

Fat of Milk Charred or Burnt— Trouble with Babcock Tester.

Editor FARMING:

A cheese factory manager in Western Ontario writes to know why "the fat, on rising to the top, is not clear, but in a dark condition, as if it was burned. There is very little showing of clear fat in the neck of the Babcock test bottle, and sometimes none at all?" He adds that he is anxious to pay according to the test plan as soon as everything is right in the testing.

From his outline of the plan adopted in sampling and testing, we learn that there are two causes of the trouble, viz., (1) using too much potassium bichromate, and (2) using too much acid. Numerous persons have trouble with the Babcock tester in a similar manner. If potassium bichromate alone be used, what will lie on a ten-cent piece would keep samples for two weeks or more, if the samples are kept in a cool place. Too much of the chromate has a tendency to produce dark, cloudy readings.

We are using a mixture of seven ounces of bichromate to one ounce of corrosive sublimate, and what will lie on a five-cent piece to preserve samples two weeks. A mixture of six ounces of bichromate to two ounces of sublimate would be better. A new preservative called "formalin" is highly spoken of.

Although much has been said and written regarding the Babcock tester, we find that many persons do not yet understand it. The person who had the trouble referred to was using *five drams* of sulphuric acid for each sample when testing. This is too much, if the acid is of proper strength. It would burn the fat. Each user should have a 17.5 c.c. acid measure, and use this amount if the acid is right.

The tester, the making of composite samples, preservatives, and all points relating to the theory and practice of testing milk with the Babcock tester, are fully explained and practised at the Provincial Dairy School, Guelph, which opens for the next session on January 15th, 1897. Every cheese and butter maker ought to avail himself of this opportunity of becoming fully acquainted with the latest and best methods of testing milk. He will learn many other things of value to him.

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Milk Fever.

In a recent contribution to *The Dairy*, Mr. Henry A. Howman gives some notes on the use of chloral hydrate for the treatment of milk fever. The recipe was one which was given him by a veterinary surgeon, Mr. Insall, Coleshill, Warwickshire. Mr. Howman states that, whereas for some years he used to lose cattle from milk fever, after adopting this treatment he never lost one. He now keeps the chloral mixture ready at hand, and on the first appearance of symptoms of the disease administers a dose. He lays special stress on refraining from milking a cow affected with milk fever for four meals, as he believes that milking just before or directly after calving is oftentimes the cause of a bad attack of the disease. He has found that heavy milking cows are most liable to it after their third or fourth calf, and that it generally attacks the cow before the fourth day after calving.

The following are the notes referred to:

Treatment before calving.—Shut up for three or four days before calving, but give exercise. Limit the food both in quantity and quality; sweet hay is the best. Give, in one or two doses, in plenty of water—

Epsom salts.....1 lb.
Powdered ginger.....1 oz.

Treatment after calving.—On no account milk the cow for four meals, but let the calf have the run of the cow, only taking care that the teats are kept clean and sucked level by the calf. If the cow shows signs of going down, give at once

Chloral hydrate.....2 oz.
Potash bromide.....1½ oz.
Tincture aconite (Fleming's)...15 drops.
Water.....sufficient to dissolve.
Treacle.....4 lbs.

Every three hours afterwards give

Chloral hydrate3 dr.
Liquid extract of belladonna.....2 dr.

in treacle, and water sufficient enough to dissolve the treacle. Repeat this two or three times.

Stop giving the medicine directly the cow shows signs of recovery. When down, the cow must be propped upright on her breast in a comfortable position with bundles of straw. Twist a roller towel round the horns, and keep it wet and cold. The cow must not be left night or day.