

# EGGS, BUTTER and POULTRY

For best results ship your live Poultry to us, also your Dressed Poultry, Fresh Dairy Butter and New Laid Eggs, Egg cases and poultry crates supplied.

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Established 1854

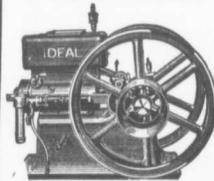
**The Wm. DAVIES Co. Ltd.**  
Toronto, Ont.  
**WANTED**

A First-Class Dairyman. Must be well acquainted with ice-cream making, pasteurization of milk and operating milk-condensing plant. Best of references required. Apply, stating experience and salary expected, to

**THE CRYSTAL DAIRY CO., LIMITED**  
NEW WESTMINSTER, B. C.

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1 1/2 to 50 H.P.  
Stationary Mounted and Traction



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Grain Grinders, Water Boxes, Steel Saw Frames, Pumps, Tanks, Etc.

**GOOLD, SHAPLEY & MUIR CO., LTD.**  
Branford Winnipeg Calgary

## FARM FOR SALE

I am offering my 300 acre farm for \$7,000 to effect a quick sale. It is a beautiful and fertile soil with my continuing farming longer. The soil is in a clay loam. 10 acres of which are under cultivation. This was originally two farms and there are two sets of farm buildings on the place. Climate and soil are excellently adapted to corn, clover, wheat, other grains and alfalfa. In an alfalfa growing contest, conducted by Farm and Dairy recently, a field on my farm secured a high placing. We are just 3 miles from the village of Keewau, where are churches, schools and railway connections. All \$7,000 this is the best snap I have offered. Iron and will respond to suitable party. None other need apply. J. C. TAYLOR - KEENE, ONT.

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Make More Money

Raise healthy, thrifty, vigorous calves at the lowest possible cost. You can do this by using

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CALFINE is a Pure, Wholesome, Nutritious meal for calves. It is made in Canada, and you have no duty to pay. Feeding directions sent on application.

Ask your dealer for Calfine. If he does not, handle it, send us a money order for \$1.75, and we will send 100 lbs. to any station in Ontario. We pay the freight.

**CANADIAN CEREAL AND MILLING CO., LIMITED**  
TORONTO, CANADA

## Creamery Department

Butter makers are invited to send contributions to this department, to ask questions on matters relating to butter making and to suggest suitable articles. Address letters to Creamery Department.

### Why Rich Cream

One of the advantages of the centrifugal cream separator over the gravity method of creaming milk is the opportunity it gives the farmer to skim a cream of any desired richness. A rich cream is a distinct advantage to both the farmer and the buyer and a standard separator will skim a rich cream as efficiently as it will skim a thin cream. The benefits a farmer will receive from skimming a rich cream are:

1. More skimmilk is retained at the farm.
  2. There is a smaller quantity of cream to cool.
  3. Fewer cans and utensils for transporting the cream are needed.
  4. There is less bulk to transport.
- The benefits of a rich cream to the cream buyer are:
1. Less vat capacity is needed for storing and ripening.
  2. Fuel is saved in heating, and ice in cooling the smaller bulk.
  3. The cream can be churned at a lower temperature, thus improve the texture of the butter, as well as save losses in the buttermilk.
  4. The maker can use more starter and thus better control the flavor of the butter.

### Why We Should use Scales

J. F. Singleton, Asst. Chief Dairy Instructor, E. Ontario  
The sample used in the Babcock test should be a definite weight in all cases; either nine grams or eighteen grams. This cannot be done with any pipette as the weight of cream delivered by a pipette from time to time or from sample to sample, will vary from several causes.

The most important of these causes is the variation in the richness of the cream. As the percentage of fat in cream increases, the specific gravity of the cream decreases. Cream may be in actual creamery weight occasionally does, test as low as 13 percent and as high as 45 percent. The lower the percentage of fat in the cream, the heavier the sample which will be delivered by any pipette; and the richer the cream, the lighter the sample which it will deliver. Manifestly, a pipette which will deliver the correct weight of a certain cream will not deliver the correct weight of a richer or poorer cream.

