HOW SHALL WE IMPROVE WISCONSIN CHEESE?

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If we note carefully the condition under which the cheese in Wisconsin is now made we may suggest some improvements.

"The system almost universally practiced in Wisconsin in cheese factories is to make the cheese on a co-operative plan. The factory doing the work of making the cheese and furnishing the materials of manufacture for a given sum per pound. Usually one and one-half cents per pound. The cheese maker agrees to warrant his cheese to bring the ruling price. The patrons who furnish the milk receive credit for the number of pounds of milk they deliver with little reference to quality and receive the returns from the cheese in proportion to the amount of milk furnished. If the cheese maker suggests to a patron that his milk lacks strength or quality, the answer usually is, "If you do not like it I will go to the next factory or I will build a factory myself." Add to this the idea held by some patrons that the cheese factories are making the largest share of profits. Factories in many localities have become so numerous that they have become weak. The small amount of milk received at each factory compels retrenchment in expenditures and a low-priced cheese maker; cheaper materials used in cheese making are tried. The old vat that has been patched and mended until it has become a stink pot to contaminate every batch of milk that is put into it, because the factory has not made enough to buy a new one.

This same influence applies to the patrons and their old cans. I have been at factories when the milk has been taken in and often one-half of the cans in which milk is brought, should never receive a batch of milk again.

These patched cans when the milk is emptied are filled with sour whey, and taken home and often remains in the cans during the entire day, and at milking time is emptied and rinsed out with cold water and the warm milk turned
in. This is I think the general practice, and the result is, tainted milk, when the first requisite of good cheese is good milk. Another practice is, commencing to bring milk when they get a good ready in the spring and quitting in the fall by the same standard without notice or consideration of the factory's interests. In this a grand mistake is made for the success of the patron is based on the success of the factory. The patrons should feel that the factory is theirs and to make it give them good returns they must give it good healthy support in quantity and quality of milk.

Patrons, watering and skimming milk is a willful practice that depreciates the quality of Wisconsin cheese to a large per cent.

One of our factories in Fond du Lac county that was receiving 3,800 pounds of milk, detected a patron skimming the milk he brought to the factory. The next morning the cheese maker told each patron as he delivered his milk, that a skimmer had been detected and he was going to be exposed and prosecuted, but did not tell who it was. The next day, the cheese product was fifty pounds more than on previous days, although the amount of milk was not any greater.

The solution to this problem was very plain. It showed that skimming or watering had been a regular custom to the amount of twelve per cent. of the cheese product of the factory, which was shown by the abrupt stop put to the practice by fear of detection.

Many factory men know that this state of things exist, but say that if you go to rooting round to find these fellows you will loose their patronage, and the factory can hardly live as it is, and besides the law is so complex and uncertain that the chances of correction are slim. These things exist, but what are you going to do about it?

The subject of this short paper is to answer that question. The question of producing rich milk by good rich food, and good rich milk producing cows is but a question of time, and is being pushed to a higher standard by the leading farmers and dairymen, led by the agricultural and dairy organizations of the state.
To keep the milk pure until it is delivered at the factory, a system of paying according to its cheese value and not by the weight of the full bulk delivered, must be adopted. It has been plainly shown that different cows vary forty per cent. in the richness of their milk, and the amount and quality of cheese it will make.

One patron may furnish one hundred pounds of milk that will make twelve pounds of cheese; another patron furnish one hundred pounds of milk that will make but eight pounds of cheese, and both receive the same amount of money.

One man loses two pounds of cheese, while the other gets pay for two pounds that he did not deliver. While if the system of paying according to the cheese value, each would have received pay for exactly what he had delivered.

Another man adds ten per cent. of water to his can and gets paid for the water according to the present system. But if he received pay according to the cheese value, his watering or skimming would injure none but himself. This system would not only correct the injustice of scaling down good milk to make up the deficiency of poor milk, but would effectually prevent watering or skimming, and thereby give Wisconsin a richer, purer milk, from which to make cheese, than we have had before.

