

milk yield, build him new barns, and, as our friend Derbyshire would put it, "It will keep the farmer's wife in nice shape," when the family income is so much improved. In the States of Vermont, New Hampshire, Connecticut and New York, I know a few herds which turn out 300 lbs. and 360 lbs. of butter per cow yearly since ensilage was resorted to, which before made from 200 to 250 lbs., and cost more money to produce it.

The other day some one asked me how much butter the Ontario creameries made. The question made me wince, because I had to answer that Ontario made about 32,000,000 lbs. of butter, of which about 2,500,000 lbs. only is creamery—about enough to keep this city for twenty two weeks. I am rather glad Bill Nye did not know this when he came here to lecture. He certainly would have twitted us with one of his quaint dashes of humor, and have made capital out of the fact when he got into New York or Michigan.

I often wonder why we don't get a few fresh eggs in winter. There are many families here willing to pay 30 to 40 cts. for fresh eggs from December 1st to March 1st. There is no other food product that will ever do so much for the woman's department of the farm as ensilage. Dairy products in winter and eggs and poultry are growing more important every year. Can our lady friends help us to get a few silos built in each county this year? Wisconsin has 515, and is planning for 200 more this year.

The Most Important Factors in Making the Butter Industry Profitable.

This paper was read by Mr. V. E. Fuller, Hamilton, at the recent annual meeting of the Ontario Creameries Association, held at Guelph.

It is generally conceded that no branch of our agriculture in Ontario is in so backward a condition as the butter industry, and the object of this association is to improve it.

It cannot for a moment be contended that Ontario is not in its climate, in its soil and pastures, its water, and in the character of its inhabitants, admirably adapted to superior butter production. Sweden cannot compare with Ontario in these essential adjuncts to butter making, and yet the former country is rapidly acquiring a first rank for the quality and quantity of its butter. We must seek beyond the natural causes for the true solution of this problem, and I shall endeavor to point out what appear to me to be a few of the causes. First and foremost to my mind is a

WANT OF KNOWLEDGE IN THE ART OF BUTTER MAKING

I say the art, because the knowledge of how to produce a good article of butter is not acquired save by application, care, study and experience. It is too commonly believed by the majority of our farmers that when the cream is separated from the milk and is made into butter, the one to whom this part of the farm work is relegated has performed his or her duty. No regard is had to the cleanliness or health of the cow; to the food partaken of by the cow; to the cleanliness of the utensils into which the milk is drawn and later on retained; to the absolute necessity of keeping the cow stable free from objectionable odors; to the retention of the milk and cream in a pure and wholesome atmosphere; to the proper mixing and thorough incorporation and equally ripening by stirring of the cream of various ages; to the proper ripening of the cream; to the proper temperature of the cream at the time of churning; nor to the fact that the butter should not be worked until it is one mass of grease; to the beneficial and profitable result that always follows from the packages being prepared in the most neat and tasteful manner for the market. All these points are absolutely necessary and must be carefully guarded if we wish to produce an A1 butter. That this knowledge is not possessed by the majority of our butter makers is too painfully apparent when we go upon the open market to purchase butter for our own tables, and it is so conceded by the general public.

Millions of dollars are annually lost to the province by this lack of knowledge, and our farmers are poor-

er by millions of dollars every year. How can we best remedy this? Such meetings as we are holding to-day is one of the means to that end and the objects that this association has in view. The establishment of creameries is one of the quickest and surest educators. Discussion in an intelligent audience will always give us fresh light on any subject, and the establishment of creameries when conducted in an intelligent and skilful manner, has in other countries been the means of improving the butter making knowledge to a very appreciable extent.

Farmers' wives and daughters upon whom generally falls the duty of the dairy work, have not the time or opportunity in this country to learn the art of butter making in its highest conception. But when a creamery is established the quantity of milk which is sent to any one creamery justifies the employment of one who has a thorough knowledge of his calling; one who knows and can impress upon the patrons the necessity for the proper care and feeding of the cows and the dealing with the milk and cream. The enforced necessity of producing the cream or milk in a clean condition is in itself an educator to every farmer supplying such, and the modes pursued at the creamery in producing the butter, and the extra price obtained for the same, act as a stimulant not only to the patrons, but to every farmer in the neighborhood, to emulate and if possible equal the product produced at the creamery.

But are all our creameries requiring at the hands of their patrons a proper raw material, and are they making the best article of butter possible to be produced? I fear not. Then surely our first work is to set our own houses in order by the visit of a properly qualified inspector or instructor before we seek to establish other creameries, and when this end has been reached let us one and all seek by all means in our power to encourage the establishment of additional ones.

