

# FARM AND DAIRY & RURAL HOME

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Peterboro, Ont., Jan. 13, 1916



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## The Annual Poultry Number OF FARM AND DAIRY Will be Published February 3rd

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## Eastern Ontario Dairying on the Increase

A Satisfactory Season Reported at the E.O.D.A. Convention.]

THE attendance was rather smaller than usual at the 39th Annual Convention of the Eastern Ontario Dairy-men's Association held at Renfrew on Jan. 8 and 9. The usual list of good speakers were on hand and delivered addresses, but the prevalent epidemic of La Grippe prevented some speakers from attending, among these being Frank Hens, of London, and Mr. Leitch, of the O.A.C. The program was enjoyable and instructive throughout, though the speakers had some difficulty at times in making themselves heard owing to the noise created in a pool hall overhead, and which seemed to be patronized liberally at all times of the day.

President Sanderson, of Oxford Station, in delivering the annual presidential address, welcomed the delegates and congratulated them on the privilege of meeting in the creamery town of the province. "This year has been a record year in all branches of the dairy industry, but especially so in the cheese end of the business, and the results are convincing proof that the dairy industry is one of the greatest factors in production in the Dominion," said Mr. Sanderson. "Keener interest than ever before has been shown in everything that tends to increase and improve the business by all concerned in the industry. District dairy meetings, herd improvement work, the work of district representatives and the annual factory meetings have all received greater attention than ever before."

### Secretary's Report

Secretary T. A. Thompson, Almonte, reported that the year 1915 had been a banner year for the dairy industry of Eastern Ontario. The season had been favorable for production and the average selling price for both butter and cheese was the highest ever obtained. The dairymen of Eastern Ontario had shown their patriotism by sending 40,000 boxes of cheese to the Motherland in excess of that for the season of 1914. There was not the improvement in the quality of milk produced on the farm that there might have been, and makers should be more exacting in their acceptance of milk at the factory. The adulteration of milk by patrons still continues, and more drastic measures to deal with the situation are required.

### Financial Statement

The auditors' report showed the following:

Receipts:	
Fines from 1915	\$ 582.54
Balance from prosecutions	480.80
Convention Grants from Peterboro City and Council	300.00
Members' fees	116.00
Program advertising	2,250.00
Government grant	1,380.00
Interest	18.81
	<b>\$2,994.85</b>

Expenditures:	
Directors' expenses	\$ 349.05
Expenses of Executive	186.30
Advertising and Printing	411.09
Expenses of District Meetings	143.25
Publications	85.40
Postage, Stationery, etc.	66.77
Officers' salaries	600.00
Official Stenographer	90.00
Expenses for prosecutions	269.50
	<b>\$2,646.79</b>

The annual report of Chief Dairy Instructor Publow reflected the prosperous state of the dairy industry during the past year, but it also called attention to the great improvement which still remained to be made in Ontario dairying. During 1915, 647

cheese factories were in operation. A total of \$166,000 had been expended by 479 owners for upkeep and improvement of factory and equipment. From May 1st to November 1st a total of 527,000 pounds of cheese had been delivered to the factories and 85,000 pounds of cheese had been manufactured, an increase of 8,000,000 pounds over 1914. Owing to the fact that the cheese season is the longest longer than in any other year, the total output for the season would probably exceed that of 1914 by 15 per cent. The high price of cheese had brought many patrons back to the factories so that the total number of patrons of Eastern Ontario cheese factories was 39,697 for 1915, an increase of 1,100.

During the season 35 persons were found guilty of supplying either skimmed or watered milk to the factories, and fines ranging from \$10 to \$50 each were imposed.

### Creameries

Mr. Publow stated that during this season 38 creameries in Eastern Ontario, and that none had been established at Napoleon, Cornwall and Arnprior. All but two of these were reported as being in a satisfactory condition as regards the number of good storage facilities; 12 collected the cream three times a week and 26 twice a week. Sixteen are using scales for weighing the samples for testing with Babcock Test. From May 1st to October 31st, 2,800,000 pounds of butter were produced, a falling off in the total make of 300,000 pounds since last year. Why butter to the amount of 381,000 pounds had been manufactured in these factories. Some 4,830 patrons supplied the cream to the regular creameries during the season, about 100 less than in 1914. Considerable discussion took place concerning the regulations of the Railway Commissioners regarding the style of box to be used by cheese shippers next year. Both box makers and factory owners are opposing the regulation, claiming that they have a considerable stock of old boxes on hand which would prove an absolute loss should the regulation go into effect next spring. President Sanderson cited an instance in which the old style boxes had been refused at the railway station this fall, and held for several days in cold weather before being allowed to go forward. The feeling of the convention was that the time should be extended for the disposal of old stock, and the matter is being taken up with the Railway Commission.

Mr. Barr, of the Dairy Department, led the discussion regarding standard sizes for milk and cream cans. He stated there is no need for a standard can so far as cream is concerned, but as the size of milk cans is being regulated, these should be strictly regulated. Instances had come to light where cans holding almost a quart more than the standard size had been given out by milk dealers, with the result that they secure more milk for the same money. Where the trade in milk is heavy, there is no time to weigh milk and the size of the can should therefore be standardized.

### Officers for 1916

The following officers were elected for the ensuing year: President, J. N. Stone, Warkworth; First Vice-President, R. G. Leggrat, Newboro; Second Vice-President, T. Grath, Mount Chalmers; Secretary, T. A. Thompson, Almonte; Treasurer, J. R. Anderson, Mountain View; Auditor, M. Bird, Stirling; Executive Committee—Messrs. Glendinning, Fraser, Olmstead, McGrath, Sanderson, Leggrat and Ferguson.



# FARM AND DAIRY & RURAL HOME



We Welcome Practical Progressive Ideas.

Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.—Lord Chatham.

VOL. XXXV.

PETERBORO, ONT., JANUARY 13, 1916

No. 2

## A Nineteen-Cow Dairy on a Seventy-five Acre Farm

The Farming Methods of a Young Dundas County Dairyman who is Making Good.—By F. E. Ellis.

ONE of the many dairy farms in the splendid district around Chesterville, Ont., that is making a nice income for its owner and operator, and also adding to the reputation of the district as a milk producing centre, is that of Roy Kendrick. Mr. Kendrick is a young man. I doubt if he has yet seen 30. Yet he was mentioned to me as one of a half-dozen men of his township who is making an outstanding success as a dairy farmer. I was told that this man Kendrick had started only six years before with little capital and on a rented farm. All of his income has not been made from his own small farm of 75 acres, I was told, but the most of it has. His, so the story ran, was one of the most intensively worked dairy farms of the entire county. I decided to investigate for myself.

The Kendrick farm I found to be all that was claimed for it and more. The 75 acres support a herd of 19 milch cows, three head of young stock, a herd bull, and five horses. Of course, the land is good. It is rich, clay loam, every foot of it workable, and not a stone on the place. Even under these conditions, however, the showing is an unusual one. I asked the proprietor how he did it. He assured me that he had nothing new to add to agricultural lore, that he had followed the lead of all other really successful dairymen. He has treated the land well, raised good crops, and fed them to good cows. Along with the practice of these principles of good farming, young Kendrick has combined good business management. His success is merely another proof of the old truth that there is no royal road to riches, if the dollars are all earned honestly. My talk with Mr. Kendrick gave me a very fair idea of the methods he had used. And they are capable of wide application.

### 1. Growing the Crops

The 75 acres in the Kendrick farm cannot be said to produce all the feed for the stock I have enumerated. All of the roughage is grown on the home farm, and enough grain for the horses and hens, but \$400 worth of concentrates is purchased each year for the dairy herd. These concentrates, Mr. Kendrick believes, can be purchased more cheaply than coarse grains to take their place can be grown. His main effort is devoted to the production of roughage in great quantities.

The farm is laid out in big square fields which



The Dairy Herd is a Mixture of Pure Bred and Grade Holsteins.

facilitate the following of a systematic rotation, which covers four years. Eighteen acres are devoted to clover crop, of which all but one and one-half acres is in corn. The remainder is in sugar beets and turnips. Eighteen acres is in grain seeded down, but just 10 acres of the grain is threshed. The remaining acres are seeded to oats and peas and fed green. The other half of the farm is divided between hay and pasture.

When Mr. Kendrick came on the farm he found it badly infested with quack grass. He is not entirely rid of the pest yet, as it thrives exceedingly on his rich, clay loam, but it is no longer a menace. Occasionally Mr. Kendrick has fol-



The Kendrick Farm is One of the Best Improved in the Chesterville District.

lowed the practice of following corn two years in succession on a badly infested piece of ground. Constant cultivation keeps the quack out of sight the first year. The second year the corn is planted between the two rows of the year previous. This method has been found effectual in ridding the worst infested fields of quack. Another method followed has been to plow deep the first of June when it is dry, then plant to corn and work the corn thoroughly. The variety of corn preferred is the White Cap Yellow Dent.

One of the problems on this farm has been to provide pasture enough for all of the stock, and supplementary feeding has been practised from the first. The eight acres of green feed

goes a long way towards supplementing the pasture. One year buckwheat was tried, one land being seeded each week from June 10 to July 17. A wonderful quantity of green feed was got from the buckwheat, it excelling peas as a supplement to dry pastures. Mr. Kendrick, however, regards ensilage as superior to either, and this year when the cows went to pasture he had 10 feet left in the bottom of a 14-foot silo. With the excellent moisture conditions that have prevailed, this would almost carry him through.

### 2. Winter Feeding

Mr. Kendrick has an eye for good cows. His 19 head are a mixture of grade and pure-bred Holsteins, big cows all, and voracious feeders. Incidentally they pay for what they eat. For such cows the main requirement is an abundance of ensilage. There are two silos in this 75-acre farm, one of them 30 feet in diameter and 22 feet high and another 14 by 18 feet. Both of these silos were filled last fall, then refilled, and even then three acres had to be fed from the stook. It is on this corn crop that the main dependence is placed for winter feeding. Last year when hay was exceedingly scarce, the stock was wintered through on ensilage and oats and peas cut green and cured for hay. The cows milked well on this feed.

As I stated before, the grain bill for the dairy herd amounts to \$400 a year. The milch cows receive one pound of meal to every four pounds of milk. The mixture favored by Mr. Kendrick is as follows: Cottonseed meal, 25 pounds; oil cake meal, 25 pounds; shorts, 100 pounds; bran, 100 pounds; and oat chop, 100 pounds. Even the last item in the mixture is purchased from off the farm. Winter dairying is the specialty; a good price is secured for winter milk, and winter feeding on purchased concentrates has always been profitable. Probably too, the fertility of the Kendrick farm is due in no small measure to the fertilizing value of the concentrates fed.

### 3. Marketing the Milk

All of the milk is shipped to milk dealers in Montreal. Mr. Kendrick's contract calls for seven eighty-pound cans a day the year round. To meet this contract, however, he buys considerable milk from neighbors who would otherwise ship to the cheese factory, and the profits made on this purchased milk is the one source of income outside of the farm itself. At the time

of my visit, Mr. Kendrick was shipping 30 to 22 cans of milk daily.