A second cause of inaccuracy in using a pipette is that it is difficult to thoroughly rinse it, after delivering the sample into the test bottle, with as small a quantity of water as may be added to the test bottle. Usually a variable quantity of cream, which should go into the test bottle, remains in the pipette. The difficulty of rinsing a pipette is largely overcome in using a nine-gram bottle, the nine c.c. pipette, and nine c.c. of water.

A third source of error in using a pipette may be the presence in the cream of gases due to souring or other fermentations, and the presence of air incorporated in pouring the sample. Of course, the presence of air and other gases in the sample will lessen the weight of cream delivered by a pipette. This source of error is likely to be greatest in rich cream, as the richer the cream the more will it tend to retain the air and gases. This factor is the greater in instances when the sample is not properly warmed before sampling.

There is a common impression among creamery men that our cream

will not test as highly as the same cream would have tested before it had become sour. This assertion has been used quite freely as an argument that it is in the patron's interests to keep his cream sweet, and thereby obtain a higher test. In order to ascertain what truth there is in this argument, I have tested several samples of sweet cream with both scales and pipette, and then allowed the samples to sour in tightly stoppered bottles. After they had become sour they were sampled with a pipette without being warmed, and when they were again sampled and sampled with both scales and pipette. Following are some of the results:

Sweet Cream	Sour Cream
Gold Cream	Warm Cream
Scales, Pipette, Pipette, Scales, Pipette	Scales, Pipette, Scales, Pipette
A . . . 41 .39	N0 test 41 .39
B . . . 35 .35	35.5 36.5 34
C . . . 33 .33	33 34 32 31.5
D . . . 24 .25	32 33 34 35 32.5
E . . . 36.5 35	34 36.5 35.5
F . . . 35 34	35 36 35
G . . . 35.5 34.5	34 36 35
H . . . 30 30	29.5 30 29.5

These figures are typical of the results obtained in several more such tests. Practically no difference, beyond a reasonable limit of error, is noticed between the tests of the same cream, sweet or sour, when the sour sample is warmed to 100 degrees before sampling. In some cases a slightly lower reading is noticed where the sample was taken without warming. It is quite possible that in special cases, say with very gassy cream, this error would show greater than in these figures, as these samples soured quite clean in flavor.

### Profitable Outside Work

Let a buttermaker induce a patron to raise a piece of fodder corn for fall feed, and it is safe to say that the farmer will think a great deal more of the buttermaker than he ever did. He will foster the buttermaker's advice, and he will also have cultivated a respect for the buttermaker's opinion, that he would not have acquired otherwise, and when the buttermaker talks better care of milk and cream, the patron is not going to turn him down as quickly as he would if he had no confidence in the buttermaker's ability and good judgment.

Some buttermakers will say that they have all they can do to talk quality to their patrons, and some may even claim that the amount of butterfat produced by their patrons does not concern them. This is, however, a serious mistake, and it is not hard to understand that if a patron is making money out of his milk, he will be much more interested and it will take less urging to induce him to produce cream of good quality than it will in dairying is merely considered a necessary drawback, and the buttermaker who can assist his patrons to produce butterfat more economically will find that the improvement in quality will come much easier.—Dairy Record.

### Objects of Pasteurization

Martin H. Meyer, Madison, Wis.  
Our first thought that comes to us when we think of pasteurizing cream for buttermaking is to free the cream as much as possible from undesirable flavors, odors and tastes. Our second thought, following the anticipated results of the first thought, is to produce a more uniform product of increased keeping quality.

Both of these thoughts are fully realized if all processes connected with pasteurization are carefully carried out. By pasteurization the cream is left practically free from bacterial growth, and, in fact, in the best condition for the addition of a pure lactic acid starter. It is only in pasteurized

cream that we can hope to realize the full effect of a good starter, also the full effect of a poor starter. Aeration of cream during pasteurization is one of the most important steps in pasteurization. Odors that pass off by agitation and other objectionable odors that, firstly, affect the cream, and, secondly, the flavor of the cream, first adding to the undesirable fermentation, and second, adding a purer cream by the elimination of various odors. We also hope to increase the keeping quality of butter. In addition to this, it tends to assure us a more stable market.

