

Cream Saving Machines

If you are still setting your milk and skimming by hand, you are losing anywhere from one-fourth to one-third of your cream. If you are using a separator, and it is not one of the best, you are still losing an amount of cream that would surprise you if you knew it. Every farm loss of milk that has been stopped this year should be stopped. Buy a Primrose cream separator and stop the cream loss.

Don't imagine that cream left in the skim milk will fatten pigs and calves faster. It has been proved scores of times that stock thrives as fast on warm separator skim milk, when a little meat or flax replaces the fat. Cream in the skim milk is dead-cream!

Primrose separators get that cream. We can prove to you that they get it all, except about one drop in each gallon.

Besides that, they are well-known as simple, easy-running, easily-cleaned machines that last and do the same good work year after year. Buy a Primrose—it will pay back its cost in cream you may now be losing. See the local dealers who handle these separators, or, write us for catalogues.



International Harvester Company of Canada, Ltd.

BRANCH HOUSES

WEST—Brandon, Man., Calgary, Alta., Edmonton, Alta., Estevan, Sask., Lethbridge, Alta., St. Albert, Alta., Regina, Sask., Saskatoon, Sask., Winnipeg, Man., Yorkton, Sask.

EAST—Hamilton, Ont., London, Ont., Montreal, Que., Ottawa, Ont., Quebec, Que., St. John, N. B.



This Engine Will Cost You Nothing

You need an engine—get a Gilson on our new easy payment plan, and it will pay for itself. You have the work for it to do this fall and winter. For those who are scarce and high priced—save yourself a lot of worry and enjoy that feeling of security, which is such a definite part of the staunch, reliable Gilson Engine.

Gilson Engines have long enjoyed an indisputable reputation for dependability, power, simplicity and economy. This year finds us with an even more attractive proposition for the discriminating buyer. Prices of everything you have been buying have been soaring, but by careful management we are able to furnish Gilson Engines at remarkably low prices. Write us interested in.

GILSON MFG. CO., LIMITED, 257 York St., Guelph, Ont.

This Clever Sheland Pony—FREE



BOYS! Here is the easiest proposition ever made to bright boys in Canada

WRITE TO-DAY and we will send you Free 10 copies of the finest Canadian Weekly Magazine you ever saw—dazzling covers and illustrations—good fiction and articles about Canadian people, customs and folklore—just the magazine every one has been talking about. Your friends and neighbors will be so much interested that you will have dozens of customers very quickly. You sell copies of Canada Weekly at 5c each and have the cash, all your own. Then you are sent Printing, Quills, Knife and Watch and State prize offers and your forms, and you will get them first. The Boy at \$10.00 in cash goes to the boy who does the best work against other fellows in the same six villages or towns.

Hurry up, boys, and be the first in your town or district to get the pony and earn a really weekly income of several dollars. Write to-day!

DEPT. 24 CANADA WEEKLY, 35 LOMBARD STREET, TORONTO

Advertising is something more than the selling of goods and buying of new science. It is something higher than "scientific distribution" of new science. It is a great agent of progress. In its broadest aspect, advertising is and always has been a powerful instrument of civilization. You will find our advertisers worthy of every confidence. When writing say—"I saw it in FARM AND DAIRY."

The Experimental Union

(Continued from Page 3.)

work of the Dominion Sugar Company, placed the need of his company for sugar beet seed at 450,000 lbs. This coming season they will grow 200 acres of seed, which will be two-fifths of the total required. Seed has been produced at 3 to 32 cts. a pound by this company. Perhaps the most interesting testimony was given by Prof. Zavitz, who estimated a yield of 1,500 lbs. of well cleaned mangel seed from one acre in 1917. As this seed now promises to reach one dollar a pound, the returns "looked good" to many of the audience. All who had had experience seemed agreed that Canada can grow as good seed as can be imported; or even better. The difficulties in the way are lack of labor and inexperience in the work.

Seed From New Ontario.

Northern grown seed potatoes are superior to those grown in old Ontario. Mr. Justus Miller attributed this superiority to climatic conditions, freedom from disease and their immaturity. Such diseases as leaf roll, mosaic and curly dwarf are found practically not at all in New Ontario, while they are serious in old Ontario. The value of immaturity is now generally recognized. Mr. Miller mentioned one grower who had made a regular practice of plowing the soil after having and planting potatoes. The crop of small, immature potatoes he used for seed, and last season dug 350 bushels of potatoes per acre. In the United States seed potatoes are grown all favor the immature seed from Maine. The natural source of Old Ontario's seed is 1,609 bags of northern grown seed that were purchased for the requirements of the Department of Agriculture. One

very Mr. A. Leitch, Lecturer in Farm Management at Guelph, who had the work in charge, explained the objects of the undertaking. Government and college farmers could not get systems of farm management, and the proper relationships of the various departments of the farm from the standpoint of profit. In every well settled township, however, are farms of every size and description. A careful analysis of these farm businesses will show just what systems are most profitable, and the weaknesses of other systems. Caledon, in Peel County, was the township selected for a survey in 1917, and 113 farms were covered. At the time of the Experimental Union meetings returns had been compiled for just 48 of these farms.