It will be seen that the methods practised on this Dundas county dairy farm are neither unusual or startling. They are sure. They have proved so in the case of Mr. Kendrick. It is as an inspiration to other young men like him, who are wondering what there is in the farm, that I give the personal side of this story. It is just six years ago last spring since Mr. Kendrick moved on to the farm he now owns. He had about \$960 in effects, but no cash, and he came

on to the farm as tenant, not as owner. He also came as a single man, but he no sooner had the seed in than he hastened to take to himself a wife. At the end of one year as a tenant, he purchased the farm, paying nothing down. That he has prospered is shown by his own statement that the profits of another year or two will make him complete owner of 75 acres of the richest land in Dundas county. In fact, the place would have been paid for already had so much not been invested in improvements. The improvements however, are returning a larger percentage of

profit than the mortgage cost. Among other items were eight head of registered Holsteins and a registered Clyde mare. The farm home is a brick house of modern construction, setting well back from the road, and made doubly attractive by the trees that surround it. The only feeling of regret that I had on leaving the Kendrick farm was the knowledge that Ontario may soon lose Mr. Kendrick. He has done well in Dundas county, and is now looking for a wider field. He now, for all I know, he may be in the dairy business in Calgary.

# Just Why Dairy Farmers are Interested in Cow Testing

A Graphic Representation of its Advantages by Chas. F. Whitley, Ottawa.

THE upper chart herewith gives

as a diagram the comparative yield in boxes of butter of three types of cows. The first, selected, both fed and bred for production, is a five-year-old grade that gave 11,630 pounds of milk, 450 pounds of butter worth \$135; with feed cost of \$85 her clear profit is \$80. Such cows and better ones have been discovered through cow-testing. Her owner was not content with an ordinary type, an average cow, for satisfaction of that kind effectually kills and buries all progress, so he selected, using records as a rational basis. The second is the average yield of 8,200 cows as collected by our recorders at 13 dairy record centres in Ontario, Quebec, and Prince Edward Island, namely, 206 pounds of butter worth \$61.80, feed cost \$35; profit, \$26.80. This is probably much better than the average yield of all cows in the Dominion. The third is the type unmasked by cow-testing, desired by no one. In this case it is not just one lone individual cow, but is the average yield of a herd of ten cows in Ontario, 80 pounds of butter worth \$24, and the owner estimated it cost \$30 to feed each cow.

Does this comparison not convey something to you? Is it not worth a very great deal to you to look carefully into this matter of cow-testing, to think in larger figures, to determine that your herd shall speedily be one of selected individuals? The best in everything is yet ahead of us; the best cow is yet to be recorded, helped on by the best in methods, the best in crops, the best in dairy farming generally, so that our dairy herds, uniformly excellent, may be of the finest type possible, always improving. Join this society of unlimited possibilities; become a member to-day, start recording at once.

### The Investment in Dairying

Cow-testing has always sounded one dominant note, the selection, on their records, of the best cows. The recommendation is timely in view of the claim that there is an investment by dairymen of from \$500 to \$1,000 or more for every gallon of milk produced per day. Thus the efficiency of every cow is no slight consideration in our huge business of milk manufacture. For every hundred dollars invested in the manufacturing industries of Canada there is reported to be a gross return of ninety-three dollars; in agriculture there appears to be a gross return of seven-

teen dollars. Can we do better? Dairy records, through giving what is absolutely essential to every manufacturer, a knowledge of cost of production, have paved for many men the royal road to larger returns; the successful business dairymen to-day make each cow their own stand her trial by the impartial jury of scales, test, and record form. The sentence is soon passed, and several reformatory inmates now pay good dividends.

Another evidence of cow-testing value is found in the largely enhanced profits and increased yields of milk and fat obtained by those well-informed men who persevere in acquiring knowledge charted in their own stables on the record form. The unit, whether cow or acre, is being studied and developed as never before, because

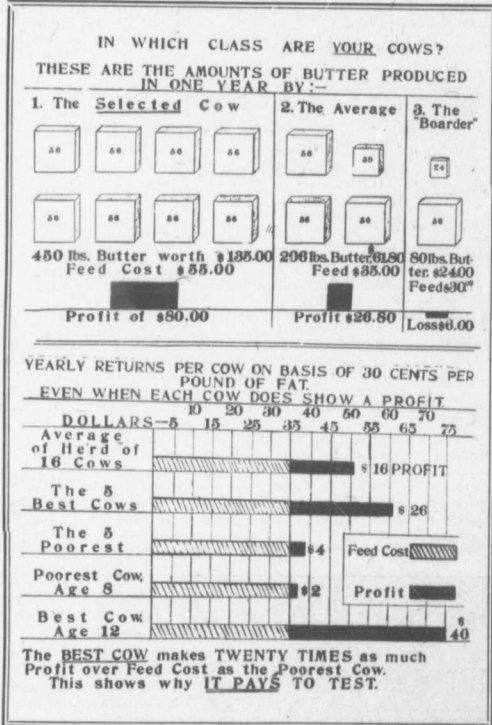
of dairy records. Cow-testing is not hedged about by any trade secrets or any copyright formula. No red tape binds one in making his own simple totals. There is no selfish or sinister competition; but on the contrary there is the greatness of true cooperation in securing results that count very materially in building a better home-farm, supporting loyally the near-by factory, advertising the locality as a good dairy section, while adding in no small measure to that needed efficiency, which makes true prosperity for the Empire.

### In a Herd of 16 Cows

The lower chart indicates graphically the yearly returns from a herd of 16 cows where some selection has been practised and all cows put on a paying basis. With an average yield of 4,850 pounds of milk, 3.5 test, and 170 pounds of fat, with feed valued at \$35 per cow, there is clear average profit of \$16. But it will be seen that the five best cows yielding 204 pounds of fat make \$96 profit as against the \$4 average from the five poorest. Then on comparing the worth of the poorest cow, age 8, giving only 122 pounds of fat, with the 12-year-old giving 247 pounds of fat, we see clearly that it is not a question of one cow returning just twice as much profit because she gives twice as much fat, but the profit is actually 20 times as great.

May I venture to submit that clearer proof could not be wanted of the practical utility of dairy records.

What additional sum is within our reach as direct gain from cow-testing? Considerable light is shed by the fact that in one creamery in Prince Edward Island over thirty patrons, members of our cow-testing association there, took in double the amount of money per cow last year than they did four years ago, while the other patrons show little or no increase. So it is in many other districts. There is nothing to prevent any factory of 500 cows, if its patrons take up cow-testing in earnest, handling extra money annually to the extent of \$8,000. We have men by the score in Ontario and Quebec now obtaining 1,000 and 1,500 pounds of milk more per cow than two years ago. Scattered all over, we find instances like this, the man who has been cow testing now milks eight cows and gets \$400 or \$430 more cash than the man who does not weigh and sample, but who



contentedly or discontentedly (which?) fusses round with class-unselected milkers.

This grand old province of Ontario could be getting at least another \$12,000,000 income from the cows now milking, and when cow testing is still better appreciated, she will obtain that sum.

Canada expects every cow to do her duty; "what we have," in the way of good cows, "we'll hold"; what we have not, let us see that we get, and we'll get them because cow testing clearly points the true path of progress.

### Good Stable Arrangement

Gordon Harris, Middlesex Co., Ont.

**O**WING to the scarcity of efficient farm help and also to lessen the cost of winter milk production, we have found it necessary to have the stable equipped as conveniently as possible. In our stable the cows stand in two rows, running lengthwise of the stable, both rows being fed from the same alley, which I think reduces the work of feeding a great deal. We have a silo at each end of the feed alley, the silage being thrown directly from silo into a feed truck and from this it is pitched into the mangers.

The different grains are mixed in the granary overhead, coming down a chute into another feed truck, which can be wheeled to wherever required, thus doing this part of the feeding with as few unnecessary steps as possible. The cattle are watered from individual basins, which are supplied from a tank in the barn, the water being pumped to this with a small gasoline engine.

The stable being reasonably wide gives ample room behind each row of cows to drive through with the manure spreader, and in this way the manure is hauled directly to the field and spread with very little extra labor.

By using these few conveniences, an abundance of light, good ventilation, and punctuality, winter dairying becomes more of a pleasure than a drudge.

### The Value of Grain Screenings

J. R. Dymond, Seed Laboratory, Ottawa

**D**URING the fall and winter, there will be cleaned out of western-grown grain at the terminal elevators at Fort William and Port Arthur, material amounting to probably 100,000 tons. These cleanings consist of from 40 to 60 per cent. of small and shrunken kernels of wheat, oats, barley and flax. The rest is made up of 25 or 30 kinds of western weed seeds. Wild buckwheat, lamb's quarters, and wild oats occur in largest numbers; among the mustards are wild mustard, hare's ear mustard, ball mustard, stinkweed, tumbling mustard, worm-seed mustard, western and round-seeded false flax, common peppergrass, and the wallflowers. Some of these are recognized as among our most troublesome weeds.

The elevators reclaim as much of the domestic grain as possible to mix with their feed grades. The larger proportion of the remainder is shipped to the United States, but much of it finds its way into Eastern Canada, where it is mixed with grain and ground up as chop feed.



Buildings on a 50-Acre Dairy Farm That Produces an Annual Revenue of Well Over \$2,000.

There are few more productive farms in Ontario than that of Mr. Parnham Allison, in the rich, level district around Chesterville, Ont. Notice how neat are the buildings; both residence and outbuildings are kept well painted. The latest improvement on the farm is a system of tile drainage, the good results from which Mr. Allison described in Farm and Dairy some weeks ago.

—Photo by an editor of Farm and Dairy.

Much of the material constituting the screenings is of excellent feeding value, as shown by the results of feeding experiments at the Central Experimental Farm last winter, and much of it could be used to advantage here. We should not, however, encourage the feeding of screenings in Eastern Canada if it is going to mean the spread of the western weeds whose seeds are contained in it.

### Danger of Spreading Weeds

The danger of spreading weeds through the use of feeding stuffs containing vital weed seeds is not sufficiently realized. A farmer in Northern Alberta who has kept his farm free of noxious weeds and who is making money growing registered seed, told me that he could not get a neighbor to bring his team on to his farm in the spring to help with his seeding, because if he did, when harvest came he would find small patches of wild oats and ball mustard in his field wherever the horses' droppings fell.

An Ontario farmer who wanted to take up the Canadian Seed Growers' Association work got registered seed, put it in his best field and gave it a dressing of manure, which he hauled from a livery stable where western oats had been fed. The result was he spoiled his registered seed, and will have his field polluted with wild oats for several years. Last winter your

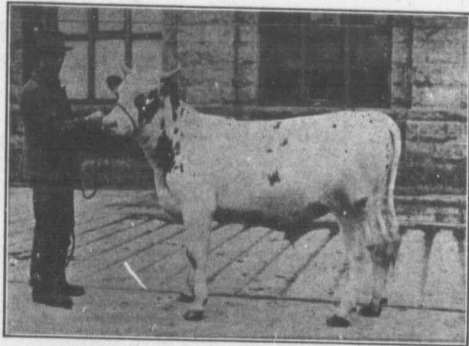
contain 120 weed seeds per ounce, 95 of them being wild oats. Some of them had been crushed, but we picked 100 of them out of the sample just as they came, and planted them in soil—12 produced plants.

