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Dairy and Farm & Rural Home

The Recognized Exponent of Dairying in Canada

Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.—Lord Chatham

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The Problems of the Dairy Farmer in Alberta

A Review of the Situation by G. A. Hutton, B. S. A., Director Dominion Experimental Farm, Lethbridge, Alberta

ALL lines of effort dealing with production are facing special problems at this time. The ranks of the producers have been drawn upon to fill the ranks of those who fight that men who stay may have freedom to produce. Both ranks of men, those at the front and those on this side, are facing new problems, new hardships and new responsibilities. It should not be said of those who form the home ranks that they have weakened under the fire of these problems.

German guns are said to have sunk over three million pounds of cheese in the first two weeks of January. Production must take into account these losses, meet them, and in addition, produce foods in quantities never before totalled. This is a part of the problem of the ranks of those who stay at home. Let men be encouraged by the thought that no real business, no business worth while, finds itself without serious problems at this time. It is part of a man's job to face these problems and solve them.

The problems presenting the most serious difficulties are those of food and labor. The problems of housing, the combatting of diseases, and the fact that dairy products have more or less of a competitor in oleomargarine, are questions of somewhat minor importance at the present time, but still merit the earnest consideration of the dairymen of Alberta. Briefly, let us discuss the minor problems first.

Oleomargarine Blunder.

I consider that we made a national blunder in permitting the sale of oleomargarine in Canada. The food value of this product is so decidedly inferior to that of butter in the nourishing qualities it contains, that those families who consider that the pressure of necessity compels them to use this substitute, will do so to the detriment of the health and mental well-being of the young people who are growing up in these homes. It is to be expected that this product will not compete with anything but low-grade butter, and since this province has the reputation of making very little of this class of goods, oleomargarine will hardly be a serious competitor, in a discriminating market, of the product of the dairy cow. As a menace to the dairymen it may prove nothing but a shadow having an outline but no substance. Its introduction is unfortunate more from the standpoint of the consumer than that of the producer, though it is bound to be injurious to both classes. It is to be hoped that in the interests of the good health of the nation that this product may be withdrawn from Canadian markets as soon as the war closes.

Diseases.

We must in time face the question of tuberculosis in Canadian herds. I have sometimes thought that the question might be dealt with by dividing the province into zones, that importations to and exportations from these zones should be made only under test, that in time the whole of the province could be included and cleared of the disease by the gradual multiplication of the healthy zones. It is admitted to be a big task to clear an entire province at one time, but if the work were undertaken in this way I do not see why the disease could not be gradually eliminated.

Whether this scheme would work in practice is not so much the question as it is that some plan should be evolved for the handling of this disease so that we may look forward to a future in which the health of the human population of the province is not menaced by diseased herds. We have been paying too little attention to the health of the family and relatively too much to the health of the animal. A visitor to a southern town was remark-

ing on the fact that a number of houses along the river were set up on posts to provide for the possible rise of the stream. As he walked along he came to one particular house where the area underneath was enclosed for three feet along the ground with boards nailed to these posts, and going over he found a large number of hogs in the enclosure under the dwelling. The owner was asked as to whether he did not believe that this practice of housing hogs beneath the residence was unsanitary, to which he replied, "No, I've kept hogs under this house for the last eleven years, and there has never one of 'em been sick."

Housing.

It is a difficult matter to build a dairy barn that is at once economical, sufficiently warm for winter, and well ventilated. The term economical must not be interpreted to mean low cost, but to convey the idea of being as low in cost as is consistent with the securing of the other qualities necessary to maximum production of the herd housed in the building. The two-storey barn, with storage provided for feed above the cows, is the most satisfactory type of building. The ceiling of the first storey should not be too high, and the ventilating system capable of being regulated so that the intake of air may be fully controlled. The ventilating shafts carrying out the foul air should be double-boarded, with paper between, so that the outgoing warm air will not cool too quickly, causing the formation of frost and the gradual filling of the ventilator shafts with frost during protracted periods of cold. Concrete floors, steel fixtures, and plenty of room be-

hind the cattle are items which add to the initial cost, but which contribute to permanency, cleanliness and reduction of the labor cost in the handling of the herd. It is not to be doubted that the cost of building will be lower later on, and those men who find their equipment, even though not fully satisfactory at the present time, yet capable of being adjusted to such an extent as to make possible the efficient handling of their herd, will be well advised to make these necessary adjustments, delaying temporarily the construction of more elaborate building accommodation.