The great Ailesbury company, of London, who furnish great quantities of milk, test their milk with alcohol and ether which separates the solids from the water, and the percentage of each is shown in fifteen minutes. A company in Saint Louis, is making a similar test with similar results. I had hoped to be able to learn the exact formula before the time of this meeting, so I might be able to make practical tests here. But I have been able to make certain results plain by simply coagulating the milk and filtering, which gave the range of difference in quality referred to. The question may be raised that the average cheese-maker will not be competent to make these tests of figures the proper percentage for his dividends. But the cheese-maker that is not competent and will not learn to come up to the highest point of the profession should be dropped and never reinstated unless he advanced with his business. By sifting out
indolent and ignorant cheese-makers it will improve Wisconsin cheese. The system of paying for making the cheese is one-sided and defective. It matters not whether cheese is five or ten cents in the market the making is the same.

The interests of the patron and factoryman should be alike in producing the best results and both showing in the profit or loss. As it is there is often an antagonistic feeling and interest between the factoryman and patron. The factoryman works for his regular price per pound and feels perfectly safe, while the patron feels if the price is running below the cost of produce it invites watering, skimming or any fraud that may appear likely to make his loss good. Often lack of care in milk will send poor milk to the factory. The cheese-maker does not detect it in time, and a sour, bad flavored batch of cheese is the result. The cheese-maker, not feeling that he was to blame keeps the bad flavored cheese out of sight in boxes or elsewhere when the buyers comes to inspect them. But when the shipment is made, they are substituted for an equal number of those accepted, and the fraud is not detected until after the cheese have been delivered and paid for. This creates a question of fraud between buyer and salesman, and the factory suffers in reputation.

Establish a system of dividends based on the price received and make the cheese maker a salesman, and you will make a co-equal interest in quality that will raise the standard of Wisconsin cheese.

There are too many small weak factories whose profits will not pay a good intelligent cheese maker and boys of a few weeks’ practice with small pay is considered all they can afford. The boys work to a disadvantage by having not milk enough to work to advantage.

The buyers, as a rule, avoid the small factories, and the cheese is often left on the shelves until past the proper season, and an uneven lot is the result and the lowering the average of the state product is the result.

Establish a standard of skill in manipulating. A knowledge of the elementary principles of chemistry sufficient to
know, when, how, and where, the chemical changes take place in the formation of the cheese.

HOW TO CARE FOR AND CURE CHEESE PROPERLY.

Have a state superintendent that would visit the factories and examine into the cheese maker's qualifications, and give or hold certificate as the case may require, give directions as to the proper methods of operating, and after the first year no cheese maker would be qualified to accept any position without the certificate of the superintendent. This will raise the standard of Wisconsin cheese.

The question of expense of an instructor, and the arbitrary rule of compelling the cheese maker to leave his business is brought in question.

But careful thought shows that the opposition to this plan is penny wise and pound foolish. We felt keenly the fact for several years past that Canada was selling her cheese product at a cent in advance of what we were selling ours, after Mr. Harris had spent several seasons instructing their cheese makers. Add one-half cent to the product of Wisconsin cheese, and you would pay the salary of a competent superintendent, and leave a handsome sum of profits in your treasury.

In times of depression in business, profits lie only on the highest points of success, and manufacture must reach high to get them.

The Wisconsin State Dairymen's Association has raised Wisconsin dairying from a low disgraceful grade to respectability. But more work is yet to be done, and I fairly believe that in the near future the clear-headed dairymen of Wisconsin will adopt measures in substance of the suggestions in this paper and Wisconsin cheese will stand preeminently the model of elegant perfection and bring the prices that such goods merit. And any factory man that does not push ahead with the tide of advancement, must keep in the old rut and continue to take the same old scrub price for his goods.
DISCUSSION.

Question — I would like to know a little further about the employment of women in the cheese factory. Can a woman manage a cheese factory without any men to help do the lifting and attend to the pressing of the curd?

Answer — They do do it, and yet it is generally pretty hard; harder than I should want a woman to do. Yet, if you have got to have two in the factory, have the woman always first and a man to help under her direction.

Question — Isn’t that a little woman’s rights?

Answer — I believe that woman should have every right that is given to a man, no matter what it is. They are better than men, or else let the men come up to the standard of the women, and we would have a better government to-day.

