Question: Has the milk increased in your neighborhood, or have the patrons increased their supply of milk per capita?

Mr. Wittig: We have more patrons than we had when we began; there is more dairying done than previously. I think the same patrons last year delivered more milk than the year previous.

Prof. Farrington: Are farmers selling their cows this fall?

Mr. Wittig: Not very much. Present high prices of feed leave a small margin for them, but they hang on.

Mr. Faville: How many of the buttermakers are prepared to enlighten their patrons as you suggested in your address?

Mr. Wittig: I think the majority of the young men facing me are prepared to do so, or will be when they get through with the Dairy school.

SOME IDEAS ON ESTABLISHING AND OPERATING A WHOLE-MILK CREAMERY.

BY H. B. J. ANDRUS, NEILLSVILLE, WIS.

My creamery is a private, exclusive, milk affair. Managed, equipped and cared for by myself. We have no skimming stations, neither do we want any.

So far, we have received nothing but milk. However, should any of the patrons wish to use hand separators, I would have no objections to receiving the cream.

I think it would be very easy to give a patron just service while delivering sweet separated cream. I would not want cream rendered by the gravity process. Our methods and appliances are as simple as possible, and so far have given the desired results.

I don’t like the “forced draft” way of doing things. It may be all right in emergencies, but the creamery is such an ordinary, every day, routine sort of a place that it’s not needed.
In the management, ample "grate area" and "medium pressure" are sufficient.

In starting business, I first found a suitable place for a creamery, bought the lot and went to work putting up the building. I did not ask a bonus, neither did I ask anyone to promise to furnish milk. Promises are so very shallow that the fewer we have in this line the better off we are.

I employ the "to be" patrons so far as possible in doing the work and was very careful to pay them for everything done. I did not expect to make their butter free of charge, therefore I did not ask them to donate their time and strength. When we were ready for business, we started out with quite a flourish but with very little milk—666 pounds and five patrons.

My idea was to deal honestly and with everything wide open. I have carried out the idea and have no regrets.

I told the patrons that we would make the butter for four cents per pound the first year and then we would see.

The next season I told them that we would make for three cents whenever the milk would average four thousand pounds per day, or over, during any month.

The milk has been very good and the patrons seemed very anxious to make their delivery in the best possible way.

In dealing with the patrons, I consider it my special duty to carefully weigh, sample and test their milk.

The testing is the vital part of the work and there is no end to the care that should be given to it.

While you are testing a patron's milk you are mixed right up with his money, and a mistake, negligence, or carelessness on the part of the operator and you have got something you don't want, and something that is hard to explain.

It's a homely thing to say, but you all know what an attachment there is between man and dog. Well, if I were going to do something not exactly right and at the same time expect to retain a patron's friendship, I would rather "can" his dog than to make a botch of his test.

I would like to have the patrons come in and see the testing done, and whenever I see one going past while we are at work.
I call him in. One patron nastily asked me what made his test so low.

I explained to him the several things that might be the cause. This was unsatisfactory. Then we had a short talk that was quite devoid of rhetoric but spiced up in other ways. We both lived, however.

I make it a practice to know as many of the little things as possible and that keeps us away from the big things.

A copy of each test is placed in the weigh room where the patrons can see it, and they have access to the book which has all previous tests recorded.

The patrons receive a complete statement each month of the creamery’s work. Some don’t understand and some don’t care what it does, but the most of them are interested. Quite often you’ll see toggled up harnesses and rickety wagons delivering the milk of those that don’t care and I really believe they don’t.

The buttermaker and the patrons must work together. It is easy when the whole work is carried out as it should be.

Buttermaking is one of the many cases of evolution that are before us and it is my earnest hope that the Wisconsin Buttermakers’ Association will live to do its part in reaching the higher and better things that are coming to us all.

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DISCUSSION.

Mr. Tyler: Have any of your patrons ever expressed a desire to examine the books and straighten out your accounts, if necessary?

Mr. Andrus: No, they have not.

Mr. Rumhill: How long since you started your creamery?

