

CHEESE.

Cheese can be but mentioned.

Another of its products, even greater in weight than either butter or cheese, is so totally ignored that I have been surprised cheese makers have not attracted attention to it.

LACTIN OR SUGAR OF MILK.

I refer to the *Sugar of Milk* that now decomposes and becomes offensive and the factories and is wasted or so fed to hogs as to be of little account. In the skim milk it is used up in course feeding, but *lactin* is a most delicate article of sugar, that which gives to fresh milk its sweetness and only wants to be generally known to be appreciated. It is a costly substance now as it is little used that only druggists keep it and not many of them. Switzerland furnishes most that is found in commerce. It is easily made by concentrating sweet whey until the sugar crystallizes out. I need not go into the details at present. *Lactin* is not so sweet as cane sugar and has never been used in quantity in the pure state, but will be made and used before long. It will pay large dividends. Swedish chemists have of late made a concentrated preparation of skim milk. It is used for several purposes, as a food, and roasted and ground as a beverage, with coffee, &c.

CONDENSED MILK.

Vacuum process milk is another product. As we find it it is an inferior preparation containing from $\frac{1}{6}$ to $\frac{1}{8}$ of water and as well loaded as high as 10 per cent. with cane sugar.

It also requires costly packages for transit.

These disadvantages must necessarily accompany the handling of milk as it is at present utilized, because if all the water be removed a compound results containing fat, which is very liable in this form to decay and the addition of water fails to restore it to its pristine condition of milk. A part of the water being retained the sugar is added as the most harmless, agreeable and nutritious preservative.

By scientific reasoning, or from the *known* to deduce the *unknown*, I would hazard the prophecy that it is more than probable that by removing the fat or cream from the pure and fresh milk, the remaining casein, lactin and salts can be desiccated by the vacuum process, and the addition of water to this powder will restore to it the original properties of the milk. The fat, butter having all foreign matters removed will not be liable to become rancid and can be put up so as to retain its freshness and flavor. In place of one we will have two products that can be mingled in any desired proportion and a pure and good milk be at our command at any time and in any place without added sugar. This addition is an inconvenience for many purposes, it increases the cost and as far as children's health is concerned it is not desirable.

Thus the public will have the sanitary, and the dairyman the financial advantage. The term sanitary needs further explanation.

The less chemical changes milk is subjected to the better it is as a food, even simple boiling lowers its digestibility and value, in the vacuum process the high temperature of boiling is avoided.

Addition to milk is not necessarily improvement. Sugar would be considered a harmless union, yet it has been found that children fed on the best condensed, or sugar preserved milk, apparently thrive and become fat and