In purchasing elevator screenings for feed, it is essential to buy only reclaimed screenings from which all the small seeds have been removed. This not only improves the palatability of the feed, but makes it possible to destroy the vitality of all of the remaining weed seeds by grinding in an ordinary grinder.

The Government is now operating three large interior elevators situated at Calgary, Moose Jaw, and Saskatoon, and a terminal elevator at Port Arthur. All the screenings accumulating at these four elevators this winter will be reclaimed to remove the whole kernels of grain and the fine weed seeds. The remainder, consisting of broken grain and the larger weed seeds, chiefly wild oats and wild buckwheat, will be pulverized and sold in car lots as chop feed. This material is of excellent feeding value, and should be available to eastern feeders at moderate prices. This feed is manufactured and sold by the Board of Grain Commissioners. For samples and prices, inquiries should be addressed to Mr. C. E. Austin, Superintendent of Government Elevators at Fort William. In time it is hoped that all of the material of good feeding value cleaned from western grain will be fed in Canada in such a way as to minimize the danger of spreading noxious weeds.

Samples that are suspected of containing vital weed seeds will be examined and reported on free of charge by the Seed Branch, Ottawa.

At the North Dakota Experiment Station, a group of sixteen pigs pasturing on a field of 2 1/4 acres, Minnesota 13 corn, from September 16 to October 21, a period of five weeks, made an average gain of 57 pounds each, or a gain of 1.61 pounds each per day. The weather conditions during that period were not exceptionally favorable to hogging down corn, as there were at least 10 or 12 wet, cold days. On October 13, two of the pigs showed a little stiffness, and were removed from the field. The total gain of the lot was 818 pounds, which at seven cents a pound would be worth \$57.26. In addition to the corn this group of pigs received 178.5 pounds shorts, 108.5 pounds tankage, and 210 pounds barley. This feed would be worth \$6.55, leaving \$51.01 as the value received for the corn by hogging down. This gives a value of \$30.40 per acre for the corn without the expense of harvesting it, even though it was a very poor crop. Disposing of the corn crop in this way may be advisable at times in South-western Ontario.



One of a Strong Class at the Guelph Winter Fair.

This youngster was one of the competitors in the new class at Guelph for Ayrshire Junior Bull calves. That this excellent individual stood only fourth in his class is the best proof possible of the quality of the entries. He is Heaster King of Springfield, owned by Jas. B. Ross, Mead ovale, Ont.

—Photo by an editor of Farm and Dairy.

chairman, Mr. Newman, brought into the Seed Laboratory a sample of rolled oats that a farmers' club had bought. Analysis showed it to

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**When You Write—Mention Farm and Dairy**

## Commercial Work Maintains Interest in the Burford Grange

The Story of This Successful Organization as Told by Mr. Peter Porter

COMMERCIAL activity and educational work are combined to good advantage by the members of the Burford Grange. When the Brant Co., last spring a Farm and Dairy representative, hearing of the good work being done by this organization, called on Peter Porter, Overseer, and one of the men whose tenacity and fighting qualities held the Grange together when internal dissension started by a small group of interested men, threatened to wreck it. In the interview that we had Mr. Porter glossed over these difficulties, but in telling of their success we can do better than relate the story, just as Mr. Porter told it to us. Mr. Porter said:

"We were organized as the Burford Grange, acting under a Dominion charter, in 1911. We worked in an educational line for two years, doing nothing whatever in a commercial way. Interest fell off, and the Grange became almost extinct. Then one of our members, Mr. Chas. Mott, attended a convention held in Toronto. Our new organization had been a success and we attribute it to the commercial enterprises of the organization.

70 Per Cent. Saved on Mangel Seed  
"We first started buying mangel feeds and seeds, such as clover and mangel seed. In some instances we saved 70 per cent. by cooperative purchasing. We got in touch with the Brant Truck Gardeners' Association and sent direct to Germany, getting a first class line of mangel seed laid down to the members at 11c a pound. We had never touched such seed before short of 35c. This a co-operation brought enthusiasm and at once enlarged the membership to 30. We then saw a chance to get in on sugar and bought

well over two tons. This, too, added to our membership. Then we took up binder twine. At the end of our first year we found ourselves with 60 paid-up members, a growth from seven to 60 inside of 12 months.

"Then our difficulties began. Our dues had been held back on account of there being two organizations, the United Farmers and the Dominion Grange. We did not know to which of these organizations to send the money. After receiving sufficient information to prove to us that the only way of holding our charter was to send our fees to the Dominion Grange, we found that our decision had aroused some difference of opinion amongst the members and those fees have not been paid yet. We forwarded our next fees, however, to the Grange.

Business With United Farmers  
"The question of amalgamating with the United Farmers then came up, and we took one share in the company. Before this, however, a re-election of officers had gotten the chief trouble maker out of the way and made this move possible. We then undertook to place as much business as we could through the United Farmers' Company, buying our mangel, seasoned meal, middlings, brewers' grains, sugar, seed of clover, timothy, mangel, turnip and corn binder twine, implements, buggies and democrats.

"At this present time (early in May), acting four months under the present staff of officers, we have distributed \$4,073 worth of goods. We have given satisfaction to everyone, and our membership is now past the 60 mark, which had dropped away about half, during the time mentioned. We have made this progress in spite of the dirtiest opposition that could be offered by certain men in the community.

"In 1914 we did a business of \$3,000, and saved roughly nearly 25 per cent. or \$750 to our members. We got two cents a pound off on binder twine, 35 per cent. to 40 per cent. off on sugar, and so on all along the line.

We have found it a great advantage to be affiliated with the United Farmers' Company. Through this company prices are coming to us instead of our officers having to hunt prices. Previously this had always meant considerable work and time to the very few who were willing to give their time to hunt bargains for others. The United Farmers have found that we can do business to good advantage with us, The Burford Grange, as we are a chartered organization, and, therefore safe to do business with. Because of our charter we are not placed under obligation of forwarding payment before receiving goods.

Retail Dealers Encouraged  
"We, as an organization in a rural district, believe that it is necessary to have some retail dealers in our community and we have not attempted to entirely eliminate the middleman. We encourage our members to leave in our own community as much money as they can by dealing with local retailers. One local dealer has informed one of our officers that his business has greatly increased right in the neighbourhood of our organization.

"We have not neglected educational work. We have tried to obtain one speaker for less than another semi-monthly meeting. Some of these speakers have been specialists on cooperation. For instance, we have had Messrs. King and Hurley of Brant-

ford, and also Mr. W. C. Good. We pay the expenses of these men in coming to our meetings."

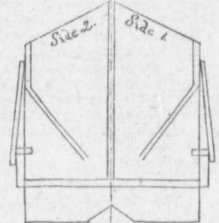
"The outstanding feature of the work of the Burford Grange is the successful combination of commercial and educational endeavor. The Burford Grange is performing a greater service for the community because of its commercial work in affiliation with the United Farmers' Cooperative Co., Limited, than it could possibly perform as a purely educational organization.



## A Self-Feeding Hopper

A SUBSCRIBER has requested us to publish a diagram of a self-feeding hopper for poultry. There are many types in use. The diagram that we are publishing here with is of a hopper used in the Poultry Department at the Ontario Agricultural College.

One side of the hopper may be used for chopped feed and the other for whole grain. The diagram given is an end view. Along the sides there are slats. The roof opens out to ad-



mit of the hopper being filled. This hopper is particularly recommended where the colony plan of summering chickens or laying fowl is followed.

## Color of Flesh

When there is demand for birds with yellow flesh a liberal amount of corn may be fed. Where the market demands white flesh less corn should be used.

To produce yellow flesh a grain mixture composed of five parts ground corn, one part ground oats, with the coarser hulls sifted out, and one pound of meat meal, makes an excellent ration. Such a ration may be fed without sour milk, but it is preferable to feed the latter with it.

For white flesh, a ration composed of two parts ground corn, two parts ground buckwheat, and two parts ground oats with hulls sifted out will give good results. Oats alone may be used but they should always be ground fine and the coarser hulls sifted out so as not to make the ration too bulky, and this should also be mixed with sour skim milk or butter milk. The acid in the milk aids digestion.

Grooming a bird for the show room is of vital importance if one expects to win, and what is the use of showing if you don't? Coop the birds in exhibition coops at least two weeks before a show and handle them often, pose them and train them to strike a proper attitude. A bird can be quickly tamed by lowering it to become hungry and then feeding with tempting feed in the way of small pieces of meat and table scraps.

# Standardization of Dairy Products the Main Theme for Discussion

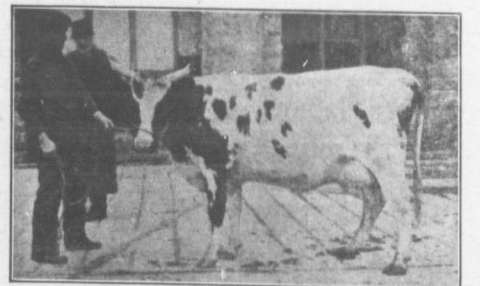
## Marketing Problems Receive Much Consideration at the E. O. D. A. Convention at Renfrew.

THE grading of cream and butter is the outstanding need of the dairying industry of Ontario at the present time. This idea took a firm hold with those who attended the Eastern Ontario Dairymen's Association Convention held in Renfrew on January 5 and 6. J. A. Ruddick, Dominion Dairy Commissioner, Geo. H. Barr, Chief of the Dairy Department, Ottawa, and Frank Hens, Chief Dairy Instructor for Western Ontario, each devoted their addresses to a discussion of this subject. Mr. Ruddick, in a letter to Secretary Thompson, emphasizing the point that the changed conditions of the last few years had made the grading of dairy products more imperative. In the days when the chief interests center in the export trade, the exporters had standards of their own, but now that two-thirds of our dairy products are consumed at home, it becomes necessary to take up the question of national standards of

cream, and in Manitoba 61 per cent. As a result of the grading of cream, Alberta and Saskatchewan bid fair to be soon able to supplant the New Zealand product in the Vancouver market, one Calgary buyer having given it as his opinion that with the same improvement in the quality of the butter this year, it would be bought in preference to the New Zealand product. Quebec was also cited as an example of a province which had drastic legislation regarding the grading of cream. The result of all this is now becoming evident. "When butter dealers in Toronto, Montreal, Winnipeg, Calgary or Vancouver want a car of the finest creamery butter," said Mr. Barr, "do they seek it in Ontario? I doubt it. They are more likely to seek it in Quebec, Saskatchewan, or Alberta." Mr. Frank Hens also strongly advocated the grading of cream and butter, and suggested that as an educational feature one or two factories

in that district from this source alone would be \$90,000, or taking Mr. Publow's figures that 90 per cent. arrived in the condition, the loss would be \$270,000, and there was also a further loss in the quality of the cheese.

