CO-OPERATIVE GATHERED CREAMERIES.

By S. E. Oaks, West Salem, Wis.

It has been and is now in the majority of gathered creameries the custom to make a poor grade of butter, and it is generally caused by a poor manager and poor board of directors. It does not make any difference how good a buttermaker may be in the creamery, he can not make good butter from poor cream. But if he is backed by the board of directors and they will let him grade the cream, he can then make good butter. In order to grade the cream properly he should have vats enough so he can have one to put the poor cream in and should have a small tank in the wash room for the drivers to put rinsings of their cans in, and also to rinse their floats in. He should not let them rinse them over the cream vats as they do in some of the factories I visited last summer. You should find out right away where the poor cream is coming from and go and tell them how to care for it, and until he does take good care of it and keep it sweet so that it will not be "off flavor," he should be docked from fifteen per cent. to twenty per cent. of the cream. Do not take this off all the patrons by putting all the cream together and making a poor grade of butter and getting a low price for it, but make two grades of butter and get the highest price for the best and get as much for the poorer grade as most of the creameries get for their butter. It can be done if the cream is gathered three times a week anyway, and in order to make it profitable for the creamery and for the patrons the cream haulers should be paid by the number of pounds of fat that is contained in the cream and not be paid by the number of pounds of cream they haul. If they are paid for the fat they only get paid for what they do and do not get paid for hauling water and skim milk that is not of any benefit to the creamery, and paying 25 to 50 cents per hundred pounds for hauling, and the cream haulers should give good bonds that if they let any cream spoil after they get it from the patrons, or if they spill any, they shall pay for it. If the but-
termaker cannot tell if it has spoiled on the haulers' hands he is not the right man to have in a creamery of this kind.

The company should furnish canvas for the driver to cover his cans with so as to keep the dust and dirt from the can, and in the winter time the company should furnish soap stones or some other kind of heaters so that the cream will not freeze, because number one butter cannot be made from frozen cream. There are some students here this winter who said they made good butter from frozen cream, and maybe they did, but I would not advise anyone to freeze their cream in order to make good butter. The buttermaker should have control of the drivers and say when they should get to the creamery, and if they stay out on the road and keep the cream in the sun three or four hours longer than there is any need of and do not get to the factory until seven or eight o'clock at night, they should be fined at least $2.00 for each time they stay out after the time they are due at the creamery, and if there is a shortage of butter to the amount of cream you are receiving the buttermaker should not let the company think that he has some friends that he is shipping butter to and putting the money in his pocket, but get after the drivers and see where the shortage is. Do not weigh the cream at the factory when unloading, like lots of the factories that I know of do, but get after them right and find out who is the thief. I do not say that all cream haulers are thieves but I do know of some that have put water in their cream to make it hold out in weight. If a gathered creamery is run right, and it can be if men of the right kind are at the head of it, the first thing is a good number one buttermaker, and in picking out a good number one buttermaker do not pick out a man who, when you go into his test room you will find his sample jars all smeared up with cream from the top to the bottom so that anyone cannot see through them. I would not want that kind of a man because if he is dirty and slack in the test room and with his sampling jars he will be slack with his other work, and if you get one that is clean and understands making butter, and the creamery is run right, and you use box churns and wheel workers so that you will know how much salt you want to use in your butter and
will not have to guess at it, I think the best grade of butter can be made and get the highest market price at a gathered creamery; but if a combined churn is used in a gathered creamery, you do not know anything about how much salt to use, but I will admit they are all right for a lazy man. I will say that if a gathered creamery is run right, and it can be, the patrons will get a larger profit than they can from any separated factory. It should be co-operative creamery and the overrun, or profit, should be going back to the patrons and making them better satisfied than if it were going into the hands of an individual.

DISCUSSION.

Mr. Wittig: I would like to have the gentleman tell us what method he uses in distinguishing good cream from bad cream.

Mr. Oaks: If you have a good nose you can tell poor cream from good cream; that is the way we tell our cream is not good.

