that mean? In order to make it plain and illustrate the object of economy in fuel, I will underestimate the number of cheese and butter factories in the province of Ontario, and say there are 1,000. Now each of these 1,000 factories on an average will burn 100 cords of wood in a year, and I will put the price of this wood at \$1 per cord. Let us now see what this means in round figures. Each factory burns 100 cords, 25 per cent. of 100 cords, which at \$1 per cord, equals 25 saved in each factory. And as I have put the number of factories at 1,000, and we can save \$25 on each, or in other words, \$25,000 annually goes up the smoke stacks of our cheese and butter factories.

Can this enormous waste of fuel be prevented? I say yes, simply by keeping the boiler in first-class working order; this means considerable. You must be thorough in the details, keep the boiler clean inside and out, clean out the flues twice per week, start the fire slowly by keeping about half of the draught shut off and never force the fire with full draught turned on, as that means a rapid consumption of the fuel in proportion to the amount of steam generated. Start the fire early enough to raise steam with a slow draught to, say, 80 lbs. pressure before you require to use the steam for any purpose. You will find the steam very dry at 80 to 100 lbs., which gives it much more power for heating vats or for using it through an engine. Keep all steam joints perfectly tight, allow no leaks about the boiler pipes or stems of the steam valves, and carry 80 to 90 lbs. of steam, which means economy in fuel, as at this pressure steam will make very rapidly, which calls for a good working safety valve set to blow off at 100 lbs. Keep the brickwork tight, allowing no holes or cracks, or else the cold air will kill the effects of the fire. Should the brick-work become cracked or holes in it, get a little mortar or clay and plaster them up. Don't allow any cold air to enter any place about the boiler but up through the fire, and keep the grates well covered while making steam. Keep the draughts closed at all times only when you require steam.

Now just a word about the man in charge of the boiler and engine and then I am done. He will require skill along his line of work just as much as a cheese and butter-maker requires skill along his, and if he proves a success as a firemen and takes pride in his work, keeps his boiler and engine clean, he will be a man worth having. In fact he requires to be an engineer as well as a fireman, as our cheese and butter factories have so much costly machinery, which needs careful attention from some particular person; and the man who is capable of filling this position is worth as much wages per month to the owner of the cheese and butter factory as a first-class cheese or butter-maker is. Where it can be done, I believe in letting the butter-maker look over his butter and the engineer his fire and machinery. As to the economy in fuel there is no secret about it. You must understand your work and be able to give the boiler the advantage of the work, provide plenty of dry wood, use good common sense, and the boiler will do the rest. 5

The Care of Milk

Paper Read by W. A. Bothwell, Hickson, at the Cheese and Butter-Makers' Convention

In the advanced stage of dairying to which we in Ontario have arrived, the care of the milk to be supplied to the cheese factories possibly stands first in importance in the matter of producing a fine product. Certainly without pure, untainted milk to begin with we cannot have a fine quality of cheese or butter. In years gone, by when dairymen kept a fewer number of cows and these during the dairy season were fed on nothing but the native grasses, a much purer quality of milk was produced than is now delivered at our factories. But now, when the herds are larger and when the milk flow is increased by various foods, some of which produce objectionable flavors, the dairymen must exercise greater care with the milk product.

Canada is a dairying country. But to make the most of our dairy, we must produce the best possible results in the

quality of the article manufactured. We have to engage in competition with other countries and there will be little money in the industry for us if we have to take a second place. The Government is providing dairy schools that the makers may not lack in efficiency. They have now provided cold storage facilities that the product may not suffer in transportation and that it may reach the market in the best possible condition. It now rests with the dairymenthe farmers of this country—to give the industry the proper start. Surely a business that brings annually into the pockets of the farmers of this country nearly \$17,000,000 is worthy of their earnest consideration.

Immediately after the milk is drawn it should be well st. red and aired until all the animal heat has gone out of it, when it should be put in a sheltered, airy place free from all bad odors. This is within the reach of all as no costly appliances are required, nothing but care.

A FEW DONT'S.

Do not keep the milk in cellars as this often gives it a musty old flavor.

Don't keep it in large quantities over night.

Don't put it in large quantities over night.

Don't put it in cold water until all the animal heat has been driven off and not then unless in extremely hot weather or when it is to be kept over Sunday.

Not only do many kinds of food give the milk objectionable flavors, but impure water is a common source of this evil. Too much stress cannot be laid upon the matter of providing pure drinking water for the herd. Cows will not drink bad water if good is at hand, and it should be considered nothing less than a crime to allow them to drink from stagnant pools or drains when it is possible to obtain better. These bad flavors lessen the value of our product from one to two cents per pound and in the majority of cases the blame rests entirely with the patron. He has entire control of the milk before it reaches the maker.

Now, I wish to say here that this is one of the points that every maker must look after, and see to it that the patrons do properly care for the milk. Don't hesitate to refuse it if it be not in good condition. You cannot afford to run the risk of using inferior milk. The best is none too good. A few cans of bad milk will spoil a whole day's output, and means a serious loss, not only to the factory, but also to the maker. It costs as much to haul poor milk as good; the same to manufacture; so by all means let us have it good. If we find a patron is not caring for his milk as he should, then, in justice to the factory, in justice to ourselves, we must see him and endeavor to find out where the trouble is, and by all fair means seek to have it removed. If we are unable to go and see him we should write him or send him word in some way. But be careful here, as this is a touchy point. It is all right if the patron is approached in a proper way, but liable to give us trouble if we do not proceed judi-ciously. We must be at one with our patrons. "Let there be unity and harmor.y," is an oft repeated saying, but in no case is it more applicable than in this one.

I believe there is a bright tuture ahead for Canada in the dairy industry. Here is fan industry that will bring her more wealth than Rossland, or even the Klondike, if those engaged in it exercised the proper energy and care.

∽ Cranberry Culture

At the annual meeting of the P. E. I. Fruit Growers' Association, held at Charlottetown on March 21st, this subject was discussed, and our regular correspondent on the island sends us the following regarding it: Mr. C. R. Dickie, Muddy Creek, gave his experience with cranberries, of which the following is a synopsis. Some years ago, while clearing some land, I discovered a patch of cranberries. Not knowing the value of it, I prepared the land for a crop of oats. When the oats were reaped the vines were so healthy that I concluded there was something in them, and so I fenced the patch. In a few years fa quart was