

11,000 saloons were voted out of existence by the people of the United States. The movement is one of the grandest of modern times and deserves to be pushed vigorously both in Canada and the United States.

## Creamery Department

Butter Makers are invited to send contributions to this department, to ask questions on matters relating to butter making and to suggest subjects for discussion. Address your letters to the Creamery Department.

### Using Hand Separators

One of the most profitable dairy counties in Wisconsin is described in a letter to *Hoard's Dairyman* from which we take the following:

In this locality, you will find that farmers all know the value of a good dairy cows. Many cows in this locality are earning from \$8, \$9, \$10 and \$14 per month in butter fat. At least that was the amount for the month of May. When you ask a farmer the price of such a cow, his reply almost invariably is, "I do not desire to sell." If in any way you can prevail upon him to put a price on a cow of the quality I have named, he will answer, "From \$100 to \$125, and they are worth it because they are earning me the money."

Now, I say that the directors of co-operative creameries would do well to visit this locality to see how scientific and practical a co-operative creamery

### Important Notice

The special Breeders' Number of *Farm and Dairy* will be published December 2nd, not November 4th, as originally announced. By coming in December, it will come at a time of year when it will be of greater value and interest to the many live stock men who are readers of *Farm and Dairy* than were it published on the earlier date. Will our subscribers and advertisers please bear this in mind. Remember the date, December 2nd. Advertising copy should be here one week in advance.

is when conducted in Wisconsin. At this creamery no milk whatever is taken and there are but a very limited number of men who skim milk by the gravity process. In such cases, such farmers have only one, two or three cows. I think the buttermaker said there were only three or four. In all other cases hand separators are used.

The farmers here referred to use hand separators, send the cream to the creamery and feed the skim milk to their calves. By said methods they are making the dairy business very profitable.

The same correspondent further says:

The average test of cream delivered at the creamery is about 23 to 25 per cent. They are just now inaugurating a system of taking ratio samples of each farmers' cream before it is emptied into the large cans in which it is hauled to the creamery. By ratio samples we mean this: for example, to-day a farmer had 100 pounds of 20 per cent. cream and at the next delivery he had 90 pounds of 40 per cent. cream and under the average system of samples, equal quantities of both kinds of cream were put into the composite jar and here would be a grave error in the amount of money paid this farmer. Let us illustrate: said farmer should receive as follows: 100 pounds multiplied by 20 per cent. equals 20; 90 pounds multiplied by 40 per cent. equals 36. Total, 40 pounds of fat. That is the exact amount the farmer should receive. Now, suppose

that equal quantities of the same cream are put into the composite jar. The test of these two samples would be 30 per cent. The farmer would then be paid for 150 pounds times 30 per cent. equals 45 pounds. This particular customer, therefore, would receive 5 pounds of butter fat in excess of what justly belonged to him under the present average system; but, if they had used the ratio sample which they are intending to use immediately, he would receive exactly what belonged to him, because they would have taken only one-half as large a sample of the 40 per cent. cream as they did of the 20 per cent. cream. The reader of this may say that the illustration is an extreme case but there would be a proportionate error provided he skimmed a 30 per cent. cream at one delivery and a 20 per cent. cream at another.

The managers of this creamery are wide awake and sincere in their efforts to give exact justice to every patron of this creamery by inauguration of this system of taking ratio samples. A very scientific and accurately graduated device for that purpose will be given each cream hauler so that it can be done quickly and accurately in the country. For example, man has 50 pounds of cream. He will take to the mark 5 on the graduate. If he has 45 pounds, he will take to the mark 4½. If he has 100 pounds, he will take to the mark 10. In this way it will be absolutely impossible for any farmer to get the advantage of his neighbor by skimming a heavy cream at one delivery and a thin cream at another. We consider this very important.

### The Care of Cream

The housewife takes before us in connection with our cream-gathering creameries is the education of the patrons to properly care for their cream. When the cream leaves the farm it should be both clean in flavor and sweet. This means care and cleanliness throughout, and the providing of facilities for cooling the cream. The utensils used should be of the best quality and properly cleaned so that there will be no danger of contamination from this source. The practice of not cleaning a separator every time it is used should be most strongly condemned. In some sections of this country this most faulty practice is on the increase and cannot be too strongly condemned. Some separator agents who have advised this practice should be severely reprimanded by their employers for so doing.

Special care should be taken to milk in a clean place and in as cleanly a manner as possible; for particles of dirt which fall into the milk during milking time are laden with organisms which produce the worst flavors with which we have to contend, and while this harmfulness is not so great as under the cream-gathering creamery system where the cream is held for some time before it is sent to the factory.

The milk should be creamed as soon as possible after milking. For this purpose I strongly favor the use of a hand separator over any method of setting the milk, as it provides the most efficient and thorough method of creaming the milk. It enables us to make a cream of any desired richness—I recommend making a cream testing about 30 per cent.—the quantity to be cooled is greatly reduced, and the cream if properly cooled will be one of superior quality.

Care should be taken to set the separator in a clean place and to stand it on a level so that it can be kept clean and not on an earthen ground floor which is sure to get into the milk sooner or later through milk being spilled upon and soaking into it, and thus causing bad odors. I would again admonish those who have hand separators to keep them thoroughly clean. I have met more separa-

tors than one in such a condition that they themselves would contaminate milk put through them. The separator bowl and its parts should not only look clean but should have a clean smell as well. If giving off any bad odors, examine all tubes and crevices about the bowl, for this is evidence in itself that there is dirt being harbored somewhere.

So much for cleanliness. This is in order to keep the milk and cream as free as possible from the organisms which work so much mischief. The next step is to cool the cream as soon as possible after it comes from the separator in order to prevent the development of those organisms that do gain access to it, for be as careful as we may milk and cream are never free of germ life. The warm cream should be put into a vessel by itself and thoroughly cooled before being added to the cold cream. The three most common mistakes made in handling and cooling cream are, that warm cream is mixed with the cold, the cream is frequently left too long before being cooled, and it is not cooled to and held at a low enough temperature. Cool it 50 degrees as soon as possible after it comes from the separator and hold it well under that temperature until it is sent to the creamery. Send it to the creamery both sweet and clean in flavor.—J. W. Mitchell.

### Double the Income per Cow

Several instances are on record in Ontario and Quebec where members of cow testing associations, who are systematically weighing and sampling the milk from each individual cow in the herd, have been enabled to increase the yield of milk per cow tremendously. Mere weighing and sampling, of course, has not increased the yield, but it has been the most important factor in the general improvement;



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it has shown that lots of cows were not worth keeping; it has shown that others could profitably consume more good feed; it has shown the owners that they must study each cow to make her do her best; it has shown them that most cows will respond readily to better care and attention and will earn more money if given the opportunity.

It means good money in any farmer's pocket if he will have a little patience and act on the information gained from the records. One man is now getting from his 20 cows an income of \$480 per year more than he was three years ago. A smaller herd in 1904 brought in only \$28.80 per cow, but last year the owner received nearly \$58 per cow, in other words he is now getting more than double the previous income per cow.—C.F.W.

Enclosed find \$1 for one year's subscription to *Farm and Dairy*. Please give me for a premium one of your 14k gold fountain pens which you offer.—A. J. O'Hara, Wright Co., Que.

Our "Pig Offer" is a dandy. Have you taken advantage of it yet? Read it elsewhere in this issue.

## INSURANCE

In return for one new yearly subscription to *Farm and Dairy*, we will give an Accident Insurance Policy, to the amount of \$1000, good for one year, through the Imperial Guarantees and Accident Insurance Co., of Canada. This will apply only through the back of this year. Send in your subscription to the

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