than four feet eight inches, a gutter eighteen inches wide, about six inches deep, and sloping to one end.

The manure should be removed from the barn daily, to a distance sufficiently remote, so as not to pollute the water. The cattle will not be compelled to wade through the same in passing in and out of the stable, and so that any odors arising therefrom, will in no way affect the milk in the milk house, or the air in the cow stable. All feed should be fed after milking and by so doing the cattle will be more quiet during milking, give more milk, and the milk will be of better quality.

The milk house should be conveniently located, so that ready access may be had from stable and ice house, and should be near the well if possible, and we insist this house be used only for cooling milk, cleansing of utensils, storing of milk, and must be kept clean.

Health of attendants is of great importance. Diphtheria, scarlet fever, tuberculosis, typhoid fever, all are prevalent to a far greater degree than producers generally are willing to admit, and should be guarded against. Finally, convince your patrons it is to their advantage to apply the tuberculin test to their herd, and you have your patrons producing a reasonably safe and sane milk.

In conclusion, I believe Wisconsin produces as clean milk as any people in this, or any other country. I believe our producers are as intelligent and progressive as can be found anywhere. The trouble is, we have too much poor milk and too little milk of the right quality. It is your duty to reverse these conditions and by so doing, you will do much for the reputation of Wisconsin dairy products. It will bring happiness and prosperity to the producers, make your work more pleasant and profitable, and finally, to the consumer you will be a benefactor.

Discussion.

Mr. Glover: The straining of the milk outside of the barn involves a lot of extra work especially where the barn is large, and have you ever thought of building within the barn a very small place in which the milk might be strained, to give opportunity for straining it out of the atmosphere of the barn and at the same time prevent so much walking? I believe we have to get around this in some other way. I moreover believe that if the barns were properly ventilated, as they should be, well lighted, whitewashed and kept clean as cow homes ought to be, that it would not be of prime importance to the production of high class milk to have it strained outside the barn in a milk house. We would make a tremendous step forward in the production of clean milk if we could get the farmers to realize the importance of air, sunlight and white washed walls in their barns, but when we ask a busy man to carry milk as far as would be necessary in a barn of fifty cows we are asking too much, we are asking more than we can expect a human man to do unless he is paid more than we are willing to pay for so much work. Why not install a place within the barn where the milk can be set and scales ready for weighing the milk?

Mr. Steffen: In Sheboygan county we found a great many large dairies and I have had occasion to visit some of them, and it is our experience that the larger the dairy, the more cattle a farmer is keeping, the better are his facilities for caring for his product and it is easier to deal with him than it is with the owner of five cows. He is more intelligent, better equipped, has a better barn, and is easier to approach than the five cow farmer. Our trouble is with the five cow man, the man that milks twenty-five to forty cows usually has the proper equipment and we have no trouble with that class of producer.

As long as I am in charge of the work I believe I will not prosecute a man for keeping a filthy cow barn because he has sinned enough already, we will simply shut his product out from Milwaukee and let it go somewhere else. I believe it is practical to have a small room in one corner of the barn, where the milk may be strained, but there should be a hallwa
of 3 or 4 feet and a window through which the air could pass from the barn before entering this room. I believe that would give good satisfaction and I have recommended it to the inspectors.

Mr. Noyes: I have lived in Wisconsin about thirty-five years, and at the present time the barns are more than 500 per cent better than they were when I first came into the state, but our milk is far from perfect and I do not know whether building better barns, airing them and getting sunlight into them will produce better milk or not. It has not proved altogether true. I think the inspection of cheese twenty years ago at the University was as high as it was this last year. That is saying something pretty hard, and we know the barns throughout Wisconsin have improved 100 per cent. There are pretty good barns in this state and still our milk is pretty poor in the matter of cleanliness. I believe the best way to overcome this difficulty would be for every cheese factory operator and every creamery operator to require his patrons to produce milk of a certain standard.

Mr. Steffen: In regard to paying higher prices, theories are all right but they do not always work out. A year ago this winter we had the highest price milk and in Milwaukee the dirtiest milk we ever had. It was our experience at that time that barns that were adapted to the keeping of ten cows had fourteen cows in them. We have but few good dairymen that realize that cows should have a reasonable amount of air space, light and ventilation, but that question of light and ventilation for the dairy cows is in a backward state and we have to recognize that fact. This theory of paying the farmer a price for his clean stuff is all right, but the minute we do that we will find we will have to have somebody with authority and enough ginger to watch them after all. Last year we prosecuted nineteen shippers that shipped water and skimmed milk to Milwaukee and only two for dirty milk. We are carrying on a campaign of education. We have inspected 2,600 farms and made 3,400 visits the past year to farms located in nine counties. We have improved the conditions tremendously on those farms.

Mr. Glover: There is no use in getting discouraged, we are on the right track; but do not expect the farmer to produce certified milk when we pay him an ordinary price because he will not do it. That is what I am pleading for today, not to take such a big step that we cannot get anything done, but when the time comes that we are going to produce the kind of milk that this speaker described we are not going to buy it in Milwaukee for 11 cents a quart. It will be worth 15 cents, and good milk is worth 15 cents in Milwaukee today if beefsteak is worth 30 cents a pound. A quart of milk contains as much nourishment as a pound of beefsteak and why should we sell food in Milwaukee cheaper than anyone else is selling food? Milk is the cheapest produce before the American people today.

PRACTICAL TALK TO CHEESE MAKERS.

T. A. Ubbelohde, Glenbeulah.

I like a milk house built against the barn, of cement blocks, with a door leading from the barn, and a tank of either galvanized iron or cement, although I prefer cement. The water comes into the tank from the pump and runs off into the watering tank for the cows. All the water for the cows goes through there and in the winter the cover of the tank fits tight, which is all that is necessary to keep the milk from freezing. A year ago this winter we had some severe weather in Sheboygan county and the milk in tanks of that description never froze sufficient to injure it. If the barn is well ventilated there is no objection to coming through the barn to the milk house and it is not necessary to go out doors. I do not want to go out doors to strain milk and I know the rest of the farmers do not want to either. The principal point is to keep the milk house absolutely clean.