Mr. Andrus: It has been considerably less than one hundred years. We have not been running a great while, started two years ago and we have a good deal more momentum now than we had to begin with.
Question: Do you own machinery and apparatus yourself?
Mr. Andrus: Had to pay taxes on it this year.
Question: What are your objections to the skimming station?
Mr. Andrus: I consider it a hole in the bucket. Years ago we had a big sugar bush and we youngsters had to gather the sap, but there was some mean scoundrels in the neighborhood who shot holes in the bucket. Of course, we could plug them up all right, but they wasted the sap, and that is the way with skimming stations to my mind.
Mr. Wallace: Have you had any experience in operating on that plan?
Mr. Andrus: No, sir; and I heartily hope I never will. I will tell you why I say this. There has been quite a call on me for skimming stations as my patrons are scattered and quite a lot of the country roads are none too good in that northern part of the state and they hate to haul their milk so far over bad roads, but I tell them they must bring the milk there and give us more to handle, the more we have to handle the cheaper we can do it.
Mr. W. S. Moore: Are you able to make a fair amount of your investment when your milk does not exceed four thousand pounds a day?
Mr. Andrus: Yes, that is all we should have.
Mr. Faville: You invite your patrons to look into your private business—we have the same privilege. He says he paid taxes, did he borrow the money or did he earn it out of the business?
Mr. Andrus: If you are milking cows and delivering milk to a creamery I will tell you.
Mr. W. S. Moore: I want to know whether out of the three cents you take anything for a sinking fund, or charge against your profits anything for depreciation of your plant? The plants nowadays do not last long; after four or five years you have no plant at all. I want to know if you take out enough to keep your plant in good repair and provide against the loss your are bound to sustain?
Mr. Andrus: We built just as good a plant as we could with the money we wished to invest and bought the best appliances we could get, and they are wearing beautifullly and doing excellent service, and the building and machinery are just as good now as they were two years ago, and I think they will be just as good five years from now with careful management, and I do not think it is necessary to take more than three cents per pound for making the butter. If we received ten thousand pounds we could charge $2\frac{3}{4}$ cents, and if fifteen thousand we could charge $2\frac{1}{2}$ cents and still make good reasonable money. If a patron milks one cow and is encouraged to buy another cow then I will make more money next year than if he only milked one cow. We want to encourage them to milk more cows.

Mr. W. S. Moore: Have you any other interests that are benefited by the creamery you are running or is the creamery business your only business, in other words?

Mr. Andrus: I haven't anything benefited in particular but a wife and two babies.

Mr. Froelich: Do you pay patrons by butter fat or actual yield?

Mr. Andrus: I take one hundred pounds of milk as a basis. I will enclose one of the statements I use and you will understand and make it clear.

Prof. Farrington: What items do you give in the statements you give your patrons each month?

Mr. Andrus: I can enumerate. At the top of the page is the patron's name, then the number of pounds of milk delivered, the average test, price received per pound of butter, the net price after making comes out, amount of cream, buttermilk and skim milk sold (once in a while we sell a pitcher of whole milk), pounds of butter fat, net price per pound of butter fat, price per 100 pounds individual brought, number of pounds delivered by the patron, patron's test, and patron's price per 100 pounds of milk.
H. B. J. Andrus,
Manufacturer of
Pure Creamery Butter,
Neillsville, Wis.

Report of .........., 190
Name of patron ........................
No. lbs. milk received ........................
Average test ........................ per cent.
No. lbs. butter ........................
Price received, $........; Net price, $........
Amt. of cream, milk and buttermilk ........................
No. lbs. butter fat ........................
Net price per lb. for butter fat ........................
Average price per cwt. milk, $........
Lbs. milk furnished by patron ........................
Patron’s test ........................ per cent.
Price per cwt. of patron’s milk, $........
Amount due patron ........................

Mr. Wilson: What is the average test for last month?
Mr. Andrus: 4.92 for the week; have not the test for the month.

Question: Have you any distinct breed of cattle?
Mr. Andrus: We have all kinds—some Jerseys, Guernseys, a lot of Natives, a few Shorthorns, and once in a while a little sprinkle of Holsteins.

Question: What is the average test?
Mr. Andrus: Last Saturday I tested the milk but did not figure it all out but I do so when the owners call for it. The lowest was 3.8 and the highest was 7.4. The 7.4 is all right. There are two cows that are very nice Jerseys that are almost dry and practically giving no milk at all. That is the way it came about.

Prof. Farrington: Do any of your patrons have figures that tell how much they have received per year per cow?
Mr. Andrus: They do keep their statements. You see it is new to them and they are interested in it.
Question: How much did they average?

Mr. Andrus: The average was about $4.60 to $4.80 per cow for July. I cannot tell exactly for other months.

Mr. Heath: Would you be willing to tell us what your average over-run is?

Mr. Andrus: Last month, if I remember rightly, it was between 11 and 12 per cent., something like that.

Mr. Grossman: I understand Mr. Andrus is from the same county where I started a creamery two years ago, Clark county. Clark county is a very fine county and will be one of the richest in the state by and by. Mr. Andrus seems to be against skimming stations. If you want to do a large business nowadays you must have skimming stations. We have two at Greenwood and will have another next year. We used to gather cream years ago but that is all played out now. He says he will take cream from hand separators. If I gather I gather. Cream with whole milk is not right because farmers’ milk is all right when it is separated but they do not keep it right. Sometimes when you get it it is sour, and they do not want to bring it every day, but twice a week perhaps. Now, the right way to do is to take in the whole milk every day, and with a large business you must have skimming stations, and of course you have to get the milk from the skimming stations as quick as you can in warm weather.

Mr. Andrus: In page one of my paper I said I have no objections to receiving sweet separator cream.

Mr. Peterson: If you took in the cream would you pay the same price for that as for butter fat?

Mr. Andrus: It would be received just the same as milk.

