

lity. It offers a bounty to the man who can succeed in getting the most water into his milk without violating—that is, by running it through his cow.

That it does have this effect is already apparent in many cases. I know of a number of instances where creameries were started a few years ago in districts where men had been breeding butter breeds of cows, and the first year the per cent. of butter to the 100 pounds of milk was remarkably high, but the per cent. has each year fallen till now it is very low. Patrons are disposing of their rich-milking, high-grade Jersey herds that it has taken them years of care and selection to build up, and replacing them with cows that may give a little more but very poorer milk. The consequence is that the yield of butter per cow for the whole district has sensibly fallen off. The fact is well established that all profitable butter cows have a high per cent. of butter fat in their milk.

The strife of the patrons by each one trying to send the thinnest milk is resulting in loss to the district, taken as a whole, and if continued will result ruinously to our herds of dairy cows, to the dairyman, and lastly, to the creamery man.

THE REMEDY.

Now, it will be asked, "What are you going to do about it?" The creameryman says it is too much work and expense to do the testing and the consequent extra book-keeping. He thinks it is of no interest to him so long as he now gets his regular four cents a pound for making all the butter and he will do it, for it matters not to him how the money is divided. It seems to me that the remedy is very simple. It lies entirely with the patrons. Let any considerable number of them combine and firmly, demand the testing, and I believe it will be done. If it is not done, then let them withhold their milk and make it into good butter—such as the market demands—and they will be the gainers by it. Now, I do not believe that I am advising anything that will injure the creameryman. I do not wish to. On the other hand, I believe it will be for his benefit, for it will greatly increase his patronage. I know of a great many private dairymen who had herds of butter cows and who are good feeders, who would gladly patronize the creamery if they could be sure of getting credit for the full amount of butter their milk contains. "But," says the creameryman, "those who get smaller dividends will do some terrible kicking." Let them kick. Let them withhold their milk if they choose. They will soon find that they cannot get anything out of their milk beyond what it contains, and will soon return and bring better milk from better fed cows.

Now, as to whether the patron or the creameryman shall be to their expense of the testing, that is just as the parties can agree on that matter. I believe it will pay either party to pay the expense. I remember, many years ago, when I used to sell beef cattle at Fort Atkinson, I had to pay for the weighing or let them go for what the buyer guessed they would weigh. I choose to pay for weighing. Now-a-days the buyer chooses to weigh. It gives better satisfaction. So it will be some day with the creamerymen testing milk.

Importance of testing milk in the creameries.

Through the Bureau of Dairy Information, Mr. C. P. Goodrich relates an instance to illustrate the importance of testing milk to determine the amount of butter fat it contains, and paying for it accordingly.

I have a friend who has been for many years a private dairyman. He has gradually, by intelligent breeding and feeding, and with an eye solely to butter production, built up

a splendid herd of butter cows. He has made money enough in dairying to enable him to buy a much larger farm than he before owned, and located near a creamery, which he commenced to patronize a few months ago.

Not long since he told me he was not satisfied at all with the returns he got from the creamery. "Why," said he, "during the months of June and July I got forty-five cents a 100 for my milk. About four pounds to the 100, average of about fifteen cents a pound, and four cents out for making does it you see. Now, the milk of my cows will make six pounds to the 100—I know it because it has done that for some years, and, besides, I kept it at home one week in June and it did it then. I know they say the separator can get more out of milk than I can, but I can get that. As to price, I have always got as much as, and usually more than, the best creamery. But of fifteen cents six pounds is ninety cents, just double what I got. Now, I can't stand that. To keep the cows—feed, care for, and milk them, and carry the milk to the factory, and then give half to have the butter made is too much for me.

I don't know what to do. I have no conveniences in making butter on this farm, and I don't want to be at the expense of \$200 or \$300 for fitting them up. Besides, my wife has always made the butter, and I don't suppose we could hire anybody to make it as good as she can.

I have got to do something different, and I have about made up my mind that I must let my splendid butter cows go—I hate to terribly—it has taken me years to get them—and get some others that will give more milk, no matter whether there is much butter in it or not. May be I'll get "Holsteins."

Then turning to me he said, "What shall I do?" My reply was, I will give you advice only on one point; that is, "stick to your butter cows, for by the time you get fairly changed around you will want them back again, because the creamerymen will soon be compelled to test the milk and give credit for the butter fat it contains or quit the business."

Butter-Making Briefly Described

Following is summary of an address by a good authority, our correspondent Mr. JOHN GOULD of Ohio, delivered at the recent farmers' institute at Delhi, N. Y. :

There is a call for only one kind of butter—the best. Yet there are more than 200 varieties sold in the market. Every lady who makes butter leaves a photograph of herself upon it, a reflection of her skill. There are only five simple rules to be observed, to succeed. The man is just as responsible for the quality of butter made as is the woman. When the milk comes into the house the butter is half made. Flavor of butter is not dependent much upon feed. You cannot feed flavor into a cow's butter fat. Any food a cow can digest and assimilate does not effect the flavor of her butter. Market flavor is artificial—the result of acidity. Milk and feed regularly. Have stables so constructed that there will be no odors in them. A man who will allow odors in his stables is an odorous farmer. You cannot feed richness into a cow's milk, so do not feed a poor cow. Get milk into the pans as soon as possible after it is drawn from the cows. The best creamery today is an 8-inch shot-gun tin can placed in another can of water, and which any tinner can make. All the money you pay more than that for a creamery is lost to you and goes into the pockets of some potent-right man. Milk diluted one-third with water, and set at 90°, set in shot-gun cans placed in water at 60°, is the best creamery ever devised. Three-fourths of a pound of butter in every 100 pounds of milk will be lost if the milk is allowed to fall 25° before setting it.