Question — What wages can a woman get at the head of a cheese factory? What are they getting now in your county?

She ought to get precisely what any competent man can in the same position, and a woman that could not earn just as much for the same work as a man, I wouldn’t have in the factory. They are actually getting about $40 a month, and cheese makers who perform the same service are paid $50, $55 and $60. That is $40 and board in most cases.

Question — Have you tried these experiments you spoke of, with two or three samples of the same milk to start with?

Answer — I have not.

Prof. Henry — In all chemical work, Dr. Armsby always starts with two samples, and if he doesn’t come out within two-tenths of each other, he says “my work is worth nothing.” I would suggest, if you were testing, that it would be better to compare two samples nearer together.

Answer — My experiments were crude, but it merely showed a point to start from.

Prof. Arnold — I have been over that ground very carefully, and made the tests just as accurately as I possibly could, and repeated them, and I found that in making the
tests without evaporation there is no reliance to be placed upon the results; you would be surprised at the wide differences it would lead to, in the little amount of moisture that would be left in one sample more than another. It looked so reasonable that I took the same view of it exactly that Mr. Decker does, but when I came to work at it practically, I found it impossible. I sometimes got ten per cent. out of the way, would find ten pounds in a hundred difference.

Mr. Decker—One reason that led me to make these experiments was that there is a company in London that make their tests in that manner; they determine the amount of solids in fifteen minutes. In St. Louis there is a company following the same methods. I thought I was closer than five per cent., at any rate I reached the conclusion that I thought was practically correct.

Prof. Arnold—I would like to speak about the combination or connection of different factories such as was suggested. This subject was studied over in Canada, and being somewhat under government control, they could operate a little more efficiently then they could otherwise. They have a fund from the government, and the proposition was, at their last convention, to employ a superintendent for, say twenty factories, let him be a competent maker, and let him dictate how the cheese shall be made in all the factories over which he presides. They propose to empower him to look after the milk through the agency of the several cheese makers; also as to the rejection of poor milk, and other questions that may come up, and he will be assisted by the cheese makers. If, in one out of twenty factories he finds a good one, he can explain his ideas, and he will tell the rest, and in that way they will make good work of it. The plan looks very feasible if you have a fund at command, or if the cheese makers themselves will bind together, and pay such a man, they will find that the improvement in the making of the cheese will pay his salary ten times over. It is like a school system, and I would not allow any cheese maker to make cheese that could not get a certificate of his ability to perform his duties, after the first year, and he must be in a position where he can say, "I am ready to warrant all the
cheese I will make, if I have the privilege of sending home all the milk that I don’t want.”

Mr. Beckwith — I want to say about the Stowell’s evergreen corn. I used ensilage corn for two years. It was planted on a field that had been a pasture. It had manure very thick over the whole field, so that the ploughshare cut through and turned it under. I put this corn in with a corn planter. I wanted a large yield of stalks that year, and I got a tremendous crop. I had enough on that field to feed into April. I did not take it out of the field. I tied it up in large bunches, and set it up nicely, and my corn was nice and green in the winter. I had forty tons per acre of this ensilage corn, and consider we were raising double the quantity of ensilage that we got of the Stowell’s evergreen. I have not a silo, but, as soon as I am able, I shall get one. I like the Stowell’s evergreen in the fall of the year when you can feed right along, but after that I prefer ensilage or fodder corn.

REPORT OF COMMITTEE ON DAIRY PRODUCTS.

Your committee to whom was assigned the duty of judging the butter and cheese, beg leave to submit the following report:

Each one of the judges worked separate from the other, and held no consultation whatever until the work was completed.

CLASS I.—Premiums on Butter.

C. F. Fargo, Lake Mills, first premium ........................................ $10 00
Harris Bros., Spring Prairie, second premium ......................... 5 00

CLASS II.—Print Butter.

Mrs. E. S. Robertson, Viroqua, first premium ......................... $5 00
Mrs. Adell M. Bragg, Viola, second premium ..................... 2 00

CLASS III.—Granulated Butter.

N. L. James, Richland Center, first premium ....................... $3 00
C. F. Fargo, Lake Mills, second premium ...................... 2 00