I do not hold to the opinion that an equally good article of butter cannot be produced in a private dairy, on the contrary I believe that with equally good surroundings and with an equal knowledge, better butter can be made in private dairies, for the reason that on one farm with the requisite care, a milk and cream more cleanly and perfect can be produced than when the butter maker is obliged to depend upon the cream of many farms. Yet from the very nature of other work on the farm the creameries must be, for years at least, the source from which our best butter will be drawn and they will also act as the best and quickest educators in butter making.

At the price at which beef and wheat have been selling in the past two years, no branch of farming will be found so profitable as the dairy cow, and yet the average cow of Ontario does not produce one-half the annual return that she is capable of.

MILK AT LESS COST.

The cow was intended by nature to produce but enough milk to raise her calf. She is now, as a deep milker, the creature of man's handiwork. From my own experience I know that the length of time a cow will keep in milk depends much upon her care, feed and handling. The first year of milking is the proper time in which to lay the foundation for a persistent milker. Milk her with her first and second calves but for four to six months, and you will fix that "habitude" in her. On the contrary feed her well, and milk her up to within six weeks or two months of her calving and persist in this, and you will equally as thoroughly fix the habitude to continue long on her flow. If this course were persisted in by every farmer in the country we would have the annual production of our milk per cow largely increased, and our cows would in the winter time help to keep themselves, in place of being kept, as is too often the case, in a wretched and impoverished condition, only to require an extra amount of feed or grass in the spring to bring them to their flow of milk. "Like begets like or the likeness of an ancestor," and the "habitude" you have fixed in your stock for two or three generations will be handed down to their offspring. If our cows will produce 5,000 lbs. of milk per year (equally as good as when they produced but 3,000 lbs.) every pound of butter made from such extra 2,000 lbs. means an additional profit to the owner. To fix a habit of continuing in milk I claim is a factor in making the butter industry profitable. Such long continuous milking means to the creamery men winter dairying, but I know in the United States the best creameries are keeping open all the year through, and I have no doubt our creameries would be only too glad to do so were they assured of the milk. In the

experience of others as well as my own, I know that cows calving in the fall, as a rule, with proper care and housing produce more milk in a year than those calving in the spring. Cows calving in the fall and beginning to fail towards spring are picked up by the grass and a fresh and additional flow of milk given to them, whereas those calving in the spring are checked by our droughts of August and September, and unless unusual care is taken they fall off when going into the stables. Butter made fresh in the winter will always produce a better price than packed butter. For these reasons I claim that winter dairying is one of the factors in profitable butter making.

(To be continued).

A New Yorker's Experience.

The disposition to experiment and change constantly without any good reason for it, will frequently happen to the most prominent and successful butter makers in the west, who have only attained their enviable position after many years of trial and tribulation in the business. If we should stop to investigate the causes of this frequent departure from the beaten path, it will likely be found that they have been prevailed on and then entirely succumbed under the pressure of some influential and fascinating salesman; hence a new kind of salt or other coloring is purchased and used, or an entire new process of churning or working the butter adopted; different temperatures for the milk or cream will be tried, and numerous other schemes that cannot be enumerated.

This is a very unfortunate state of affairs and should be altogether condemned. This is not the entire story, however, for the channels of trade in the east, for which it might have been peculiarly fitted, may fail to respond to the change, and reject it perhaps with great contempt for not being the same as before. New outlets must then be found again and concessions in price as inducements are made to build up other admirers for the now new and changed character of the butter. Thus the expense and loss of reputation and trouble in the east for want of that most admirable of all elements of human nature in the west, viz., stability, regularity and reliability in the making, handling and shipping of fine creamery butter.

This paragraph, clipped from an exchange, enunciates a principle that cannot go unheeded by him who is to succeed in any line of life. When one has, after years of hard and constant labor, established a reputation for his goods, he cannot be too careful as to what changes he introduces. It would not be commendable for him to reject what have been clearly demonstrated as improvements over his system, but nothing in the tentative stage should be allowed to supplant the methods which have won for him reputation and emolument. On the other hand it is folly to shut our eyes to the advantage of embodying in practice what has been clearly demonstrated to be an improvement. Millers who persist in grinding with the old burr stones since the introduction of the roller process do so to their own hurt, and so of the home butter-makers who shut their eyes to the light that is given them from year to year by the various creamery associations. But this is no reason why creameries should be constantly changing their methods as some of them do, for no other reason apparently than that some one has recommended the change.

"I have been a subscriber for the JOURNAL since its first issue, and I propose to be one as long as it remains as good as it is."—M. E. Bullard, Iron Hill, Que.

"I have dropped the *Farmers' Advocate*, as it has gone back on scrub stock. It shows a want of consistency. I suppose it will devote all its space now to the Co. of Middlesex."—Joshua Knight, Elginburg, Ont.

"I am well pleased with your paper. It should be in every farm-house in the country. My card in the Breeder's Directory brings me a great number of customers that I would never get any other way."—Joseph Yuill, Carleton Place, Ont.

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