

Cheese Department

Makers are invited to send contributions to this department, to ask questions on matters relating to cheese-making, to suggest subjects for discussion. Address your letters to the Cheese Making Department.

An Eastern Instructor's Method J. B. Lowery, Dairy Instructor, Hastings Co., Ont.

In making September cheese, there are several things necessary. Pure, clean, sweet milk should be provided in a cleanly manner, with clean, dry hands. It should be kept cool, (especially the night's milk), to at least 65 degrees, immediately after milking.

When in vat, the milk should be heated to 86 degrees; add $\frac{1}{2}$ oz. of pure culture starter to assist in bringing about the desired fermentation. Then add sufficient rennet of some good brand to coagulate the milk in about 25 minutes. After cutting stir gently for about 10 minutes before adding the steam. Take about 35 minutes to cook the curd up to 100 degrees, to 104 degrees, according to the richness of the milk. The curd should be well cooked before it shows .18 per cent. of acid by the alkali test. The whey should be drawn off at this stage, or before this, if the vat full. The time elapsing between setting and dipping should be about three hours. Stir the curd sufficiently dry. This is when good judgment is needed. The curd should not be stirred too much or too little.

After stirring, pack the curd along the sides of the vat. In about 15 or 20 minutes cut it into strips 6 to 8 inches wide and turn over; keep turning it over until it is ready to milk. The time to milk curd after it is packed, depends largely upon the moisture the curd retains. In normal working milk it usually takes from $\frac{3}{4}$ to 3 hours. After milking, stir well, and keep the curd stirred occasionally for one hour before salting. This is another point where good judgment is needed.

I find it is an advantage and an improvement on some curds, after adding a little of the salt shortly after milking, say $\frac{1}{4}$ to $\frac{1}{2}$ of the total amount. It would use from $\frac{1}{2}$ to 3 lbs. of salt per 1,000 lbs. of milk, according to the moisture in the curd, and richness of the milk. I approve of maturing the curd in the salt at least one hour, and some curds longer. After the salt has been well stirred in, pile the curd up deep. When it is put into the hoops, curd them and let the curd stand for 35 or 40 minutes before turning the followers down. Do not put the full pressure on for a while. Apply it gradually. In about one hour dress them nicely. Make a good finish on the cheese, so that they will look attractive on the shelves. Press all these two days.

After the cheese is made from good milk in a clean factory, by a clean cheese maker, there should be a good curing room to cure them in, so that they can be controlled, both temperature and moisture.

Enquiries re Acidimeters

Editor Farm and Dairy:—In your valuable paper, August 22, 1909, an article, mentions "In Cheese Making." The writer asks the Marshall acid test. Where would it cost? Is it a true test for over-boiling? In regard to the batch of pinholes mentioned in the aforesaid article, please explain how you make the curd "very dry." Each knows what to do when we say pinholes, yet it is not explained what is done. We should be obliged to know this information through Farm and Dairy. Subscriber, South Bay, Que.

The Marshall Rennet or Acid Test

is not used by any great extent in this country. The Stewart Acidimeter, costing about \$4.50 is universally used in this country for determining the acidity or ripeness of milk. If the alkaline solution is correct, as well as the indicator used, this is a reliable test for acidity both of milk and in the different stages of cheese making. Any of the supply houses advertising in Farm and Dairy have acidimeters for sale.

TO MAKE THE CURD TEST
With regard to the pin holes, these are usually caused by gas in milk. The bacteria enter through unclean handling, either with particles of manure, dust from the stables, or in numerous other ways. The curd-test is made by taking a sample of the milk, is 5 or 6 oz., and a few drops of rennet extract is introduced while the milk is at 86 degrees, when coagulation takes place. The curd is cut with a sterilized knife, and the curd is placed in warm water at a temperature of 98 to 100 degrees. This temperature is maintained for three or four hours when the whey is poured off. The curd is again placed in the warm water several hours, the whey which comes from the curd being poured off occasionally. This allows any bacteria present in the milk to develop in the curd. If any bacteria is present that will cause gas, they will show in the curd either through pin holes or little gas holes as the case may be.

So far as the patrons are concerned the first essential is clean water for cooled down below 70 degrees by placing the can in cold water immediately after milking without any dipping or aeration. The whey should be properly pasteurized at a temperature of 155 degrees.—Frank Horne, Chief Dairy Instructor for Western Ontario.