### Fifty Thousand Men Required

**Farm Laborers' Excursions - This Year's Wheat Crop will be the Largest in the History of Canada.**

The wheat crop of 1912 will be the greatest ever harvested in Manitoba, Saskatchewan and Alberta, thus requiring the farm laborers of the Empire to recruit and assist in harvesting the World's greatest bread basket. The Governments of the respective Provinces estimate that fifty thousand men will be required for this year's harvest. These will have to be principally recruited from Ontario, and the prosperity of Canada depends upon the success of the wheat crop of the Canadian Pacific, on which companies will fall practically the entire task of transporting the men to the West. The respective Governments are making special arrangements for this year's excursions from points in Ontario to Manitoba, Saskatchewan and Alberta, will be by rail and special trans operated, making the trip in about thirty hours and avoiding any change of cars or transfers. This will be a day shorter than any other route.

Low rates and conditions will be announced. Write to Geo. Campbell, our C.P.R. agent for full particulars.

### FOR SALE AND WANT ADVERTISING

**TWO CENTS A WORD, CASH WITH ORDER**  
FOR SALE - IRON PIPE, PULVERIZERS, BELTING, CHAINS, ETC.  
PETERBORO, W.P. SMITH, 215 PETERBORO ST., PETERBORO, ONT.  
WANTED Immediately, Assistant Bookkeeper, experienced, with experience. J. G. JACQUES, Wincheloan, Ont.

**FARM** Want to buy good farm, from one acre to 100 acres, state price and description, also address - M. A. W. WATSON, Chicago, Ill.

**WANTED**  
Second-Hand Mason Trowel Mixer. Best price - BROCKIEBANKS, LIMITED, Arthur, Ont.

**WANTED-CREAM**  
Highest Toronto prices paid for Cream delivered at an Express Office.

**WE PAY ALL CHARGES**  
FOR THE EXPORT OF CREAM  
PAY ACCOUNTY PORTWORTH  
ICE NOT ESSENTIAL  
Write for particulars.  
THE TORONTO CREAMERY CO., Ltd., Toronto

**WANTED AT ONCE**  
FIRST CLASS CHEESE MAKER  
Must apply in person and have good recommendations as to ability and character. Maker will be required to buy his factory, which is one of the best in the western Ontario. Apply to  
MARSHALL, RATHWELL, NAVAN, ONT.

**\$25 Buys a Sureskut Tills Machine**

either 3 inch or 4 inch size, one early and make your own cement tile for spring use. Capacity for 1000 sq. ft. of concrete. Price ranging from 300 to 520 per sq. ft. and up. Send for circular to  
WILLIAM JOY, Box 277, Niagara Falls, N.Y.

**Cheese D**  
Makers are invited to send contributions to this department, to ask questions on matters relating to cheese making and to suggest suitable articles. Address letters to the Cheese M

**Err on the**  
H. H. Dew  
Since the advertisement makers have increased the acidity of their cream, we must more accurately determine the acidity under the "r" method, and also determine acidity by means of directly is this the importance of making the acid test benefit to these very important making, viz. "acid test" is a result of a tests conducted obtained the following

Acidity of milk at f  
renneting, it  
185.0 2  
180.0 3  
175.0 4  
170.0 5  
165.0 6  
160.0 7  
155.0 8  
150.0 9  
145.0 10  
140.0 11  
135.0 12  
130.0 13  
125.0 14  
120.0 15  
115.0 16  
110.0 17  
105.0 18  
100.0 19  
95.0 20  
90.0 21  
85.0 22  
80.0 23  
75.0 24  
70.0 25  
65.0 26  
60.0 27  
55.0 28  
50.0 29  
45.0 30  
40.0 31  
35.0 32  
30.0 33  
25.0 34  
20.0 35  
15.0 36  
10.0 37  
5.0 38  
0.0 39  
0.0 40

The average of 100 samples showed an average of 1.000 lb. of "sweet sea butter" per 100 lb. of milk at f. The average of 100 samples showed an average of 1.000 lb. of "sweet sea butter" per 100 lb. of milk at f.

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The wheel that runs stand still. Strongest windmill made. Give steady power. Write for FREE book. List facts about our 1000 ft. diameter Ontario Windmill. PUBLISHED BY TORONTO, WINDMILL CO., WINDMILL CO., WINDMILL CO.

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