

working people this spring, the tension experienced last year from the scarcity of farm help has been considerably relieved, and when these people become accustomed to the ways of the country, it is hoped that many improvements may be carried out that have been delayed owing to the labor problem.

## DAIRY.

### The Farm Dairy Outfit.

By Laura Rose.

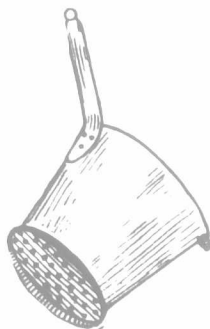
The dairy outlook to me seems especially bright. Prices are high, and both the home and foreign market good. With increasing intelligence and skill, the quality of Canadian dairy products will gain further excellence, and this will create a larger demand. The general prosperity and refinement of the masses will also swell the demand for the choicest dairy products, and give ability and willingness to pay advanced prices for fancy cream, butter and cheese. Higher education will also make the consuming public better appreciate the food value and relative cheapness of milk, butter and cheese—a fact that is not so well understood as it should be.

This bright prospect for the dairy business should encourage farmers to make some outlay toward a better equipment. Butter is very expensive, compared with churns, workers, etc. You must not spoil your product for lack of the right utensils to work with. Just as a business man must watch the market to take advantage of the  $\frac{1}{2}$  c. a pound on the article, that he may successfully compete with his competitors, so must you be on the alert to use every possible means to give that extra finish to your butter, that it may command just a little bit more than the best price going. It is a struggle in which energy and skill will tell for a great deal, and you will have solid enjoyment in every point gained. Many a woman has told me she always gets five cents a pound more than the market price for her butter, and her real pleasure comes more from the pride she takes in having such a

town with a No. 2 barrel-churn in the back of his wagon, and I said to myself, "Unless that man has only a cow or two he is making a big mistake in buying a small churn." If I had only three cows, I would get a No. 3 churn. The larger the churn and the smaller the quantity of cream in it, the lower the temperature at which you may churn, the quicker the butter comes, and the more exhaustive the churning. I prefer a barrel-shaped churn with no dashers or breakers inside. If I had large churnings I would contrive to have some kind of power to run the churn.



Milk Strainer.



Strainer Dipper.

Where creamers are used, or the milk sent away in cans, the strainer here shown is a good one. Have it 12 inches across at the top, and 5 inches at the bottom. It may or may not have a brass wire bottom. Have a tin band large enough to slip easily over three or four thicknesses of cheese cloth, when placed over the bottom of the strainer. The cloth must be taken off and well washed after each time of using.

If you have never used a strainer dipper in your dairy work you have missed a great convenience for straining the cream into the churn, straining the buttermilk from the butter, holding the cheese cloth to strain the wash water into the churn, etc., etc. If the following directions were given to a good tinsmith, he should make you an extra nice one for 40c. or 50c.: Nine inches across the top, seven inches across the bottom, six inches deep. The bottom should be of strong perforated tin—the perforations one-sixteenth of an inch across. A strong flat handle 10 inches long, and a small piece of double tin at the opposite side to act as a lip to keep the dipper from sliding into the churn, completes the dipper. A dipper of similar size, with a tin or copper bottom, is just fine for either the dairy or kitchen.

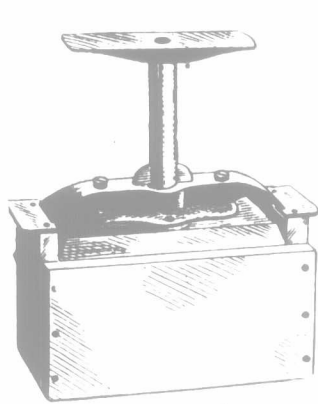
The little cream stirrer is as excellent as it is simple. By an up-and-down motion it thoroughly mixes the cream from the bottom to the top. The little tin saucer is between three and four inches in diameter, and the tinned wire handle about twenty inches long.

I cannot but wonder when I hear people still say, "My finger is my thermometer." No reliable work can be done without thermometers, and one should appreciate the fact that they are so cheap.

I really believe that the stooped shoulders of some of the farm women are the result of working pounds upon pounds of butter in the butter-bowl with a ladle. It is work that I do not want to again attempt. Every woman who is making any quantity of butter should have a lever butter-worker. It is not expensive to buy, but a handy man can make a better one than can be bought. For handling the butter when working and printing it, a flat spade, like the one shown, is much handier than a ladle.



Butter Worker.



Butter Print.



Cream Stirrer.

commendation shown her butter than in the extra money she receives.

The road to successful dairying is open to all, but it is a thoroughfare that is not likely to become overcrowded. There is too much hard work and personal supervision in it for the average person. You know it is the sin of idleness that makes a great many men poor. Wealth is usually the result of incessant diligence—at least, the man who has amassed thousands in the dairy business can truthfully say so.