The Rennet Question  
Very emphatic was Prof. Dean's utterance regarding the supply of rennet. The war, as interfered with the supply which formerly came, for the most part, from Germany. He read letters from several firms who deal in rennet, showing that the supply was in a very precarious condition. Russia has a surplus for export, but shipments can only be made through Sweden and Arcangel, and the trade is further hampered by laws prohibiting the export of rennet at certain times. Our present supply is drawn largely from Canada and the United States and is manufactured almost altogether south of the border. If the United States were to prohibit the export of this rennet, the result would be disastrous to the Canadian cheese industry. Mr. Publow also mentioned the fact that the higher price of rennet had many makers to economize too much in its use, and to use impure grades, with the result of lower cheese yields. This false economy was strongly condemned by Mr. Publow.



His First Winner: Good Encouragement to Come Again.

This is Susana Evergreen, first in the class for Ayrshire heifers in the Guelph Dairy Test with the excellent production of 147.6 lbs. milk testing 4.3 per cent. fat. The exhibitors of the heifer, E. B. Palmer & Son, Norwich, Ont., were at Guelph for the first time last December. Such an initial success should encourage them to come again. The junior member of the firm may be seen holding the cow.

should be set apart and a rigid system of grading conducted. "Some creamery men are anxious to grade," said Mr. Hens, "and they are that but anxious to pay according to quality, provided it can be shown by practical demonstration that it will not only pay the creamery men, but the producers as well."

### How Milk Cooling Pays

Mr. G. C. Publow, Chief Dairy Instructor for Eastern Ontario, called attention to the great loss which farmers were sustaining by failing to properly cool their milk before sending it to the factories. The instructors had taken this matter up during the season, and had proved by practical demonstrations on the farms that by the use of ice or cold water, whereby the milk was delivered to the factory nine degrees cooler than when such methods were not used, the increase in the cheese yield was one-third of a pound per hundred pounds of milk, which, with cheese at 15 cents a pound, means an increase of five cents per hundred-weight of milk. The question of over-ripeness caused by not properly cooling the milk was further discussed by Prof. Dean, who had found a loss of 6.34 pounds of cheese per thousand pounds of milk due to over-ripeness. Assuming that one-tenth of the milk arriving at the factories in Eastern Ontario was in an over-ripe condition, the loss to the farmers

Possibilities  
"Cow Testing Possibilities" was dealt with by Chas. F. Whitley, of the Dairy Staff, Ottawa, who strongly recommended farmers to get away from average milk yields of all the cows in the herd and to pay more attention to individual performance of each cow. The culling out of undesirable and the building up of a high producing herd could one be accomplished to the best advantage by the use of the test. Mr. Whitley also championed the use of pure-bred sires, stating that the balance in favor of the good dairy sire was from 1,500 to 3,000 pounds of milk per annum in one generation. The results of selection and good breeding were shown in one case where 50 cows gave a profit above feed cost of only \$615, while at the next factory a herd of 43 cows gave a profit of \$1,840.

Wilfred Sadler, B.S.A., of Macdonald College, in discussing new possibilities in dairying, outlined the method of making Devonshire clotted cream. This table clotted cream is now almost unknown in Canada, but Mr. Sadler believes that once the public, and especially the wealthier classes, get a taste of it, the demand will grow rapidly. He also advocated the making of the small cheese of about one pound in weight. Made in this size, cheese kept better after being purchased by the consumer, as the smaller surface exposed to the air prevented evaporative loss to a large extent. Details of the making of both these products were given in detail, and will be published in future issues.

Prof. Dean drew attention to the possibility that, since the war has caused a stiff demand and good prices for cheese this season, the competition of hostilities might be accompanied by a fall in prices and a readjustment of market conditions. It would be well then for us to look well into the future and provide for the time when some production might have to be maintained by extensive advertising in the place of the present lack of demand.  
Care and the Dairy Cow  
Mr. Henry Glendinning of Manilla, Ont., who had the unique distinction of being the only practical farmer to give an address before the convention, outlined the methods by which he has achieved such marked success as a dairy farmer. "Many good dairy cows are unregistered," said Mr. Glendinning, "and the well-known system of breeding in one line and

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common coal oil, and gives more than twice as much light as the best round wick open flame lamp. No odor, smoke or prohibited simple, clean, no pressure, won't explode. Children run it. Several million people already enjoying this powerful, white, steady light, burners to sunlight. Guaranteed.

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to the person who shows us an oil lamp equal to the new Aladdin (details of test in our circular). Would we dare make such a challenge if there is the slightest doubt as to the merits of the Aladdin?

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From neighbor to neighbor, the news of Page Engine superiority is travelling fast. Every time we install one of them, we stand a good chance of getting other orders from that same neighborhood. The owner of a Page cannot help but be a salesman for this engine—his enthusiasm will not allow him to keep silent about its merits.

You, too, when you buy a Page, will find the news too good to keep—you'll be telling your neighbors of its remarkable strength and simplicity—its day-in and day-out satisfaction.

Remember we do not ask more for this better engine—we ask less than you would pay for other engines that do not begin to compare with the Page. By large production, and by selling direct to you, we've got the price down so low per h.p. that no other engine concern has yet been able to compete with us.

using a good registered sire still stands the test of time." It is best for a man to raise his own calves, as men usually sell the cows they don't like. Ground flax seed, as distinguished from oil cake, is good for growing calves. In caring for the dairy cow, remember that the best conditions for milk production exist in the early summer, and the dairy farmer should aim to continue these conditions as long as possible throughout the season. Mr. Glendinning's address will appear in a subsequent issue.

J. H. Grisdale dealt with the growing of feed from the dairy farmer's standpoint, recommending the well-tried crops which everybody knows how to handle, viz., corn, red clover, and oats. He stated that he liked clover about as well as alfalfa, his chief advantage being that it fits well into a short rotation, and that everybody knows how to grow it. His experience was that corn grew best on spring plowed soil or pasture that he previously received a light dressing of manure. This should be rolled immediately, cultivated thoroughly, and the corn sowed as soon after plowing as is possible. Sowing in drills was preferable to hill planting, as it saves time both in seeding and cultivation, and is also much easier on the corn binder than the hills. The three-year rotation—corn, oats and grass and clover—was recommended where permanent pasture was available, and the four-year rotation including the above and one year in pasture, where the latter was needed. Rather intensive farming was advised.

"The cause of most failures in farming," said Mr. Grisdale, "is due to the failure of men who make the best use of the land which they work. In Canada we fall down badly when it comes to yields. There is no reason why we should not have excellent crops every year, and our yields should be 50 per cent. better than they are. To obtain this result, all that is needed is more care, thought, and intelligence and a little more labor."

**Community Building**

The evolution of the country home from the time when it was self-sustaining and all-sufficient to the present time where, in many cases, there is scarcely any home life, was sketched by A. McLaren, B.S.A., who has charge of work in rural sociology at

the O.A.C. The home has turned over to the church, the school, and the state, functions which it formerly performed within itself, but these were not doing the job as well as they should do it. We cannot, however, go back to the old conditions, but must work along the lines we have already adopted. The logical unit from a sociological standpoint

was the community; that is, the trade district surrounding each local centre. The development of the community idea with its consolidated school, its general meeting-house, its community play-day, and possibly even its community church, was in the speaker's mind the means by which the true solution of the rural problem would be brought nearer.

## Our Experience Meeting: Handling Bulls

### Don't Be Afraid of the Bull

(First Premium.)

Albert G. Cole, Huron Co., Ont.

I HAVE kept a bull ever since I started farming 45 years ago, and have never had what you might call a cross bull. My plan is to turn him out into a two-acre field right near the stable, along with the calves during the summer. Whenever we want to bring him in we call him by name and he comes without any trouble. We never tease or abuse the bull, and we are never afraid of him. One of my neighbors thought that he would try handling his bull the way I do, as he had two grown-up sons to help him, but I told him that they would not make a success of it, as they were afraid of the bull. However, this neighbor bought one about a year ago. He was very quiet when first bought, but my neighbor only had him about three weeks, when he got so cross that it took the two boys and the father to take the bull out of the stable. This is the way they had been using him: The boys would put a head stall on him, then tie a rope on both sides, and get a big club about two and one-half feet long and as thick as one's wrist. Whenever the bull turned his head, first one would hit him over the head, then the other, until the bull thought every time he was untied from the stall that he was going to be hammered, and soon became so cross that they could not handle him that way.

The next plan they thought of was to put a ring in his nose, and came over to see if I could put the ring in. I told the others to keep away, and I took the rope, tied it to one side of the halter, gave him a little pull, spoke to him, and he walked out of the stable as quiet as my piece. I led him to a tie post in the yard and tied him with a chain. It was only about five minutes until the ring was

### Handling Winter Manure

What method of handling the winter manure crop do you follow and what do you consider are its advantages?

The answer to this question must be based on the writer's practical experience. For the best reply received on or before Jan. 22 we will extend the writing privilege to our Farm and Dairy for one year; for all other replies published for six months. Letters of about 300 words in length are favoured.

Address, Question Editor, Farm and Dairy, Peterboro, Ont.

in his nose and he was back in the stable. I told the men not to use the ring for about three weeks, but they thought one week was enough. They used the bull so roughly and made his nose so sore that he became ferocious, and they had to fatten and kill him.

I consider that this is the way to have a quiet bull: Don't tease them when they are young, or, in fact, at any time. Don't be afraid of them. Feed well, groom well, and pet whenever you handle them. If you ever have occasion to use a whip use a small switch and hit them on the ears or under the fetlock of their hind legs. They will heed that far more than using a big club.

### What Would the Bulls

Think of You, Thos. Dennis, Elgin Co., Ont.

WE have found the old proverb, "An ounce of preventative is worth a pound of cure," the most thorough and generally true, and keep two boys and treat them to the yoke when they are yearlings. In this way, by working them, it keeps them quiet, they will pay for their keep, and become more vigorous and strong, as they get the necessary exercise which they would not get in a stall.

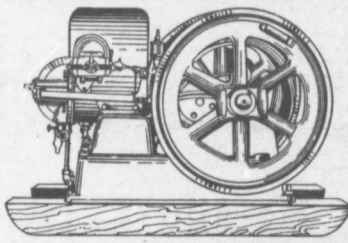
### General Principles

Wm. Currie, Chateauguay Co., Que.

I DO not think any one can give a method that will apply to all bulls. I have had a good deal of experience with all kinds, and find they are like the human family—you have to study their nature. In the first place, you have to be master at once. Sometimes when you approach them, sometimes you can conquer them by kindness. If that fails, and you have to resort to punishment, do not leave him till you have him conquered; then you have to be master at once.

I have been handling old bulls for years, buying them in the fall and feeding them all winter, and I have had some bad ones, and I have never seen one that did not master. If any resisters of Farm and Dairy have cross bulls they cannot handle, let them send them to me, and in two weeks I will be boss.

Your Xmas Number is a hearty and chock-full of good information and cuts well worth a year's subscription.—George McKay, Perth Co., Ont.



