

The fact that the cream tests vary does not indicate that careless testing is being done, as it is practically impossible to run a separator under farm conditions without having the cream vary.

#### Speed of Separator.

A change in the speed of a separator changes the per cent of butterfat in the cream. The higher the separator is placed the greater the amount of skim-milk thrown out, and this results in giving a smaller amount of higher testing cream. A low speed of bowl gives a larger quantity of thinner cream.

#### Inflow of Milk.

Many people assume the separator is supplied milk at the same rate on account of the float governing the inflow into the bowl. This is not the case, as at times the faucet is not opened quite its full capacity, or the milk tank is allowed to run low which decreases the inflow into the bowl. Whenever the flow of milk into the bowl is increased, a larger amount of thinner cream results.

#### Flushing the Bowl.

A common cause of variations in cream tests is connected with flushing the bowl. It is a very easy matter to vary a pint or more in the amount of water or skim-milk used for flushing, and this alone may be sufficient to change the test of the cream 2 to 5 per cent, as a portion or all of the flush water may be permitted to go into the cream.

#### Variations in Milk.

Variation in richness of milk is another common cause of variations in cream tests. It is a well known fact that the milk of an entire herd may vary in per cent of butterfat from one day to another. A sudden change in the weather, or excitement of any kind may make a difference. If the milk of a herd of cows whose average test is 4 per cent, is separated so cream tests