The most important deduction drawn by Mr. Leitch from the compilation was the relationship of the farmer's labor income to the size of his farm. The table published on this page gives the results. It will be noticed that the increase in the size of the area increased. Special attention was called to the greater area of crops handled by each man and each horse. The unproductive capital is not much greater on the large farm than the small one; that is, the money invested in machinery and buildings. "The man on the small farm is right up against it in Ontario," decided Mr. Leitch. "He has too small a business." Illustrating his point still further, the speaker stated that although this past year had been "the year when Caledon farmers made money if they ever did," fully one-third of the farmers, those on the smallest farms, had made a labor income of only \$352, or less than the amount of the same townships. "I'll guarantee," said he, "that for the

RELATION OF SIZE OF FARM TO LABOR INCOME.

During the past few months a survey has been conducted in Caledon Township, in Peel Co., Ont., on 113 farms. Returns from 48 farms, now complete and tabulated. The results, as presented by Mr. Leitch to the Experimental Union at Guelph, last week, as they affect farm income in relationship to acreage, are summarized in the following table:

Acres	Under 5	5-10	10-124	125-150	151-180	181-240
Number of Farms	16	12	12	13	10	20
Average Size	7.2	9.5	119	137	162	219
Average Capital	\$7,125	\$9,216	\$14,973	\$14,623	\$16,219	\$20,919
Productive Capital	\$4,317	\$6,185	\$8,422	\$9,254	\$10,229	\$10,951
Productive Capital per Acre	\$592	\$652	\$710	\$673	\$632	\$500
Crop acres per man	44	56	22	24	25	23
Crop acres per horse	54	44	24	24	25	23
Labor Income	\$392	\$484	\$1,061	\$1,073	\$1,099	\$1,928

thousand farmers, through the Experimental Union, will be given a small quantity of northern and southern grown seed for a comparative test. Small lots of northern seed will be distributed to 5,000 rural school children. All of the district representatives will conduct tests with New Brunswick, New Ontario and Old Ontario seed. On the provincial farms at Burwash and Ft. Williams about 40 acres of seed potatoes will be grown. Farmers in Northern Ontario will be assisted to some extent in getting inspected Maritime seed of the two standard varieties, Irish Cobbler and Green Mountain; the freight will be paid from New Brunswick. Farmers' Clubs in Old Ontario will be placed in touch with sources of seed that were inspected in the past summer and certified free from disease. Fields this year will be inspected with a view to recommending seed next fall. Such are the plans of the Department for the improvement of the Ontario seed potato supply.

"New Ontario is practically free from the physiologic diseases," remarked Prof. J. H. Bennett, who spoke briefly after Mr. Miller. "These diseases are transmitted through the seed. The only way to avoid them is to get seed in districts that are free from them." Even with disease free seed, however, precautions against ordinary diseases will have to be taken.

The Farm Survey. Ontario has had its first farm sur-

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past 25 years, on the average, this group of farmers have worked for nothing or less than nothing. The greatest need of Caledon is good stock. Mr. Leitch illustrated this by the following summary of survey results:

	Poor Crops.	Poor Crops.
Number of farms	11	12
Poor Stock.	10	11
Average Size	102	111
Labor Income	\$765	\$1,159

	Poor Crops.	Poor Crops.
Number of farms	12	12
Poor Stock.	12	12
Average size	126	118
Labor Income	\$465	\$1,341

Good crops, but poor stock, resulted in a material improvement in income, but not so great as did good stock. Stock, too, can be improved more quickly and more cheaply than crops. "And the crying need of almost all farmers is more capital," concluded Mr. Leitch.

Cooperation in Wool Marketing. Mr. R. W. Wade, who engineered the successful cooperative wool marketing scheme of the last year, outlined his work. Nine thousand application forms had been sent out, but up to April 23rd only 100,000 lbs. of wool had been listed. There was a general campaign was conducted in the agricultural press, and 100,000 lbs. more came in. All told, 270,000 lbs. were handled. Mr. Wade exhorted his hearers to not look to price alone, but to the cooperative principle. The Department materially cheapened the marketing expense last year, but in future the

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