Compare these prices with the prices quoted by other engine houses:

14 H.P.	\$46.50	5 H.P.	113.50
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### The Acre Profit Competition for 1915

#### Some Splendid Yields Were Secured by the Young Men of Ontario

**T**HE results of the Acre Profit Competitions are now out. These competitions, we may explain, are conducted by the Ontario Department of Agriculture through the district representatives. Young men are eligible to compete who have taken short courses of four to six weeks conducted by the district representative. The prizes are awarded on the basis of profit per acre from some one crop selected by the young men themselves. Five dollars an acre is allowed for the rest of the land; 15 cents an hour for manual and 10 cents an hour for horse labor. The prizes given to those who secure the greatest profits for their acre is a short course at Guelph with all expenses paid. Sixty-seven young men will be at Guelph on this basis this month, and the conclusion of the course an examination will be held in stock and seed judging and a gold watch, donated by the Deputy Minister of Agriculture and the Assistant Deputy Minister, will be given to the young man who attains the highest marks.

Four young men succeeded in growing over 400 bushels of potatoes to the acre, and it is noticeable that all of these four are located in the northerly counties of the province, where the climate seems more adaptable to potato growing. Milton H. Goltz, of Bardsville, Muskoka, had a yield of 514 bushels of potatoes on his acre. His soil is a clay loam, following oats, farmed 10 years and fertilized with five loads of manure to the acre. Davies Warrior was the variety. Valuing the marketable potatoes at 75 cents a bushel, and the unmarketable at 37½ cents a bushel, this young farmer had a net profit of \$49.05. and a net profit of \$36.79.

Percy Wright, of Westmeath, in Renfrew county, had a yield of 421 bushels and 30 lbs., cost of production \$42.09 and profit \$39.81. C. W. Campbell, Powassan, in Parry Sound district, had a yield of 405 bushels, cost of production \$39.30 and net profit \$25.30. Edwin Playton, Dorion Station, Port Arthur, had a yield of 409 bushels, cost of production \$49.65 and a net profit of \$24.25.

**Competitors in Oats**  
James J. Pennett, Perth, Lanark Co., was one of three who grew over 90 bushels of oats to the acre. His yield was 104 bushels 10 lbs., cost of production \$17.76 and net profit \$33.93. Osborne Roseburgh, St. George, Brant county, had a yield of 92 bushels 28 lbs., cost of production \$16.02 and net profit \$21.11. Roy Ewing, Elginburgh, Frontenac county, had a yield of 90 bushels 17 lbs., cost of production \$16.49 and net profit \$19.78.

**Mangels**  
Halton county, represented by Jos. Willmott, Milton, secured prize in mangels with 1,650 bushels to the acre, cost of production \$42.33 and net profit \$18.12. Wilda Elson, Fraserville, in Durham county, had a yield of 1,369 bushels, cost of production \$31.85 and net profit \$130.39. Wm. Cooper, Mindemoya, Manitowlin, had a yield of 1,379 bushels 40 lbs., cost of production \$31.69 and net profit \$121.84.

**Silage Corn**  
The results in the silage corn competition were wonderful, yields being secured that would not have been thought possible, except in the southern states. Four contestants had yields of over 30 tons to the acre. Archie R. Gregg, Salford, Oxford county, had a yield of 30 tons and 460 lbs., cost of production \$18.15 and net profit \$100.95. J. F. Campbell, Milton, Halton county, had a yield

of 33 tons 1,000 lbs., cost of production \$21.55 and net profit, \$93.95. George Suggitt, Fenelon Falls, Victoria county, had a yield of 29 tons 240 lbs., cost of production, \$14.73 and net profit, \$81.63. Robert Watson, Woodbridge, York county, had a yield of 29 tons, cost of production \$17.56 and net profit, \$78.44.

In the corn for seed competition, Graham Griffith, Mandamin, Lambton county, had a yield of 154 bushels, cost of production \$43.82 and net profit, \$190.18. John Breault, Enterprise, Lennox and Addington, 94 bushels 19 lbs., cost of production, \$42.70 and net profit, \$75.22. Gerald Smith, Ruthven, Essex county, had a yield of 72 bushels, cost of production, \$18.94 and net profit, \$71.76.

**Turnips**  
In turnips Roland Brown, Hymers, Fort William, had a yield of 99 bushels 40 lbs., cost of production, \$21.94 and net profit, \$97.42. H. A. Parker, Uno Park, Temiskaming, had a yield of 942 bushels, cost of production, \$42.78 and net profit \$70.23.

In spring wheat, Silas Farrell Finch, Dundas and West Stormont counties, had a yield of 46 bushels 45 lbs., cost of production, \$16.15 and net profit, \$32.22.

In barley C. B. Hazen, Port Rowan Norfolk county, had a yield of 51 bushels, cost of production \$17.28 and net profit, \$10.79.

**Beans** are a crop limited to certain counties of South-Western Ontario. Clifford Smith, Ridgeway, Kent county, had a yield in beans of 29 bushels 30 lbs., cost of production \$21.55 and net profit, \$56.61.

**Hog Feeding Competition**  
Seventeen young men will take the short courses at Guelph at the expense of the Department of Agriculture as winners in the Hog Feeding Competition. The hogs were selected when six weeks old, and a value of \$4 each was placed on them at that age. Contestants were allowed to feed four and select the best three at the end of the competition. They were fed until 22 weeks of age, and a record kept of the amount of feed used each week.

Lawson Sewell, Meaford, Grey county, had an average cost of production of \$12.53, average value, \$24.84 and average profit, \$12.31. J. S. Pollard, Mt. Elgin, Oxford county, average cost of production, \$13.63, average value, \$24.84 and average profit, \$11.21. Calvin White, Pem-

broke, Renfrew county, average cost of production, \$9.14, average value, \$19.65 and average profit, \$10.51. Owen Fitzgerald, Harrowsmith, Frontenac county, average cost of production, \$8.06, average value, \$18.60 and average profit, \$9.53.

#### Coming Events

- SIXTH Annual Apiculture Short Course, O.A.C., Guelph, Jan. 11-22.
- Ottawa Winter Fair, Ottawa, Jan. 18-30.
- Ontario Corn Show, Chatham, Feb. 1-4.
- Canadian Jersey Cattle Club, Annual Meeting, Feb. 1, Carls-Rite Hotel, Toronto.
- Canadian Ayrshire Breeders' Association, Annual Meeting, Feb. 3, Carls-Rite, Hotel, Toronto.
- Annual Meeting, Holstein-Friesian Association of Canada, Canadian Foresters' Hall, Toronto, Feb. 3.

#### 'A Ration without Succulence

**W**ILL you kindly give me a balanced ration for a cow giving 30 lbs. of milk a day? What feed would you recommend buying along with lucerne clover, timothy hay, oat straw, oat chaff and flax seed, ground fine? Young Farmer, Huron Co., Ont.

A cow giving 20 lbs. of milk 7 day should not be difficult to feed, as this is only a moderate milk yield. "Young Farmer" has lots of feed on hand to meet all of his requirements without purchasing at all. The greatest lack is succulence, and consequently palatability. A few roots if they are on hand, or can be obtained at a reasonable price, would help out immensely.

We would suggest that the cow be fed mixed lucerne and timothy hay after milking in the morning, as much as she will eat up clean in one hour. For a morning grain ration we would suggest two and one-half pounds of oat chaff and a handful of ground flax. A small feeding of hay might be given again at noon, and the same feeding at night as in the morning. Last thing at night, after the hay and grain have been cleaned up, the manger might be filled with oat straw. The cow will pick over the straw and eat the best portions; what is left may be used for bedding.

In order to give more palatability to the ration we would suggest purchasing some feed molasses, which can easily be gotten at 18 to 20 cents a gallon, mixing with three or four times its bulk of water and sprinkling over the hay before feeding.

## Stumps Out Quick and Easy

Here at last is the land clearing device you have been looking for—the Kirstin One-Man Stump Puller—a simple, powerful, practical Puller that one can handle and operate with ease. No big, expensive, cumbersome outfit—no horses to drive—no extra work of any kind. With the Kirstin, one man *also* clears land quickly and economically. Costs little to begin with—nothing for upkeep—and costs far less to operate than any other hand or horse power puller on the market. In the

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Sworn detailed statements of circulation of the paper, showing its distribution by counties and provinces, will be mailed free on request.

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We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and because to protect our readers, we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you, we will make good the amount of your loss, provided such transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that we find the facts to be as stated. It is a condition of this contract that in writing to advertisers you state: "I saw your advertisement in Farm and Dairy."

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"Read not to contradict and to confute, nor to believe and take for granted, but to weigh and consider."—Bacon.

## Better Cows Needed

IN a certain dairy instructor's territory in Eastern Ontario, there are 1,722 patrons sending their milk to cheese factories. These farmers milk 11,932 cows and their average gross return for the whole cheese factory season in 1915 was only \$42.18 a cow. The average price realized for cheese was 14.92 cents a pound. We may assume, therefore, that with pastures good and cheese high in price, these cows were given a reasonable opportunity to do their best. And yet with all things in their favor, the return of \$42.18 is hardly enough to pay for their feed. Certainly the return is not sufficient to yield any profit to the farmer.

The educational institutions of the land, of which the agricultural press is not the least, have been preaching better cows so long that one would almost think that the three thousand-pound cow would be extinct long ere now. Then along comes a statement like the foregoing, and we realize that we must start our work all over again. Although the subject may be somewhat hackneyed, there is still much need to impress the value of better breeding, better feeding, and better selection—the three basic principles of good dairying.

## Joys of the Farm

THE man whose ideal is wealth that may be named in many thousands, perhaps millions, of dollars, should choose some other occupation than farming. As a business, farming yields only moderate returns on the labor and capital invested. Whoever heard of a farmer becoming a millionaire through the production and marketing of crops? The best farm income would look small to the successful broker or merchant.

Such a confession must seem to many like an attempt to give farming a black eye. It is, if we view farming only in its financial aspects. But when we consider the farm as a place to live, our industry more than comes into its own. The farm enthusiast, the man of rural ideals, draws big dividends in joy in his work, his wholesome environments, and the opportunity that contact with nature offers him for creative work. It has been men inspired with this joy of farming who have blazed the way to all modern methods. Many of Our Folks take more pleasure in improving a strain of seed than any broker ever took in cornering the market or any merchant in amassing a fortune. We have many such men among the farmers of Ontario, and verily they are the salt of the industry.

## A Warning in Advance

THE seed question of 1916 is complicated by two factors—the shutting out of European supplies of root and vegetable seed and the doubtful quality of our own home-grown grain and clover. Much of the grain in Eastern Canada was injured by the wet weather of last season. In the corn sections of South-Western Ontario, there was a general tendency to softness in the ear, and the quality of seed corn coming from there will not be as good this year as it has been in the past. The clover seed situation is even more serious. There was very little No. 1 clover seed produced this last season.

There is only one way to guard against crop loss from seed of inferior germinating qualities—test your seed and sow accordingly. The farmer who is accustomed to sow oats at the rate of two bushels of ninety-five per cent. germination to the acre, should next season sow nearer four bushels to the acre if he finds that the germination power has been reduced to fifty per cent. The same applies all along the line. With the average seed that will be offered in 1916, there should be heavier planting of corn, grain, and clovers. This will increase the seed bill, but any extra expense incurred at seeding time will be more than counterbalanced at harvest by the superior crop that comes from the good stand. Those of Our Folks who do not wish to test their own seed can have samples tested by forwarding them to the Seed Branch at Ottawa.