It is the poorest economy to use dilapidated, out-of-date utensils. Not having a proper equipment results in lack of interest in one's work, more labor, extra loss, and very often, inferior goods. Good judgment is required in the purchase and care of dairy equipment. One should be prudent in buying expensive machinery. The test question should be, "Will it pay back its cost and good interest thereon during the time I may expect it to last?" If not, then do not buy it. Labor-saving devices now seem a necessity, and the farmer who wishes to keep pace with the times must have them. Many debate the advisability of buying a separator, looking at the cost as being beyond all the gain to be derived from investing such a sum of money. But a careful study of the problem would likely convince such people that a separator would be a wise outlay.

A Babcock tester is something which the shrewd dairy farmer cannot afford to be without. It is not a difficult machine to learn to use. A lesson from one understanding it and a little reading up on the subject of testing is all that is necessary. Weighing and testing the milk from each individual cow in your herd once a month, gives a very good idea of the relative value of the cows. The Babcock tester is the best revealer of leaks that I know of. Test the skim milk and buttermilk, and see if exhaustive work is being done. Butter-fat is too expensive to feed to stock. A four-bottle tester, complete, can be purchased for about \$6.00.

The other day I saw a farmer going out of

cream kept in one runs no chance of becoming sour, or too warm for churning, and the butter may always be firm.

Better to have less money in the bank and more labor-saving devices in the home. The following is a list of utensils and supplies, with approximate prices, for a well-equipped small farm dairy:

|                                             |        |
|---------------------------------------------|--------|
| No. 3 barrel churn                          | \$5 50 |
| Lever butter-worker                         | 3 00   |
| Butter spade                                | 15     |
| Good butter-print                           | 40     |
| Thermometer                                 | 15     |
| Large strainer dipper                       | 40     |
| Large dipper                                | 35     |
| Long-handled dairy brush                    | 40     |
| Small fiber brush                           | 5      |
| Five-gallon covered cream can               | 1 00   |
| Cream stirrer                               | 15     |
| Two large pails                             | 80     |
| Milk strainer                               | 50     |
| Two shallow tin pans                        | 20     |
| One thousand sheets printed parchment paper | 1 90   |
| Salt (100 lbs. best dairy)                  | 1 00   |
| Butter color                                | 25     |
| Cheese cloth                                | 10     |
| Scales                                      | 8 00   |
| Four-bottled Babcock tester (complete)      | 6 50   |
| Cream separator (850 lbs. capacity)         | 75 00  |

### Quality of Butter at Cream-gathering Creameries.

To the Editor "Farmer's Advocate":

Sir,—That the quality of the butter made in the cream-gathering creameries in Western Ontario is not so fine as it should be, I think is admitted by nearly all those immediately in touch with the trade. The question arises, first, can those interested in the production of the cream and the manufacturing of the butter afford to produce goods that are not finest? 2nd, What is the cause, and who is responsible for it?

In answer to the first, I would say they cannot. It costs just as much to manufacture one hundred pounds of second-class butter, as it does one hundred pounds of first-class butter. The labor, fuel, time, tear and wear of the machinery are the same in both cases. The reputation of the creamery depends upon the quality of the goods produced, and according to the reputation will be the patronage. The better the reputation the larger the patronage; the larger the patronage the greater the profit to the manufacturer.

How does inferior quality affect the patron? The patron's share is what is left after the price for manufacturing the butter and hauling the cream is deducted from the selling price of the butter. The price for manufacturing a pound of butter that has a rank old-cream flavor will be just the same as for a pound of fresh, clean-flavored butter, but the price that will be paid by the buyer will be from two to four cents less. It is easily seen how it affects the patron.

What is the cause of the butter not being of a fresh, clean-flavored quality? There are several, but the main causes are, thin sour cream and lack of proper facilities at the creameries for rapid cooling of cream. I have never been able to understand why farmers who are patronizing a creamery because they want the skim milk at home for their calves and pigs, will persist in sending tons of skim milk off their farms yearly by skimming a thin cream. For example, and for convenience, we will estimate that cream testing 100 by the oil test equals 22 per cent. by the Babcock test (which is nearly correct).

A sends 100 pounds of cream testing 180 oil test or 28.6 Babcock test; he sends 71.4 pounds of skim milk to the creamery. B sends 100 pounds of cream testing 60 oil test or 18.2 per cent. Babcock test; he sends 86.8 pounds of skim milk to the creamery, which means that in every 108 pounds of cream he sends off his farm he is sending 15.4 pounds of skim milk more than A is, and besides this, he is liable to spoil the quality of the butter at the creamery, because thin cream will sour much faster than will thick or rich cream. This fact may be just what some patrons want, as they think by having their cream sour they will get a better test by the oil test; if they do, which is doubtful, they will lose more than they will gain in the churning of the cream and the quality of the butter.

This is where the oil test is an injury to the butter industry. It is putting a premium on sour cream, while the Babcock test puts a premium on sweet cream, as sweet cream will always test higher than if it is allowed to get sour. More butter can be made per pound of fat from rich cream than from thin, because more moisture can be retained in the butter. Hence the necessity of having a thick cream and keeping it sweet. To keep it sweet, keep it cool. The cooler it is kept the longer it will remain sweet. There is no doubt that it would pay creamerymen well to get a cooler that would cool the cream rapidly while it is being delivered into the creamery, and in this way retard the development of acid in the cream after it is delivered at the