Prof. Farrington: I would say that in such cases there is a slight difference that should be made in paying the cream patrons as compared with the milk patrons. The cream must be tested the same as the milk and then the pounds of cream fat which a patron delivers is multiplied by 1.03. This puts the cream patron on the same basis as the milk patron.

Mr. Andrus: If a man were milking twenty cows, how much difference would that make?
Prof. Farrington: The test of skim milk is perhaps 0.12 per cent., that of whole milk about 4.0 per cent. Now, this loss in the skim milk is 3 per cent. of the total fat in the milk. The whole-milk patron gets paid for the total fat in his milk and in order to pay the cream patron for the fat in his whole milk, the cream fat should be increased by 3 per cent., or multiply by 1.03.

Mr. Andrus: If any of my patrons should bring in cream I would look the matter up and pay for it on the right basis. They have never done so as yet.

Question: Concerning making price, you say a creamery cannot be operated on 4,000 pounds of milk and make for three cents a pound. I should think this would pay a good dividend. Unless you pay freight and commissions there must be a leak somewhere which has not been explained.

Mr. Andrus: We receive 4,000 pounds of milk and we get four cents for making butter. If we received 4,001 pounds of milk we could make it for three cents a pound, and any honest creamery can take 10,001 pounds of milk and, according to my rating, three cents a pound for making the butter gives him all he deserves. If he does not know enough to accumulate a larger business that is all he deserves.

Question: Do you remember how much cream you sell in a month?

Mr. Andrus: I have not tried to remember.

Mr. Faville: How much do you get out of a year’s work?

Mr. Andrus: I do not know, but if you will give me your address I will send you the figures when I get home.

Mr. W. S. Moore: You say the average test was 4.93. How low was any of it at that time?

Mr. Andrus: I do not think there was a test lower than 4.4, although there might have been; we certainly get good milk.

Question: I do not see how he can have such a high average if he figures right. It is a pretty high average, and I would like to know how he figures it.

Mr. Andrus: I would multiply the average test of each man’s milk by amount of milk. I would take each patron’s
milk, multiply it by his average test, then take the whole amount of butter fat and get the average test with the whole amount of milk.

Question: We have only about 10 or 11 per cent. It would incline some people to think he had made a mistake.

Mr. Andrus: We use the standard Wagner glassware, we test all test bottles and the incorrect ones we break, the good ones we keep, we use the regulation pipette, standard acid and measure and do the work when we are perfectly sober.

Question: How many days in the week do you run your creamery?

Mr. Andrus: We run every other day during the winter, every day during summer.

Question: I think the gentleman on the floor has not said he paid the freight and commission out of this four cents.

Mr. Andrus: Did I not tell the people that I had on my statement the net price?

Question: Now, Professor, here is a technical point. Does the very best kind of food make the very best kind of milk?

Prof. Farrington: This is a question that has been much discussed and I believe that the evidence so far received indicates that under normal conditions the feed has no influence on the test of the milk.

Mr. Andrus: Well, we have the very best kind of feed in our county.

Prof. Farrington: I really do not think it makes a bit of difference with the richness of the milk.

Mr. Andrus: We have good cows. There are a lot of natives and some of them are very good cows and they give very good milk.

Member: Prof. Henry tells us a man cannot make money if he is operating the creamery himself, that he cannot begin to make money until he is thirty-five years of age. After that time he can begin to make money.

Member: I would like to put this question to the gentleman right straight once. Does he pay the freight and commissions out of the three cents, or do the patrons actually pay that?
Mr. Andrus: I deliver the butter to the station and there I stop. The making comes out of the net price for the butter.

Mr. Holmes: The trouble is in making butter for three cents when a great many are charging four cents and have the milk delivered at the door and receiving the money there, the man operating the creamery paying all freight and commissions.

Mr. Andrus: We make for four cents a pound and we do all of the team work in connection with it. Our patrons bring the milk there, we empty the cans and return the skim milk to them as clean as they bring it. We put up our own ice, buy our own wood, carry out our ashes and board ourselves.

Mr. J. A. Moore: I do not doubt the statement as to the average test. We have 181 patrons at our creamery and the average test is from 4.80 to 4.90 and we have 13,000 to 14,000 pounds of milk a day. The price for making is 1.51; we take out of that price insurance, taxes, wages of three men, officials, and ten per cent. on money invested.

Mr. Andrus: When we develop to where we get a big flow of milk, say 50,000, we can work cheaper.

Mr. Tyler: I would like to explain our method of making so he will understand why I question so. We make for four cents a pound the year round but we pay the patrons within four cents of the Elgin market. We pay all expenses, freight, commissions, buttermakers' wages, taxes, and everything must come out of that four cents.

Mr. Andrus: That method does not agree with my ideal in regard to this—it is liable to develop avariciousness.

Mr. J. A. Moore: It is the principle worked upon by the neighboring creameries and gives good satisfaction.

Mr. Andrus: Let every man stand independent and not give a "hooter" for his neighbors.