## A Word in Season

BARNYARD manure has value on the farm aside from that as a fertilizer. It improves the physical conditions of the soil and makes it easier to handle. Its decay produces heat and its presence aids chemical and bacterial processes. Moreover, it absorbs and holds a large amount of water and helps to aerate the soil. The benefits of these indirect aids to plant growth are in some cases worth as much as the fertilizing power of the manure.

When it is added that barnyard manure is worth at least \$2.50 a ton, and that each farm animal produces from five to seven tons per 1,000 pounds of live weight each year, it is easy to see that as a fertilizer the material should not be wasted.

And yet it is. On the average Canadian farm only fifty per cent. of the fertilizing value of manure ever reaches the soil. The other fifty per cent. of value is lost by leaching and fermentation consequent upon improper handling. We have even known seemingly intelligent farmers to waste the manure produced on the farm and then turn around and buy commercial fertilizer to make good the drain on their soil. The best practice is to haul the stuff directly to the fields from the stable. Where this practice is not followed, provision should be made to preserve all the liquid excrement and keep

tightly compacted and moist to prevent fermentation. There is no more important problem at this time of year than the conservation of stable manure.

## The Unemployed: The Solution

AT the conclusion of the war four million British citizens will be returning to their home lands, the most of them looking for work. The finding of jobs for so many jobless men is a problem that will call for the best statesmanship. Already many solutions of the coming labor problem have been proposed. The best of these comes from the United States Department of Labor. In that country, like all other civilized countries, the unemployed problem has always been with them, and Secretary of Labor William B. Wilson, in advancing his solution, has thrown precedence to the winds, and brought forward a scheme that will work, because it is fundamentally right.

Secretary Wilson has already tried the commonly advocated plan of establishing labor exchanges on a national basis, but the scheme has failed for the very good reason that there are more men offering than there are jobs for them. He now draws attention to the possibilities of opening jobs for the unemployed on the retained lands. He suggests that the Government retain title to all the public lands it now holds, and also acquire the extensive areas of unused, privately-owned farming lands in all of the States, the tenure to be so adjusted "as to prevent the inflation of land values." In addition to placing the laborers on the land, Secretary Wilson would have the Departments of Agriculture and of the Interior cooperate with the Department of Labor to instruct in farming and marketing and to make possible the establishing of a rotary fund from which loans could be made.

The need for such a scheme in Canada will be even greater at the conclusion of the war than it is now in the United States. Much of our best land has been given away, but much good Government land still remains. This could be extended by expropriating from its present owners the vast areas of unused land in all of the Western provinces, which came into the possession of their present owners by frauds perpetrated on the Government. This may seem to many a radical method of solving the problem of the unemployed, but abnormal conditions demand radical remedies.

## Plant that is Undesirable

(Ladies Home Journal)

IT was a shrewd Yankee storekeeper who said to me we were driving along by a farm: "I reckon Will Peyton isn't doing so well." "How do you know that?" I asked. "His barn," he said laconically, pointing to a barn the side of which blazoned forth an advertisement. "When a man lets another paint his barn full of an advertisement we think twice when he comes to the store and wants to buy without money. We are generally out of what he wants."

The comment was shrewd; it is a truth that very few farmers realize. The owner of a farm never advertises the loosening hold on his strings or his poverty more convincingly than when he lets another fellow paint his barn. If more farmers realized this fact there would be fewer barns, fences, and sides of houses made hideous by advertising painting.

"I didn't hear anything at the Institute that I didn't know, anyhow," declared the poorest farmer in the community. Nobody doubted his word. Anybody can listen to good advice. It takes a wise man to profit by it.



**The Chicken Thief**

H. Percy Blanchard, Hants Co., N.S.

**J**UST imagine what your feelings may be when, morning after morning, you count your prize stock of R. I. Red chickens, great big fellows, almost as big as hens, and little we ones, and on nearly every occasion find the count running shorter and shorter. "If you have sworn, prepare to swear them now." But why stand disconsolate; the rather, it is time for action; certainly our chickens were diminishing in numbers. Mr. Williams and I talked it over. Mr. Williams was the old foreman on this farm when it was owned by my predecessor. Likewise, he is an expert woodsman, and a man of resources.

Now, I thought the depreddator was a mink; but Mr. Williams said skunk. One mornning, among the survivors I found a chicken with its comb almost bitten off, just hanging by a little bit of flesh. Here was a trail. Now, according to Mr. Williams, skunks seize the chicken by the throat and suck its blood; whereas a mink grabs it by the head, bites it through the skull and brain, and so carries it off. It looked as if my guess were right. But one bright moonlight night, I had awakened by a tumult among the bunch of chickens that were roosting on an open box below our open window. I was out of bed and gazing into the night at the instant, and surely I saw some small animal prowling round below. When I shouted and clapped my hands, it slowly and unwillingly made off. When I got enough clothes on that I might follow it out into the chilly night, it had disappeared. Mrs. Blanchard upbraided me because I did not have a loaded shotgun in the bedroom, so I could have shot the beast; but then, how did I know the beast would come that night; and besides, if I had had a gun, I never would have seen the thief. I have proved that conclusion far too often to dispute it to-day.

On the morrow, Mr. Williams and I again considered. The beast was about the size of a large cat, forward end dark, and hind part lighter. It moved as good deal like a cat. "Skunk," said he; "if you had met it last night, we would have had to bury your clothes." I was glad then I had not met it. I would hate to have my clothes buried, even if I were not inside them. But the insolence of the brute increased. The fowls were all shut up in the hen-house, with no entry but the small run-in hole from the yard. One morning we found on the floor a somewhat dilapidated dead hen. So after dark the next night, we closed up that one entry, and Mr. Williams hunted up an old mink trap and set it just outside the hole.

Next Morning the Trap Was Sprung  
But there was no mink in it. However, we both could plainly smell skunk. He would likely come back again if he were not hurt. Now, a peculiar coincidence was that on that same morning, Randolph's big old white and black tom cat came

home, with one front paw smashed off and the other broken. Randolph shot him to put him out of misery. Another coincidence is that we have lost no more hens. That trap must have so scared the skunk when it snapped, that the beast has abandoned its evil ways.

At the same time, now that he is dead and cannot defend himself, a suspicion has fastened itself upon that tom cat. Some of the neighbors missed poultry, and they blamed Tom. Randolph himself lost some. Since Tom departed the chickens have not been molested. But what I would like to know is, how was it that on that morning when we found the trap sprung, we smell skunk?

**Calves Without Milk**

**E**DITOR, Farm and Dairy.—On reading "Herdsmen's" letter in Farm and Dairy of November 25th re calf rearing without milk, I was much struck with the great difficulty he attaches to the process, and I'm not surprised that his only attempt was a failure. Now, having raised many fine calves without milk, I take the liberty of telling "Herdsmen" my method, and being a milk seller I speak from practice, not theory.

The calf is taken right away from its mother and taught to drink. For the first few days it gets all the milk it needs. When about four days old I begin adding a little gruel, gradually reducing the milk and increasing the gruel, commencing with a tablespoonful, till about a teacupful is reached, which is the most they ever get; this quantity is not reached till the calf is about a month old. After they are two weeks old, they get only a taste of milk; they are never fed as much gruel as we would feed were they getting milk, the idea being to get them eating as soon as possible. When about two or three months old, I stop feeding the milk, as they are then eating a sufficient quantity of other food; they start on solid food as soon as ever they will begin to eat, which they generally do in about a week. They are given a little pulped turnips and meal (chop), with fresh hay always within their reach, and fed according to their capacity. Give fresh clean feed at regular meal times and cold water as they want it. In making the gruel, I noticed better results when I used a less quantity of the directions call for, and I always let it boil a few minutes when making it, adding water as needed when fed. We have raised as many as five calves on using it for several years with the best results.—"Dairyman."

[Note.—Before publication, this letter was submitted to "Herdsmen," who wishes to call "Dairyman's" attention to the fact that the only calf he ever fed without milk didn't get any milk whatever, not even during the first day or two. He has followed a method similar to that advocated by "Dairyman" with good results, but not so good as where lots of skim milk was available.—Editors.]

**The Canny Scot**

**T**WO friends, a Welshman and a Scotsman, happened to be lunching together recently in a certain restaurant. The latter kept turning round to see that his hat and coat remained still on the peg where he had left them.  
"You are a suspicious chap," said his friend at last. "Who do you think is going to walk in here and steal our coats?"  
"Canns say," replied Scotty, "but I'll tak' ruid care nobody perts mine; yours vent ten meenutes ago."

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FOR a woman to be wise and at the same time womanly, is to wield a tremendous influence which may be felt for good in the lives of generations to come.—David Jordan.

## The Silver Lining

By C. D. POGSON

(Continued from last week.)

ON the evening of the twenty-third the two friends rode into town. Having stabled and fed Molly and Pepper in the "Sarnia" livery barn, they had supper at the hotel, took a stroll around town, and retired early to their rooms.

Next morning they were up at dawn fed and groomed their horses, then ate a hasty breakfast. This done they rode out to the race track, where they took several turns in order to accustom Molly to the lay-out of the course. Then came a baseball game, in which Jimmy's picturesque cowboy costume, and especially the capacious yellow silk kerchief which was knotted at two corners and thrown loosely around his neck, where it floated gaily in the breeze, attracted much attention from the crowd.

After a hearty dinner the friends repaired to the grounds once more to "take in" the races which were billed for the afternoon, it being understood that the bucking contest should take place in the evening. When the "free-for-all" was announced, Jimmy, Bill Burkle, and half-a-dozen others lined their horses up before the judges. After considerable manoeuvring, the word "Go!" was given, and they were off in a whirl of dust, the lanky gray in the lead, some feet ahead of Molly. The latter gradually lost ground until she was three lengths behind, with the other horses following closely.

Jack began to have some doubts regarding Molly's ability to win, but just then he saw Jimmy lean forward in the saddle until his face almost touched the mare's neck, as though he were speaking to her. And speaking he was.

"Steady girl. Keep cool. That percussion behind won't touch ye. Steady there. Just keep yer nose a-flying. Steady, I say. That old gray ain't got no wind."

Then he kept talking, while Molly gradually increased her speed until she had gained a length when they rushed past the grand-stand, and started on the second half, amid a storm of applause.

"Go it, Jim," yelled the cowboys. But Jimmy was so intent upon lessening the distance between himself and Burkle that he heard not a word.

At the three-quarter mile the gray was weakening slightly, and Molly had gained another length.

"Now, girl," said Jimmy, "dust it up. Slug 'im. Slug 'im, give 'im the knockout! Hike! Hike!"

And "hike" she did, passed the gray like a whirlwind, and slipped under the wire leading by a length.

The applause was deafening. Jimmy sprang from his saddle, danced up and down, patted Molly's neck,

and showered compliments upon her; while Jack threw a blanket over her and proudly led her to the stable.

Shortly after the races the Blair family drove into town. Not caring to witness the races, they had decided to remain in town overnight, and do some shopping, and so timed themselves to reach town just in time for the "bucking contest."

As soon as supper was disposed of the crowd gathered to see the bronco-busting. There were 10 or 12 contestants, and as many incorrigible horses. Needless to say, the worst in the surrounding country had been



A Tribute to the Hard Work and Good Taste of an Earlier Generation.

