MORNING SESSION.

Convention met at 10 A. M., February 12, 1903.
The President in the chair.

REPORTS OF CHEESE INSTRUCTORS.

E. L. Aderhold.

During last winter a number of factorymen in Calumet and Manitowoc counties formed an association with the primary purpose of giving the "pound for ten" system a black eye, the members being pledged to accept no milk from patrons of neighboring factories where this system was being discontinued.

Under the protection of that association something like twenty-four factories paid by test for the first time. The patrons in some instances were given the choice of receiving pay on the fat basis, or by the cwt. of milk based on the net returns for the cheese.

The latter proposition did not take well because "pound for ten" farmers are suspicious of each other and when their pet system is denied them the test system is usually chosen in its place.

Realizing that the "pound for ten" system prevents harmony between the factory-man and his patrons and therefore stands like a stone wall in the way of all necessary improvements; realizing that a discontinuance of said system meant a great deal more than was apparent on the face of things; realizing also that the test system, in these twenty odd factories was merely on trial and that the results of this trial were of the greatest import, I took it upon myself, first, to visit those makers who had started on the test system and drill them in the work of testing, test their test bottles, and to call their patrons together and explain
the test and its application in making out dividends. Later I did the same in factories lying in adjacent territory in order to arouse, as much as possible, a sentiment in favor of the test system.

Occasionally I made flying trips among these test factories in order to compare notes and see whether or not the testing was being done right. The result was that, with few exceptions, there was very little variation between the different factories in the yield of cheese per pound of fat and farmers came to believe that the fat content of milk is a good indication of the cheese content.

Very few of those factory-men lost any patrons and such losses are considered temporary.

From the evidence I have been able to gather I am safe in stating that the test system in the above named territory has scored a decided victory, that seventy-five per cent. of the farmers who patronized these factories will, in the future, oppose any other system of making dividends.

This little band of cheesemakers by, for once, asserting their backbone; by, for once, standing for their rights; by, for once, acting like men instead of like boys have won a victory far-reaching in its effects.

They have strengthened their position with their patrons; harmony is taking the place of distrust; they look into the future with increased confidence and some of them are already planning and making improvements such as they had never before dared to dream of.

At one factory in this territory the patrons had refused to accept the test system and as they were somewhat wrought up I managed to get a fair attendance at a day meeting. The maker had on hand composite samples of milk and I undertook to show his patrons how to test.

Nearly all of those farmers were ignorant on the question of testing and they must have taken me for a Norwegian because, while I was taking samples they made such remarks in the German language as "two samples of the same milk will not test alike," and, "adding water to milk will not lower the per cent. of fat."
There were twenty composite samples and when I had taken a sample from the last jar, after inviting their particular attention, I added four small doses of water to the jar and took a sample between each dose. The finished test showed them a reduced per cent. of fat for each dose of water added and they were convinced that the Babcock test does show how rich the milk is.

Then I talked to them in their own language for an hour, after which they were satisfied that paying by test is the right way, providing the testing is correctly done, and they voted to accept pay on the fat basis.

The basis of opposition to the test system is ignorance, and one day spent in making demonstrations in correct testing will dispel more foolish notions that a year’s talking will.

Farmers, like other people, are afraid of doing business under a method with which they are unacquainted and it is certainly a fact that a large majority of the cheesemakers do not possess the ability to so demonstrate and explain milk testing as to make the farmers feel sufficiently acquainted with the test system.

As it is not practicable to make these demonstrations by lamplight it seems expedient that day meetings be held. But I have found by experience that it is simply impossible, under ordinary circumstances, to get an attendance at a day meeting after spring work has begun.

It is customary to hold annual meetings at cheese factories. The time of holding these meetings begins in February and extends into April. They usually are, or can be, held in the day time.

As there is a good attendance on these occasions and as plans for the future are acted upon at these meetings they certainly furnish the very best opportunity for missionary work.