Increasing the Selling Price of Milk.

Sound business sense demands that any line of endeavor shall offer its profits before attracting capital and labor investment. Dairying has not offered sufficiently attractive inducements in the way of profits in recent years to warrant very increasing investments in this branch of agriculture, in competition with other lines of agriculture. Milk is the cheapest and most nutritious food on the market to-day. I am not suggesting that the price of milk be raised to such an extent that it would be over an equal basis with other foods, but that the price of milk and its products be advanced in order that the profits resulting to the dairymen would be such as to attract larger investment, and so increase production.

The cost of the returns to milk at the prices at which it is being retailed is away below the cost of nutrients in steak, salmon and chicken, and would permit of some equalization without injustice to the consumer. Milk at twelve cents per quart represents 620 calories of heat; steak at thirty-five cents per pound represents 280 calories; salmon at twenty cents per pound represents 300 calories, and chicken at thirty-three cents per pound represents 283 calories of heat.

Labor Efficiency.

When men are working to what they consider their full capacity, no one receives much thanks for suggesting an increase of output with the same labor. It is a fact, however, that frequently an inquiry into methods of work will make it plain to the owner certain changes in method which will reduce labor without detracting from efficiency. Every operator should inquire of himself as to whether there are not some changes in his system which might be introduced.

The mechanical milker should receive the consideration of every dairy farmer who is handling 15 or more cows. The Experimental Farms System has been carrying on experiments for several years at the Central Farm at Ottawa, with various makes of mechanical milkers, and have reached the conclusion that a saving in labor of from 35 to 40 per cent may be effected by the use of such a machine. It has been estimated that the cost of hand-milking is 7.2c per cow per day where men are paid 25c an hour. The cost of machine-milking has been placed at 4.6c per cow per day, labor being valued at the same rate, and having allowed for the running expenses of the machine.

The average cost of installation, taking into consideration several of the most popular of the machines on the market, would average about five hundred dollars for an outfit capable of milking four cows at once, and a herd of from twenty-five to thirty cows. These figures would place the cost of installation at from \$15 to \$25 per cow, depending upon the size of the herd. The smaller the herd the larger the cost per head to install. Given a man with an interest in his work, the machines are proving very efficient and the results, as far as the cattle themselves are concerned, have been entirely satisfactory.

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The Silo is Indispensable

IN these times of high-priced feed the silo is as indispensable to the farmer as any other piece of farm equipment. Many farmers would be better off if they had less other farm equipment and a silo or two. Silos mean livestock, and livestock means more pasture, hay, corn, other grains, and farm manure.

Livestock means enriched soil, larger crops, more money for the farmer, and plenty of prosperity for everybody.

Livestock means more meat, milk, butter, cheese, and clothing for our soldiers. No nation can exist without an ample supply of animals.

Silage should be considered by the farmer in the same light that the house-wife considers her canned fruit, a provision for future needs. The advantages of the silo are many, and if these were known to the farmer, more silos would be built. More of the corn crop can be saved by the use of the silo than is saved in the ordinary way. With the best methods, ordinarily about 33 per cent of the crop is lost, and under certain conditions it may far exceed this amount, but with the silo, there is no loss except what is caused by fermentation. This is very small. Any method that will enable the farmer to get more out of his crops will increase the returns from his land. With the silo, our land will return one-third more than without it.—R. W. Clark.

*An address before the Alberta Dairymen's Association Convention this year.