

BOOK REVIEW.

"CREAMERY BUTTERMAKING," BY MICHEL'S.

The rapid growth of the creamery industry in Canada makes a work by so well and favorably known a writer as John Michels a welcome addition to the literature of Canadian dairying.

The work is composed of two main parts, Buttermaking proper and the Creamery Industry in general. The first chapter deals with the composition of milk. The Babcock test is very fully discussed—one might almost say too much so for a work on buttermaking.

The author very properly calls attention to the fact that "Direct Heaters," i.e., heaters which use steam added directly to the milk, are very objectionable, as there is always some dirt in the steam which is likely to taint the milk.

The range of temperature suggested for ripening cream seems rather wide—60° to 80°. We should be inclined to restrict this range, yet each buttermaker must study this question and adopt such a temperature which gives best results in his particular circumstances. The general rule is, ripen the cream at as low a temperature as possible, consistent with a reasonable time and proper development of lactic acid. By breeding the right kind of bacteria cream may be ripened at a comparatively low temperature.

The principle of "selection" and "survival of the fittest" is applicable in bacteria as among higher orders of life.

Our own experience scarcely agrees with that of the author with reference to the relative keeping quality of butters made from ripened and unripened cream, more particularly with reference to cream pasteurized.

Adding ice to cream to cool it is strongly condemned by the author on p. 76, yet many creamerymen find this is about the only way they can cool their cream at times.

Too much washing of butter destroys its fine flavor by removing the delicate flavoring substances as explained on p. 103. This is a point wherein many buttermakers make a mistake. If no bad flavors be present in the butter, wash it as little as possible and salt lightly, to retain the delicate flavor for which people pay a high price.

A number of buyers complain with reference to irregularity in salting butter—or, rather, in the amount of salt retained in the finished butter. The salting question is very intelligently discussed on pages 104 to 106.

The marketing hints, pages 116 and 117, are valuable. Too many fail at this point to receive just reward for their labors. The author advises the addition of two per cent. to the fat delivered by cream patrons where there are both milk and cream delivered to a creamery. He estimates that this added two per cent. will about compensate for the extra losses of fat in skim milk and handling whole milk. The practice among Canadian creamerymen is to place both classes of patrons on the same basis.

The use of a clear, concise monthly statement to patrons, the pasteurization of by-products before returning them to the farm, and the more general adoption of pasteurization are all commended. He falls into the error of crediting Storch, of Copenhagen, Denmark, with having originated the system known as pasteurization. The credit belongs to Jensen, as nearly as we can find out.

He quotes Danish experiments to show that the cost of pasteurization of cream is about one-tenth of a cent per pound of butter. Experiments now in progress at the O. A. College indicate that this figure is too high, and a full report of this work will appear later.

The buttermaker is advised to have a maximum of not over 15 per cent. moisture for butter, in order to keep out of the clutches of the law.

Screening against flies, the use of a septic tank for sewage, a proper system of bookkeeping, and a chapter on "Creamery Mechanics," are commendable features. A glossary and index make a fitting close to an excellent book.

The book may be ordered through "The Farmer's Advocate" at a cost of \$1.50, postpaid. H. H. D.



The Thrifty Housewife's Friend

There's just one best way of cleaning up the home—the Dustless, Germless, Scientific way—the "Soclean" way. That explains why

Soclean THE DUSTLESS SWEEPING COMPOUND

appeals so forcibly to the particular women of Canada. There's no scrubbing with "Soclean"—no dust. Germs cannot live on any floor or fabric to which it is applied. "Soclean" is a thorough disinfectant—it's the only sweeping compound that effectually destroys moth eggs and makes the old carpets look like new.

"Soclean" is a brown powder sold by most grocers at 25c, 50c and \$1.00 the pail.
SOCLEAN LIMITED 201
King Street and Spadina Avenue - - Toronto



PEDLAR NESTABLE CORRUGATED GALVANIZED CULVERT Saves Farmers' Money Bettors Roads—Lowers Taxes



THESE culverts of mine are a great thing for the farming world. They not only make good roads possible, but they serve the farmer in many other ways. And they are so simply laid. They come nested like this:



This compactness saves freight and makes it easy to handle them. You put the sections together like this:



Then you clamp the flanges together like this:



And you've got a piping that will outlast anything of the kind there is. Better get the book and sample and study it.

G. H. Pedlar

JUST give me the chance to prove to you that my Culvert is so far ahead of any other in everything that makes a culvert good, that you won't be satisfied until your township authorities have read my book—sent free—and are also convinced of its superiority. You will benefit through better roads, lower taxes and prevention of washouts. My Culvert actually costs less than even the cheapest and most unreliable wooden culverts. Outlasts and excels wood in durability and reliability, and all other materials in economy, strength and genuine utility. Write for my Free Book and read the facts—then do what you can to have Pedlar Culvert used in your township.

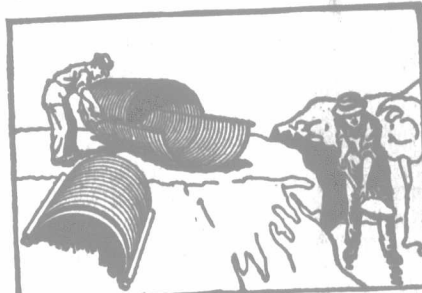
Pedlar Nestable Culvert also has

A Score of Uses On YOUR FARM

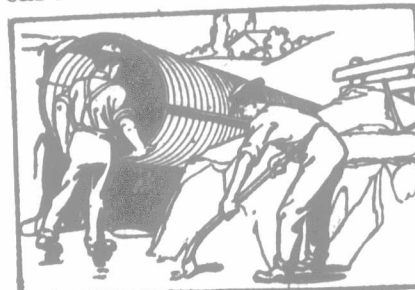
Makes the best possible well curbing or cistern lining, and keeps your water supply pure. Makes it easier to water your stock. Use Pedlar Culvert to drain any swampy spots or for irrigation ditches and under-drains. Or to instal a permanent sanitary sewage system. Or to pipe water from springs or windmill tanks. Get my book and read how it "fills the bill" and saves your money.

Ask For Free Book No. 20 And Sample Culvert

And give me your name and address. A postal will do.



Pedlar Culvert is put together and in place in one-third the time required for any other culvert. No special skill needed; no bolts, no rivets. Easiest to install, and by far the most economical and most durable.



410 ADDRESS OUR NEAREST WAREHOUSE.
HALIFAX 16 Prince St. ST. JOHN, N.B. 42-46 Prince William St.
QUEBEC 127 Rue du Port MONTREAL 321-3 Craig St.
OTTAWA 423 Sussex St. TORONTO 111-113 Bay St.
LONDON 86 King St. CHATHAM 200 King St. W.
PORT ARTHUR 45 Cumberland St. WINNIPEG 76 Lombard St.
REGINA 1901 Railway St. South CALGARY 1112 First St. W.
VANCOUVER 621 Powell St. VICTORIA 434 Kingston St.
WE WANT AGENTS IN SOME LOCALITIES. Write for details. Mention this paper.

When Writing Advertisers Mention this Paper.