Another method is to hold the cream sweet until twenty-four hours before churning, then heat it to 65° F. and add one pint of culture to every gallon of cream. In the evening, cool to churning temperature or

below, and hold at that temperature over night.

Separator cream should have the foam well stirred in, and by placing in cold water, should be quickly cooled to 60° in winter and from 50 to 55° F. in summer. Stir the cream occasionally while cooling. It is most essential that this thorough and quick cooling be done before adding the cream to the cream can, otherwise separator cream cannot make choice butter.

It is the neglect of this prompt cooling which gives the bad flavor

to so much of the dairy separator cream and butter.

Examine the cream, and when it has a smooth, glossy appearance, pours like molasses and has a pleasant acid taste and smell, it is in proper condition to churn. Churning should be done not less than twice a week in summer and three times in two weeks in winter.

To insure a good body in the butter have the cream lowered to churning temperature or below, several hours previous to churning. It does no injury to raise the temperature to that desired, but when the temperature of the cream is lowered just before churning, the fat globules have not had time to harden, and the result will be a soft, weak-textured butter.

To prevent loss of butter fat in the buttermilk, sweet cream should

not be added during the last twelve hours before churning.

Perfectly sweet cream will churn in the same time as ripened cream and makes a mild creamy-flavored butter which is gaining in favor in the best markets. If the temperature of sweet cream is kept low there is no excessive loss of butter in the buttermilk.

I think the time is not far distant when little cream will be ripened for butter-making purposes. The sole care of the butter-maker will be

to have the cream as clean and sweet as possible.

Complaints are sometimes made about a bitter flavor in cream. When held sweet for sometime at a very low temperature this bitterness frequently develops. To overcome this difficulty, either pasteurize or get the cream started to sour.

## PASTEURIZATION.

For farm butter-making we do not consider pasteurizing the cream necessary, but if bad flavors are found in the sweet cream it will, to a great extent, destroy them. If cream obtained from cows a long time in milk proves difficult to churn, pasteurizing it will assist greatly in getting the butter to come.

To pasteurize cream, place the can holding the cream in a dish of hot water on the stove, and bring the cream to 160° F., and keep at that temperature for twenty minutes; then quickly cool to 60° F. or below. It is always necessary to add a culture to pasteurized cream if you wish

to ripen it.