very important requirements do not receive sufficient consideration to promote the best financial results, either to the farm students or the public."

A good business man, in a productive business, should know the exact cost of production in relation to each article, or how, asks Mr. Macpherson, will he know where profits arise or losses occur?

The lack of the institution, Mr. Macpherson contends, is what he describes as the application of "business science," in addition to the other two great requisites, so that students will not only understand the science and practice involved in raising abundant crops, but learn "how to produce the most profitable crop." What he advises is a "business department" supervised by a "business professor," who would lecture on "agricultural business science," devise the best plans of work, the best system of keeping the farm accounts, and to demonstrate the economic result of work done on the farm, which would not only benefit students and the people, but, he contends, cause parliamentary representatives more cheerfully to grant any reasonable money requirements for promoting the efficiency of the institution.

We should be glad to hear a further expression of opinion from readers who have given this subject due consideration as to whether such an addition to the already large college staff is really necessary, or whether such a line of work, if required, would not properly come within the function and capacity of the existing staff.

Partial Underdraining.

The unusual lateness of the season for spring seeding this year and the frequent rains which delayed farm work has no doubt led many farmers to turn their thoughts to this subject. While it is certain that most farming lands, especially such as contain a fair amount of clay, would be improved both mechanically and in certainty and amount of yield of crops by underdraining, yet we find that in most sections of Canada very little underdraining is done. This is probably not because farmers as a rule are not persuaded of the benefits that would be likely to follow the practice, but because they do not feel that they can afford the outlay necessary for the performance of the work. While we sympathize with them to a large extent in this view of the case, at least in so far as thorough drainage is concerned, we are constrained to say that there are on most farms some parts of fields which the farmer cannot afford to leave undrained. These are low, flat places from which there is little or no fall to carry off the surplus water by means of the usual surface drains or water furrows. Such portions of the fields are liable, especially in a wet spring, to delay the seeding of the whole field for several days, and in such a case the loss in the difference between a good crop, such as would likely have followed an early seeding, and the inferior yield, owing to delay in seeding, would mean more in one season than the cost of putting in underdrains sufficient to have improved the condition of the field, making it more uniform in all its parts and fit for earlier seeding. These low places, generally containing the best land on the farm, often hang out the signal of distress in the form of a broad sheet of water on the surface after a shower, or in the dark, wet streaks in plowed land where all should be uniformly dry. Sometimes it is seen in the curling leaves of the corn crop or in the yellow leaves and spindling stalks of grain. The result is an uneven crop, a smaller yield from the whole field, and the harvest delayed while these places are maturing, the better parts of the field in the meantime getting overripe, resulting in loss of grain by shelling and loss in the feeding value of the straw on the greater part of the field. These facts may well lead the farmer to reflection; and if he feels that he cannot afford to drain the whole field, he may at least, if a fair outlet is available at a reasonable distance, put in sufficient tile drains to improve some of the worst of the places we have described. If he does this much properly