Mr. J. D. Frederickson, Little Falls, N. Y. Is there any advantage in adding hydrochloric acid to raw milk without pasteurizing the milk?

Prof. Sammis: No, there isn’t, and the reason is this, that no matter if you do put acid into raw milk, the bacteria are there and some days will ripen rapidly and some days slowly. There is no use to add the acid.

Chairman: Does this hydrochloric acid affect fermentation?

Prof. Sammis: You can’t find the acid in the cheese if you search for it. Ninety-five per cent of the acid put into the milk goes out in the whey and the cheese cures in the normal fashion with the aid of the bacterial starter you put into the milk.

APPEARANCE AND FLIES.

Mr. Joseph William Warner, a Swiss, brick and limburger cheese maker, called on for a few remarks, emphasized two points, appearance and flies. “I talk to the farmers in the same way,” he said. “I say to a farmer, if you drive through a town and see milk cans standing around the depot and everything in a dirty condition you don’t think much of that farm. It is the same way with the cheese factories, and one and all should be cleaning up and improving their appearance.”

USES OF CONCRETE IN CHEESE FACTORY CONSTRUCTION.

I. M. Clicquennoi, Chicago.

The buildings which shelter the valuable machinery of a cheese factory are without doubt one of the most important of fixed changes. The requirements of a building for a cheese factory should unquestionably embody first, sanitation; second, fire-proof construction; third, permanence. Concrete has long been recognized by leading engineers to meet all of these, together with having the simplicity of construction, allowing largely of the use of local materials and a small percentage of skilled labor. The choice of finishes and the elasticity of architectural design afforded by concrete permit the erection of a building which will be a credit to the architectural surroundings.

From a sanitary standpoint, concrete by virtue of its composition and its properties is one of the most sanitary building materials in use today. It may be flushed and scrubbed by water with no danger of rotting. It is vermin-proof and rat-proof and there are no cracks, in which dust and refuse may accumulate.

The necessity of a fireproof structure is without doubt very urgent in cheese factory construction on account of their location in rural districts which afford no fire protection. Low fire insurance rates accompany this protection. There are two types of concrete construction well adapted to this type of factory, namely:—concrete blocks and reinforced monolithic concrete. The latter is to be preferred as the whole building is constructed as a unit and a stronger and more fire-proof building is obtained.

As most of the outlying cheese factories require only one story buildings, it is most essential that the roof should be of concrete. A construction of this character incloses all of the machinery of the building in a fire-proof compartment. The boiler room should be inclosed by a concrete division wall, and with the floor and roof of concrete, the danger of fire is reduced to a minimum.

The thickness of the walls will depend largely upon the height and character of the building, but for ordinary one-story buildings an 8 inch wall should be amply thick. Reinforcement in both directions, and especially around the corners is an essential feature. This gives strength and rigidity to the structure, as well as preventing cracks due to expansion.