Experiences of the Season

Ed. Farm and Dairy:—Owing to the present very dry weather, the supply of milk is dropping off fast and as corn and other feeds are late, there is not much prospect of a heavy fall make. This, naturally, has created an agitation among farmers to put in more fodder crop for dry weather. As a result, next season we will be better prepared for the inevitable. The quality of milk has been above the average this season which may be largely attributed to the pasteurizing of the whey at the factory. No one would want to go back to the old system of sour whey. Every farmer is highly in favor of it.

Pasteurized whey is clean, tanks are more easily kept sweet and it is strongly urged that every factory should install a system of pasteurization.

WELL FLAKED CURDS

I find that it is always easier to make cheese when dipping on the sweet side, say from 16 to 20 per cent. acid in two and a half to two and three quarter hours, from time of setting. By dipping sweet it is easier to draw the curd, thereby making a more milk texture and a better bodied cheese. In no one case is it advisable to mill before the curd is well flaked, which can be done better by piling the curd in the centre of the drain instead of having it right across touching each side. By piling in the centre, the curd is allowed to spread out in all directions. A well flaked curd is important, although it is not thought so by some makers.

TO GET GOOD MILK

A recent letter in Farm and Dairy remarked that sending a note along careless patrons was a good plan. This is so, but a better and more specific plan, to get good milk is to send all second class milk home and send it again if necessary.

It pays everyone to return bad milk. I find it the only permanent way to get first-class milk. We have no cool curing room, but are making plans in that direction for next season.—Wm. Reid, Gals-bush C. and B. Factory, Lambton Co., Ont.

Nuggets of Dairy Thought

At the time of the visit last summer of the members of the Canadian Jersey Cattle Club to the farm of Mr. D. Duncan, of the Don, Prof. H. H. Dean, of the O.A.C., Guelph, delivered a splendid address. The following are extracts from it:

"A man may be ever so good, even a local preacher, but if he does not make money out of his farm or his business men say that he is a failure."

"It is an easy thing for us Government officials to draw Government salaries. When, however, we get out on the farms and get in touch with practical farmers who are working out practical problems in a practical way, we see that the world is going forward elsewhere as well as at the college."

"While we are constantly hearing people say that the price of cheese must go down and that the people of England won't pay the prevailing high prices, still we notice that the prices are higher to-day, than ever before. The fact is cheese is one of the cheapest foods that the people of England can buy even at present prices."

"Where farmers have the proper appliances and a good home market, butter making is a profitable business but it is hard on the women. The selling of cream relieves the women of a great deal of hard work. It keeps the skim milk on the farm and returns the fertility to the soil."

"Women are the hardest workers on our farms. Their work is never done."

"When I was in England I found that the butter most prized was the French rolls from Normandy, done up in fancy packages with great skill. These came from Denmark, Norway, Sweden, and the Netherlands and New Zealand. It was humiliating to find that our butter was only on a level with that from Siberia. We think that we are superior to the people of Siberia but our butter product does not show it."

"The secret of success of the Danes is pasteurization."

"The shipping of milk to the cities is a profitable branch of dairying but it has its serious drawbacks. My opinion is that the people who supply milk for our cities must in the near future furnish better milk, and it must be from cows that are free from tuberculosis, and that are milked in clean stalls. The bacterial content of milk must be greatly reduced."

"City people if they want better milk must be prepared to pay more for it. The health of the family is of far more importance than a paltry few cents a quart more for milk."

"We must have better cows and better men to handle them."

"There is a great future for the Jersey cow, if she will convince the man on the farm, by actual test, of her capacity to produce large quantities of milk or butter. I am afraid

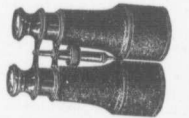
that in the past Jersey breeders have given too much attention to fancy points and not enough to increasing the producing qualities of their cows."

"Our dairy farmers to-day must be shown by actual test what cows are capable of doing. No longer can our breeders give guesses as to what their cows are doing. They must be able to prove their statements."

"I heard a discussion once as to which was doing the most good for the country, the Agricultural College or the press. The college is doing good work but it reaches comparatively few. The press reaches the masses. Bacon said, 'Reading maketh a full man.' Our farmers should read more and work less. In the past the importance of manual work has been over emphasized."

THESE FIELD GLASSES FREE

How often a farmer can make use of a good field glass. He sees something at the other end of the farm but cannot make out what it is. He sees a fox but cannot see what it is without walking the length of the farm. He has a him on a holiday. He can take them with him on his trip. Every farmer should have a pair. Perhaps you do not want to spend the money for a pair just now, but you do not need to. We can supply them Free of Cost.



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By L. L. Van Slyke, Ph.D., and Chas. A. Publow, A.B., M.D., O.M.

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