

The Dairy.

About Dairy Utensils.

It is really astonishing how small an amount of uncleanness in the vats, milk pails, or any other utensil used about the cheese factory, results in damaging the flavour of the cheese made. Wooden pails have, we know, been pretty well discarded for tinned ones at the factories, and yet once in a while, sometimes too often in a while, the entire making of a day's milk is spoiled through some slight and not easily discoverable neglect.

To destroy the germs of ferment existing in decomposing milk requires an exposure to a boiling heat of full 212 degrees Fah., and in cleansing any utensil in the dairy or factory, it becomes absolutely necessary to use water at the boiling point. Now it is here that many are careless. It is rarely that even those who have been brought up to kitchen work know exactly what constitutes boiling water, yet this is a most important point.

The mere noise of singing from the kettle, or emission of vapour from the water, does not show that it is heated to the boiling point, and the only reliable way to ascertain the fact is to see that ebullition is actually going on. If the water is fully boiling it is hot enough to kill any germs of fermentation that it may come in contact with.

It is not, however, so much the factory men, as the milkmaids and dairymaids, that need a talking to on this subject. The factory man, if he is anything of a good manager, knows how much his success will depend on his enforcing perfect cleanliness in every department of the factory. But he cannot well attend to the important branch of the business that still remains to be performed by the patrons who supply the material out of which the cheese is made.

It is here that the greatest deficiency in the factory system becomes manifest, and a uniform good quality in every cheese produced from the same factory becomes next to impossible.

The keeping of the milk-pails, strainers and carrying cans, is usually entrusted to female hands, and from our own observation we can say that few of even the best and cleanest of dairymaids seem to understand that there is any principle involved in so simple a matter as keeping a milk pail clean. Now, the principle is, that the germs of fermentation (which are somewhat analogous to the spores of fungoid life) existing in a very small quantity of old milk, will start the fermenting process in a large quantity of good milk, and to destroy those germs effectually the vessel must be well rinsed in water that is absolutely boiling. We do not say it is necessary to wash or scour the vessels in boiling water, but that after they have been washed and properly cleaned, they should

be set in boiling water for a short time, then taken out and set away to drain and dry off, without again coming in contact with a cloth, or anything else, till they are to be again used, when they may, if it is necessary to cool them, be dipped or rinsed in clear cold spring water.

Of course, some of the patrons will attend to this matter with all due diligence; but should one or two be neglectful, and their milk get into the vats, all the care of the careful ones will but be thrown away. It is for this reason that the manager has need to be particularly careful in examining all milk brought to him, and rejecting without scruple any and all milk that may seem to him to have the least suspicion of taint or uncleanness about it. And, for the like reason, where the whole of the operations of the dairy, from the feeding and milking of the cows, to the last finishing stroke to the cheese when it is boxed for market, is under the supervision of one and the same person throughout the process of manufacture, the cheese produced at such a dairy ought to be and can be of more uniform good quality throughout. Such we found to be the case in many large dairies we visited when in England some years ago. We believe just as good cheese can be made here as in England, or anywhere else in the world, for that matter, and we know of at least one dairyman in Canada who makes an article that has acquired an almost world-wide celebrity, and brings a price that we hardly dare mention; but the first requisite to the production of cheese, or butter either, of a No. 1 quality, is fresh, pure, rich, sweet milk.

Butter Making.

We are glad to notice that the persistent advocacy of the fact that it is as easy to make good butter as bad, is beginning to tell on our market, and that there is really an improvement manifest in the general quality of the article this year over last.

There are two facts relative to butter making, however, that are not yet fully understood, and are more especially applicable to those who manufacture the article for packing rather than putting up in rolls for immediate use. One of these is that butter may be, and often is overworked, i.e., that it gets too much handling or working in the effort to get rid of the buttermilk. The butter may appear good, and seem of fair flavour, yet it still has a sort of shining, solid, greasy appearance, and does not give the rich high flavour of prime butter to the taste. This is mainly due to the fact that the grain of the butter has been broken up by too much manipulation. To prevent this, the butter, after coming from the churn, should get abundance of washing in cold water, and be rolled over and cut up with the ladle, but should not be pressed and ground against the sides of the butter bowl. If properly managed, but very little work is

required to get rid of the buttermilk. The butter should be well washed in water twice. After the first wash, when the water runs clear from it, add the salt, and let it be set aside in the bowl in a cool place for ten or twelve hours, during which the action of the salt will have drawn out what buttermilk may still remain in the butter, and it is to be worked over again with the ladle and cold spring water.

The other fact is that there is too much carelessness in the use of the salt. We have bought excellent butter in the market, that on cutting into was found to be full of lumps of hard rock salt as big as hailstones. This is ridiculous, and we are sure is due rather to carelessness than wickedness on the part of the maker. If rock salt must be used, or in fact any kind of salt that is not specially prepared for dairy use, it should be made very fine by pounding in a mortar, or with a flat iron; a good plan is to spread it out on a sheet of paper on the top of a smooth table and roll it well with the dough roller, in the same way as would be done for pastry, when rolling it out preparatory to making into pies, &c. With the present low price of the very best Goderich-made dairy salt, there is no excuse for the use in butter making of the coarse, cheap Liverpool salt, which is generally impure, though strong.

Cows for the Dairy.

It is, perhaps, a difficult matter to settle what particular breed of cattle is the best adapted to produce cows in every way fit for the dairy, and so far there seems to have been but little effort made to settle the question. The Ayrshires are undoubtedly the best pure breed we have that are exclusively adapted to the dairy, but their small size, and want of aptitude to fatten, render them less profitable in general to the stock-breeder than the Short-horns or even the Galloway.

The Short-horns, while being the kind most generally adapted to cross upon native stock, in order to improve their size and fattening qualities, can also with advantage be made the basis of improvement in milking qualities. Some of the strains of blood, or tribes, among the Short-horns, are much better adapted to this end than others, and notably of them we may rank the Duchesses, Booths and Gwynnes.

Much has been said recently in American agricultural papers of the Alderney and Jersey breeds (which are identical for all practical purposes, though a distinction is made between them by fancy breeders), as giving extra good cows for the dairy; but they are as yet little known in Canada, and in our judgment are likely to prove too small and too tender ever to become favourites with our breeders. They suit gentlemen of wealth and large acres, who can admire their deer-like, picturesque appearance in parks and pleasure grounds, and can afford to keep them well housed and petted through the winter.