Big stone fences such as these, bear testimony to the fact that the clearing of many Canadian farms was "no cinch." Tree planting generally was left to the second generation, and we unto the third and fourth generations, enjoy the results of their labors.—Photo in Peterboro Co., Ont.

procured for the occasion. Each man was expected to saddle the horse allotted to him for the contest, and to ride him without bit or saddle, nothing more than a halter to which was attached a long halter-shank. The horses were led in by men on horseback, then blind-folded by a sack, and held in position until the contestant had placed and securely cinched his saddle. Then, seizing the loose end of the halter shank, he sprang into the saddle; the sack was quickly jerked from the horse's eyes, and they were off.

Kicking, rearing, side-stepping, jumping up and down, the bronco tried to unsettle his rider, and sometimes succeeded, to the discomfort of the latter, and the amusement of the crowd. When the horse stopped bucking, or had thrown his rider, another bronco was led in. After all had ridden, the judges chose the three best-riders, and the three most unmanageable horses for the "final."

Jimmy was among the contestants, and so distinguished himself as a rider, that he was placed in the final.

The horse allotted to him was known far and near among the cowboys as "Tornado." He had successfully thrown his rider in the first contest. Jimmy came last in the final, and Tornado stood meekly until the saddle was cinched, and his man seated. Then at a touch from the spur he sprang into the air, kicked, reared, plunged, zig-zagged, lowered his head, gathered all fours together, and bounced up and down for some time, then reared almost perpendicularly, while Jimmy slapped him on the side, neck and head with the hat which he carried in his hand.

Finding his usual tactics to displease a rider this time unavailing, Tornado tossed up his head, and galloped furiously across the grounds towards a barbed-wire fence. Jack, seated on Molly's back, and intently watching the proceedings, saw his friend's danger. One moment's rapid thought, and he galloped headlong across the field. If he could only come between Tornado and the fence, and thus turn him back towards the centre of the field! There the bronco would doubtless be captured by a number of riders stationed there for that purpose.

Jack succeeded in turning Tornado, but just as he did Molly stepped into a badger-hole and fell, tossing her owner to the ground some feet away. Jack sprang to his feet unhurt, but was alarmed to see his plucky little mare standing on three feet, the other leg dangling loosely from her shoulder.

A Mounted Police officer, elbowing his way through the throng, hastened across the field. After a brief examination, he ended poor Molly suffering by a bullet from his pistol. One sorrowful look did Jack bestow upon the dying horse, then strode

called Jack to the hostler as they rode away.

Next morning, when Dorothy's father stepped into the livery barn he heard Jimmy, who was saddling Pepper discouraging upon the good qualities of Molly.

"Fardon me," said he to Jimmy, "do you know who owned the little mare that the police shot yesterday?"

"Bet yer life I do," said Jimmy. "He's my nearest neighbor. Jack Gray's name, an' a better fellow I never met or shot neither. I went home last night. Guess he's feelin' mighty blue, poor chap. He's got a hall, twenty miles out, two hundred broke an' seedin' his house, too, spring creek an' let me tell you, stranger. Jack is steady; keeps everythin' ship-shape. Come up from the East six years ago. Fir when Jack came he useter be a-whistlin' an' a-singin' most all the time. That was for the first couple of years; but he's been mopin' off an' on ever since. I kinder think that's the worst to the bottom o' 'em. 'Course he never said, but I useter take letters out ter him, an' every time he got one he most walked on air. An', with a chuckle, 'he useter send me letters, an' I'd be Miss Blair. Jack said she was some relation or nuther, but I noticed when no more letters came, he sent no more, that's got ter be a right bluer than I'd be over 'a ordinary relation. Tell yer, friend, the woman that tossed Jack over, dropped the substance an' grasped the shadow. She useter be the spunkiest some o' 'em at any rate, drat 'em," exclaimed Jimmy as he swung into the saddle, and turned Pepper head towards home.

Needless to say, Dorothy's father did some serious thinking on his way back to the hotel, where he had left his wife and daughter. Fortunately, Dorothy was seated at a window, reading a book, and oblivious to the ground. Drawing his wife to the shady lawn, Mr. Blair told her in a few brief words what he had learned that morning.

Mrs. Blair listened to her husband's account, then, after gravely thinking for a few minutes, exclaimed, "Let us write to Jack, and invite him over. I feel certain that he will explain everything. We won't get a word to Dorothy in the meantime. Dear child, how I hope she may yet be happy."

The letter was hastily written and mailed, then the party started for home. They were now speeding across the flower-sprinkled prairie which, with its mirages, freedom and untamed appearance, was gradually gaining a larger place in their affection and towards the goal of restoring the roses to Dorothy's cheeks.

Jimmy arrived at Jack's in time for dinner, and while he shared the repast discussed the doings of the previous day in a lively manner, hoping to cheer up Dorothy from the care of his friend. He also mentioned incidentally that he intended to go south in a couple of days, on an extensive trip to his old home and other points. When bidding his friend farewell, Jimmy said, "Cheer up, old man. The little mare's gone, but she left a good record. An' what's more, every cloud has a silver lining, an' you're bound to find the linin' in your cloud, one o' these days, An', 'gripping Jack's hand, 'thanks for savin' my life yesterday."

"Don't mention it," said Jack "twas nothing."

A few days later one of the "boys" brought Jack his mail. Among the letters was one from Mr. and Mrs. Blair, telling him of their coming to the country and their intention of living. The latter ended with a cordial invitation to visit them at any time when he found it convenient to do so.

"Well," thought Jack to himself, "this is mighty queer. Shouldn't

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# A Reminder of January Whitewear Sales

*Farm and Dairy patterns shown in these columns are especially prepared for Farm and Dairy's Women Folk. They can be relied upon to be the latest models and include the most modern features of the paper patterns. When sending Farm and Dairy your order please be careful to state best or usual measure for adults, care for children and the number of pattern desired. Price of all patterns to Our Folks, 10c each. Address all orders to Pattern Dept., Farm and Dairy, Peterboro, Ont.*



WITH the advent of January, comes the annual mid-winter white-wear sale. At these sales if one is in good luck bargains can frequently be secured, as merchants are willing to sell off their stock at a sacrifice. Now is a fairly slack time for most of us, too, and it is a good time to make up our summer clothing, while other duties are not pressing. While it might not be advisable to make up dresses and blouses just now, as the styles change getting the supply of under-clothing for the children and ourselves nearly made up, all ready for the season when made garments, such as nightdresses and undershirts, that can be secured at a considerable reduction, and everyone likes to have one or two of these daily garments to add to their wardrobe.

**1501—Lady's Waist with Body Lining.**—This seems to be an endless variety of models from which to fashion blouses this season and here is one decidedly different from what we have noticed recently: The wide strapping adds quite a distinctive touch to the blouse. The knee vests and collar are also unique and the sleeves are very new. This blouse has a body lining for which one and one-half yards of material are required. Six sizes: 34, 36, 38, 40, 42, and 44 inches bust measure.

**1502—Girl's Dress.**—Draws much from the design illustrated herewith and trimmed with contrasting material would make a very neat little school dress, or for general wear. Notice how nicely the collar fits and ties of different sorts may be worn, which will lend variety to the outfit. Four sizes: 4, 6, 8, and 10 years.

**1503—Lady's Skirt.**—If looking for a very neat and practical separate skirt, the design here shown should appeal to one.

The back is laid in two pleats and at the sides there is a pleated insert. The points running down over this insert and the belt with two or three buttons, are all the trimming necessary. Six sizes: 24, 26, 28, 30, and 32 inches waist measure.

**1504—Lady's Combination.**—In this design we have a suggestion which can be put to good use after we have visited some of the whitewear sales. This combination blouse and envelope skirt drawers, is and they can be made very simply or more elaborately if desired. Three sizes: small, medium and large.

**1505—Junior's Dress.**—A dress for the young girl that is somewhat out of the ordinary is shown herewith. The skirt is laid in side pleats, two meeting in the back. The blouse effect to be worn over the skirt is unique. It fastens down the centre front and is trimmed with buttons. Notice also the cute little pocket on the belt which suggest a military touch. The neat tailored bow at the neck adds the finishing touch. Three sizes: 12, 14 and 16 years.

**1507—Lady's Dress.**—This house dress has some style features of its own worth noting. The wide lapels and set-in dicker are a slight change from the usual designs shown. The skirt has an inverted pleat down the centre back, which is stitched only a few inches from the waist. Either long or shorter length sleeves may be utilized and if preferred one might have a high collar attached to the dicker as shown in the small view of the back. Six sizes: 24, 26, 30, 42, and 44 inches bust measure.

**1502—Lady's "Over All" Apron.**—Nothing in the apron line looks quite so neat as the styles that fit in at the waist. This overall design presents a very neat appearance. Three sizes: small, medium and large.

## What Is Auto-Intoxication--And How To Prevent It

By C. G. Percival, M.D.

Perhaps the best definition I have ever noted of Auto-Intoxication is "Self-Intoxication, or poisoning by compounds produced internally by oneself."

This definition is clearly intelligible because it puts Auto-Intoxication exactly where it belongs; takes it away from the obscure and easily misunderstood, and brings it into the light as an irritating, virulent, poisonous ailment.

It is probably the most insidious of all complaints, because its first indications are that we feel a little below par, sluggish, dispirited, etc., and we are apt to delude ourselves that it may be the weather, a little overwork or the need for a rest—

But once let it get a good hold through non-attention to the real cause and a nervous condition is apt to develop, which it will take months to correct. It is true that, but Auto-Intoxication so weakens the foundation of the entire system to resist disease that if any organ of the body is below par, a more or less serious derangement is sure to follow—

The ailments which have been commonly, almost habitually, traced to Auto-Intoxication are: Langour, Headache, Insomnia, Biliuness, Melancholia, Nervous Prostration, Digestive Troubles, Eruptions of the Skin, Rheumatism, Neuralgia, Kidney Disturbance, Liver Troubles, etc.

There are several conditions which may produce Auto-Intoxication, but by far the most common and prevalent one is the accumulation of waste in the colon, caused by insufficient exercise, improper food, or more food than nature can take care of under our present mode of living.

I wonder if you realize how prevalent this most common cause of Auto-Intoxication really is—the clearest proof of it is that one would be entirely safe in stating that there are more drugs consumed in an effort to correct this complaint than for all other human ills combined—it is indeed universal, and if it were conquered, in the words of the famous medical scientist, Professor Eli Metchnikoff, "the length of our lives would be nearly doubled."

He has specifically stated that if our colons were removed in early infancy we would in all probability live to the age of 150 years.

That is because the waste which accumulates in the colon is extremely poisonous, and the blood, as it flows through the walls of the colon, absorbs these poisons until it is permeated with them. Have you ever, when bilious, experienced a tingling sensation apparent even above the dormant sensation which biliousness creates? I have, and that is Auto-Intoxication away above the danger point.

Now, if laxative drugs were thorough in removing this waste, there could be no arraignment against them—

But they are at best only partially

effective and temporary in their results, and if persisted in soon cease to be effective at all. Their effect is, at best, the forcing of the system to throw off its own waste, and they therefore "jolt" nature instead of assisting her.