Last year, for the first time, I started out early enough to attend a few annual meetings and the result was so encouraging that I deem it pertinent to suggest to the management of this association that they make arrangements whereby the instructors can attend as many annual meetings as possible. I feel certain that if such a change is made there will be a good demand by farmers as well as by factorymen for the instructor’s services at these annual gatherings and I feel equally certain that the efficiency of the instructor’s work will be greatly increased.
The practice of coating the surface of cheese with paraffine has grown so much in favor that nearly all the cheese that goes into cold storage is now subjected to this treatment.

I have heard dealers say that if the paraffine is rightly applied to cheese that are well dressed, clean and bright, the shrinkage, while in cold storage, will be almost insignificant.

If that is true is it not possible that, indirectly, the paraffine treatment may be the means of improving the quality of our product?

When cheese is taken from the factory and placed in cold storage it usually implies that it is removed from a temperature that injures to one that preserves or improves the quality.

If the paraffine treatment almost eliminates the factor of shrinkage during cold storage may we not expect that dealers can be persuaded to accept cheese at a younger age than they have heretofore been willing to accept them?

I do not know what dealers will say to this proposition. I simply mention it as a possibility.

The manufacture of square-shaped cheese has grown rapidly. Approximately one hundred and fifty factories were turning them out during last season. These cheese have creases pressed into their faces to indicate pound cuts.

The claims put forth in favor of this style are that the boxes cost less; they can be cut up to better advantage for table use and the retailer is protected from loss from shrinkage while on the block. So far this cheese has been manufactured only on orders from dealers and in sizes of ten and twenty pounds.

A bird's eye view of our cheese factories reveals things that are pleasing and things that are otherwise. Some of our best factories are built on a site that slopes enough to facilitate drainage and furnishes pitch to conduct the whey from the vat outlet to a tank that is placed on top of the ground. The building is roomy and neatly painted. The walls are, in some degree, airtight and insulated. The floors are sound and the make room floor is pitched towards a gutter. The whey and washings are conducted through the wall above the floor into an open hopper outside of the building. The boiler room floor is about on a level with the make-room floor. There is an elevated water tank,
an engine for pumping water, running the curd mill and that curd agitator that ought to be installed. The piping is so arranged as to enable the operator to easily obtain water at any temperature he desires; also to use steam for cleansing, sterilizing or pasteurizing purposes. The cheese vats, I am sorry to say, are made to suit the man who manufactures them instead of the man who uses them, and in many instances they are monstrosities that reflect little credit on the good sense of those who buy them.

The curing room is of the basement type or has a sub-earth duct connected with it to insure against extremely high temperatures. The nasty pestiferous flies are compelled to remain outside of the building and the operator positively declares this to be much the easiest way to keep them out of the milk and cheese.

The interior of the factory and the machinery, of course, are in a clean condition and the operator looks tidy and, like a good dairy cow, has a high forehead and a bright eye and as we depart from his place we instinctively feel the pity that comparatively few of our factories reach the above described standard.

A true illustration of one of our worst factories presents a sorrowful picture. It is built on the lowest spot that can be found in the immediate vicinity and the odor surrounding the plant bears constant witness to the total lack of drainage.

The building stands on posts. It is one and a half stories high, six feet too narrow and ten feet too short. The upper half story furnishes the dwelling abode for the operator and his family.

One thickness of boards and battens furnishes the insulation for the walls. The temperature of the curing-room is in deep sympathy with the outside temperature. The floors are unsound. There is no boiler nor Babcock tester. Whey is conducted in open, leaky troughs under the floor, or in pipes that enter through the floor and emit foul gases. There is a stagnant puddle under the factory. The equipment and arrangement are generally inconvenient. The only warm water obtainable is from the self-heating cheese vat, and as the milk pan leaks a little this water is foul smelling. Nothing more than a bluff is
made to prevent flies from entering and you can imagine there is "something doing" during fly time.

The floors, walls and utensils are unclean almost to stickiness and the outer garments of the operator can stand alone. The word sloven is stamped on his countenance. He may have a good excuse for his lack of civilization, but what excuse has the state of Wisconsin to offer for allowing such a plant to exist within her borders.