Mr. J. G. Moore: Mr. Oaks said in his paper the patrons of a gathered cream plant received more for their product than patrons of whole milk creameries. I would like to know how he figures it out.

Mr. Oaks: All I can say is that I know of eight or ten factories not far from us and we pay from 1½c to 3½ more for butter fat than any of the creameries around that section of the country.

Mr. Dodge: I would like to know how he makes his test of the milk. How do you pay?

Mr. Oaks: We pay by the number of pounds of butter fat in the cream; we have a composite sample and test once a week.

Question: Do you measure with a 17.6 cc. pipette?

Mr. Oaks: We weigh it out.

Prof. Farrington: Tell us something of the size of your factory.

Mr. Oaks: In 1901 we made 740,000 pounds of butter, and the largest day's work last summer was 4,350 pounds, the largest week's work nearly 24,000 pounds of butter.
Prof. Farrington: Is not that the reason why you can make butter so much cheaper. Is it not due to the large factory and not entirely to its being a gathered cream factory?

Mr. Larsen: Is the cream weighed out at the factory?

Mr. Oaks: It is weighed out by the haulers at the farms; he carries his scales and does the weighing himself.

Question: Have you a special style of scale for weighing?

Mr. Oaks: Yes, we have a scale that the haulers use.

Question: I mean for making the test, have you a weighing pipette or do you measure the cream?

Mr. Oaks: We use 18 grammes for a test.

Question: How much more is that than 17.6 cc.?

Mr. Oaks: I have never had much experience in the testing room; have had no experience until I came here; our head buttermaker did that.

Question: In regard to using the combined churn the gentlemen said there was too much uncertainty about salting with the combined churn in a gathered cream factory. I do not know why there should be any more guess work about it than at a whole milk factory where these are used with good results.

Question: How much butter do you churn a day.

Mr. Oaks: Not less than 2,700 or 2,800 pounds a day.

Prof. Farrington: How many patrons have you?

Mr. Oaks: About 500.

Prof. Farrington: When any farmer is sending in milk that is not up to the standard, you say you send a man around to see the farmer. Does not that take one man’s time almost entirely?

Mr. Oaks: No, because we do not have much poor cream; they all take first class care of their cream.

Question: How much time does it take to keep the patrons up to the standard with their cream?

Mr. Oaks: Two or three visits during the year.

Question: What is the average test of your cream?

Mr. Oaks: Along about 24 or 25.

Question: Is there any material difference in the average test from day to day?

Mr. Oaks: I cannot say as to that.
Mr. Livermore: I would like to ask the gentleman if he has trouble in figuring his salt in putting in the combined churn, how he would figure for coloring matter?

Mr. Oaks: Guess at it as with the combined churn. I will admit that the combined churn is all right for a separator factory.

Question: I want to ask how he gets the sample from which he makes the test, whether the driver takes it, and how he keeps that composite sample for 30 days.

Mr. Oaks: The driver takes the sample of the cream from day to day when he goes to the farm and he brings it to us in a glass tube in a box he carries in his wagon, and each one of our patrons has a jar that is numbered and we take the driver’s box and find the number of his sample of cream and put it in the jar and put in a tablet to preserve it.

Mr. J. G. Moore: If the driver takes samples at the door what precaution does he take to keep the haulers from favoring a person; that is, taking a sample that is better than the cream?

Mr. Oaks: None that I know of. If they think a driver is favoring any one they would catch them if they could.

Question: What is the average length of the cream route of your drivers?

Mr. Oaks: Somewhere in the neighborhood of 28 to 30 miles that each team makes each day.

Question: Do you have trouble in your cream being churned when it comes to the factory?

Mr. Oaks: Once or twice it has been churned when it came from farms about 35 miles distant.

Question: What price do you get in a gathered cream factory for your butter as compared with the whole milk factories; is it larger or smaller?

Mr. Oaks: I cannot say, but for the month of June our butter sold for 22½ cents a pound. But I am not posted on this subject as the president takes care of that part of the business, the buttermakers do not know much about it.