When a farmer offers for sale skimmed or watered milk at a factory the state is liable to arrest him and impose a fine, and rightly so. Yet the milk so adulterated may be perfectly wholesome for food purposes. But what about the unsanitary conditions of most of our cow barns and some of our cheese and butter factories. Are not these conditions a thousand times more damaging and dangerous than the above named adulterations?

To the cheese factory patrons I wish to say you are not making good use of your opportunities for enhancing the profitableness of your industry. Our population consumes an average of only three pounds of cheese per head annually. Those three pounds are the result of some milk, some skilled labor and an uncertain quantity of abuse. If the abuse were left out the people would demand more than three pounds per head and prices would be maintained higher than we have ever had them.

You should improve the sanitary condition of your cow barns, produce clean milk and be more liberal with boiling water on your utensils; compel the factoryman to add a boiler to his equipment, if there is none, also a measuring device for distributing whey; compel him to clean the whey tank daily and to scald the whey at least once a week; persuade him to add a curd agitator to his equipment and do not allow him to cure cheese at a temperature above sixty or sixty-five degrees.

Because of low grade work at our cheese factories there is an enormous loss constantly which you milk producers must bear. Do not let it continue. Get together and demand that the factoryman shall perfect his building and equipment so that he may perform a higher grade of work, and don't forget that you owe the cheesemaker a living and that he cannot furnish high grade
work at the rate of low grade pay that obtains in eastern Wisconsin.

To the cheesemakers I will say that it takes you a mighty long time to realize your condition. Your dwelling places average much poorer than those of your patrons. A great many of you live upstairs in your old factories. Some of you have lived there for more than a score of years and never expect to occupy a decent house unless some one makes you a present of it.

Model factories are about as scarce as hen's teeth. Most of you would be glad to perfect your plants if you could figure out returns on the investment necessary for doing so. You are doing a poor job in cheese work, and you know it. Your property, generally speaking, is not salable. Your machinery and supplies cost more than they did a few years ago and the farmers are receiving fancy prices for their cheese so what reasonable objection can they have to paying you a little better for your work.

Cheesemakers, are you not entitled to a decent house to live in such as your patrons have? Is your labor not entitled to remuneration that will enable you to make your factory respectable and salable? Is not your profession respectable and legitimate? Are you ever going to realize that you need to become emancipated?

My advice is for you to act like men and make a determined fight for what your station entitles you to so that you may be enabled to begin "right living" sometime before you die.

The past season has been unique in point of advantages. We had an abundance of grass, insuring a big production of milk; cool weather, insuring milk of superior quality, and high prices throughout. Never before have we been blessed with so many advantages in a single season.

As to the price of cheese for the future I am very hopeful because, first, on account of our increasing population the demand for dairy products must grow; second, the rate of increase in the production of milk is restricted; third, the production of cheese in the United States is probably not growing at all. If I were compelled to add a fourth reason it would be this; The butter
factory may not be in serious competition with the cheese factory.

Taking all things together I do not hesitate to say that for many years to come cheese will compare very favorably in price with other farm products.

REPORT OF CHEESE INSTRUCTORS.

John B. McCready.

Mr. President, Ladies and Gentlemen: I submit the following report of my season's work for your consideration.

I started my road work May 1st, 1902, and finished November 3d, 1902, earlier this year than usual on account of having to be present at the opening of our Dairy School.

The first part of this season, I visited 12 factories where I was not called and made short visits; was called and worked from two to three days in 47 factories; 13 of these received second visits. Five of these factories were making Brick, Swiss or Limburger.

Had evening meetings at nearly all factories visited and found only three American factories not paying by the test.

The evening meetings have been productive of much good; yet the patrons whom we really wish to reach (namely, the careless ones) are often the ones who do not attend.

As a cheese instructor of this association, during the past year I have had an opportunity of studying existing conditions as found in that section of the country in which I worked.

The past summer was one of the finest in the history of my experience for the manufacture of good cheese. Cool weather, plenty of rain, excellent pasture and a fine, strong market all went in to make it so.

The demand for cheese was good and prices paid were high; the result was that the buyers were not so strict in their inspection as might have been the case had the prices been low.