There is, however, a method of eliminating this waste, which has been perfected in successive years of practice and study, which might be aptly termed a nature remedy. This is the cleansing of the colon its entire length, at reasonable periods, by means of an internal bath, in which simple warm water and a harmless antiseptic are used.

This system already has over half a million enthusiastic users and advocates, who have found in it the one effective and harmless preventive of Auto-Intoxication, and a resulting means of consistently keeping them clear in brain, bright in spirits, enthusiastic in success, and most capable in their performance.

The one great merit about this method, aside from the fact that it is so effective, is that no one can quarrel with it, because it is so simple and natural. It is, as it is called, nothing but a bath, scientifically applied. All physicians have for years commonly recommended old-fashioned Internal Baths, and the only distinction between them is that the newer method is infinitely more thorough, wherefore it would seem that one could hardly fail to recommend it without stultifying himself, could he?

As a matter of fact, I know that many of the most enlightened and successful specialists are constantly prescribing it to their patients. The physician who has been responsible for this progress, and the method of Internal Bathing was himself an invalid twenty-five years ago. Medicine had failed and he tried the old-fashioned Internal Bath. It benefited him, but was a partial success. Encouraged by this progress, however, he improved the manner of administering it, and as this improved so did his health.

Hence, for twenty-five years he has made this his life's study and practice until to-day this long experience is represented in the "J. B. L. Cascade." During all these years of specializing, as may be readily appreciated, most interesting and valuable knowledge was gleaned, and this practical knowledge is all summed up in a most interesting way, and will be sent to you on request, without cost, or any obligation, if you will simply address: Chas. C. Tyrrell, M.D., Room 396, 257 College Street, Toronto, and mention having read this article in Farm and Dairy.

The inclination of this age is to keep far away from medicine as possible, and still keep healthy and capable. Physicians agree that 95 per cent. of human ailments is caused by Auto-Intoxication.

The two facts above should be sufficient to incline everyone to at least write for this little book and read what it has to say on the subject— (Advertisement).

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Year After Year

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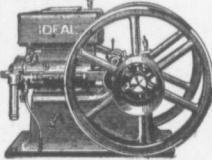
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**Maxwell**

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—makes churning a pleasure. It's so simple to drive—requires so little effort to produce the butter. Agricultural Colleges and Government S. Africa, and all over Canada.

Call at your dealer's and let him show you the splendid unique features of the Maxwell "FAVORITE." Sold on eight sizes.

**MAXWELL'S LTD.** S. MARY'S, ONTARIO

**The Makers' Corner**  
 Butter and Cheese Makers are invited to send contributions to this department, to ask questions on matters relating to cheese making, and to suggest subjects for discussion.

**The Problem in Butter-Making**  
 J. A. Buddick, Dominion Dairy Com.  
**T**HE improvement in the quality of Canadian butter in recent years has resulted in a great increase in home consumption and consequently enlargement of the market. Every effort which has been made through the different agencies, both federal and provincial, to raise the standard of quality has been worth while and the results are a standing encouragement to further effort with the same object in view.

In those sections of the country where the cream gathering system is in vogue, no single measure for the improvement of the quality of the butter is of greater importance, or is likely to be more successful, than the already attained in Alberta, Saskatchewan and Manitoba, especially in Alberta, are abundant proof of the practicability and the advantages of the methods which have been adopted in the provinces for the grading of the cream as supplied to the creameries. If cream grading can be supplemented by a workable system of butter grading, which will ensure a fair discrimination in price according to grade, the stimulus thus given to everything which makes for better quality will be very great.

The value of the grading of the cream or butter lies in the fact that it leads to payment on a quality basis. It is the lack of discrimination in the butter trade generally, especially in relation to the primary sale by the manufacturer, which regards as the greatest barrier to progress that the industry has to face. All arguments or representations looking towards improvement lose their effect when it can be asserted in reply that the butter of inferior quality can be sold at the same price as other butter produced under very high better conditions.

Present Method Discouraging  
 We are not concerned for the moment with the reasons why the merchants are impelled to do business in this way, we merely want to point out a few facts as briefly as possible. This tendency to strike an average value neither encourages the progressive butter maker who turns out a superior article, nor punishes the indifferent or careless maker whose product is of inferior quality. Neither the creamery owner nor the patron of the creamery can be expected to

take much interest in the matter of quality when the best quality butter of widely different quality being sold for practically the same price.

If there were the same discrimination in value in the purchase of butter from the creamery as there is in the retail trade the patrons of many creameries would soon awaken to the fact that they were receiving a very much smaller return for their milk or cream than the patrons of other creameries where the business is conducted on better lines. How to secure full value and a reasonable discrimination in price is one of the greatest problems before the dairymen of this country. It is the problem of problems. If it were solved most of the other problems would themselves. There is no question before the dairymen of Canada to-day which deserves more careful study and attention.

**Sweet Cream for 14 Years**  
**T**HE City Dairy Company of Toronto has one cream shipper whom they value highly. In the 14 years that he has been shipping cream to them, D. J. McClure, of Churchillville, Ont., has not sent them a single can of cream. The Farm and Dairy recently wrote to Mr. McClure, who is an old friend of ours, for an outline of his methods of keeping cream sweet. Following is Mr. McClure's letter in full:  
 "Cleanliness is my first great secret. Add to this an abundance of ice, and it is easy to keep cream sweet. Some think once a day is sufficient to wash a cream separator. I never got that idea; separator and pails are always washed morning and evening, and thoroughly scalded. I have always been very careful never to let the ice supply get out of the vat, as one hot day in summer without ice would have had a bad effect on sweet cream.  
 "For winter, I had a place made in the cellar large enough to hold a cream vat. The window in the cellar was kept open, except in very cold weather, and I always had either ice or snow in the cream vat. I never add hot cream to cold; I always let it get chilled before putting together. In the 14 years that I have been shipping to the City Dairy Company, the cans came back perfectly clean and sweet, but I never put cream in to ship again without scalding the cans. My separator and milk vessels are on a rack at the south side of the house in the sun all days in summer. If the fable is looked after in winter and during the summer, in addition to the foregoing simple rules, it is impossible for cream to get sour."

For some years previous to the introduction of the rennet extract cheesemakers were able to secure what was known in the trade as Bavarian "rennets." These were calves' stomachs that had been carefully prepared and dried so they could be kept without deterioration for some time. In still earlier days it was the practice to secure the calves' stomachs from the farmers supplying milk to the factory. Indeed at one time, in some districts at least, it was the rule that each patron had to furnish the cheesemaker, gratis, with as many calves' stomachs or "rennets" as he had calves in his herd. If some of the calves were raised it was necessary to secure as many stomachs from some farmer who was not sending milk to a factory.

I do not know of any better educator than the sediment test. It disgusts a patron, when he sees the cotton disc containing the dirt from just one pint of his milk to think that he is sending in such milk to the factory. Barr, Chief of the Dairy Division,

**FRIDAY JAN. 13th**  
**FRIDAY JUNE 13th**  
 These dates mean nothing to a "NEW-WAY" customer, because it "Goes and Goes Right" the year round. No hoodoo days—no water to freeze—cannot overhear—guaranteed for life.

**Guaranteed for Life**  
 House of Refuge, L'Original, Ont. Dear Sir—  
 In reference to the two "NEW-WAY" engines which we purchased through your local agent, Mr. Howard Durant, of Vankloft Hill, we wish to say that we are right pleased with both of these engines. Our first "NEW-WAY" engine was purchased about Feb. 26th, 1914, and has run half of each day every day since then, pumping all the water used in the inmates and several attendants. This engine has also been used for cutting corn, cutting lumber, wood, etc.  
 After that engine that we purchased the first "NEW-WAY" we also purchased a water-cooled engine for use in the laundry, but as we had frequent trouble with it we finally replaced this water-cooled engine with second "NEW-WAY" direct-cooled engine, which has been running a large power washer two days of the week for every week. We find the "NEW-WAY" requires very little attention, and runs the best of the year, and the warmest days in summer. We would not think of buying any engine other than the direct-cooled "NEW-WAY." (Signed)  
 SISTER ST. FELIX DE VALOIS, Superintendent.  
 All sizes 1 to 12 H.P. at reasonable prices and for our handomely illustrated catalog No. 43.  
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 4 Champion Anvil, 100 lb. weight, with die.  
 5 Blue Smith Hammer, 1 Parriers Hammer.  
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 HOLSTEIN  
**T**HE Holstein-Friesian Cattle Show will be held at the Farmers' Hall, of Yongo, February 13th. The Executive Committee of the Ontario Holstein Station.

Members of the Holstein Station. All the secretaries be properly the members of the annual and in the proper order to give records.

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HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the leading journal of dairying in Canada. The great majority of the members of the Canadian Holstein-Friesian Association are readers of this paper. Members of the Association are invited to send their notices to Holstein breeders for publication in this column.

HOLSTEIN-FRIESIAN ASSOCIATION OF CANADA

THE 3rd annual meeting of the Holstein-Friesian Association of Canada will be held in the Canadian Foresters' Hall, 22 College Street, (near corner of Yonge), Toronto, Ont., on Thursday, February 16, at 5.30 a.m.

The Executive Committee will meet on Wednesday, Feb. 2, 1916, at 9.30 a.m. in the Oak-Rite Hotel, opposite the Union Station.

Members of the Association are reminded that the annual due of \$1.00 is payable to the secretary's office, so that they may be properly credited and receipt sent to the remitter. Payment of dues, etc., at the annual meeting takes up valuable time and in the rush it is difficult to keep a proper record of all amounts received and to give receipts for same.

Notices of Motion. Mr. J. W. Richardson gives notice that he will move to amend Article VI, Section 4 of the Constitution and By-laws by striking out the last sentence and substituting therefor the following:

- To be eligible for registry, all animals must be black and white in color. Animals showing the markings hereafter specified shall not be accepted for registry: (1) Solid black. (2) Solid white. (3) Black with. (4) Solid black with white on belly only, extending to knees and hocks. Four inches or more marked will debar from registry. (5) Black on legs beginning at feet and extending to knees and hocks with white interspersed. One leg so marked will debar from registry. (6) Gray, or mixed black and white, generally prevailing. (7) Patches of other colors than black and white; red, brown, dun, etc. (8) Red and white.

Mr. F. R. Malloy gives notice that he will move to amend the Record of Merit rules by cancelling the first three paragraphs of the rule entitled "Confirming a Record" and substituting therefor the following:

In case a test above normal is reported, the secretary shall have authority to decide if a retest is necessary. If deemed advisable he shall immediately arrange to send another supervisor to conduct a new test, which shall extend for a period of at least 24 hours. The expense of such a retest shall be borne by the Association.

Records of more than fifteen pounds of butter-fat by junior two-year-olds, seventeen pounds by senior two-year-olds, eighteen pounds by junior three-year-olds, twenty pounds by senior three-year-olds, twenty-two pounds by four-year-olds, twenty-two pounds by senior four-year-olds, and twenty-four pounds by mature cows shall be considered above normal and shall be subject to a retest. In case a retest is ordered and not made, the record shall not be entered unless approved by the Executive Committee of the Association.

If during any official test a supervisor finds that the animal is producing butter-fat at a rate exceeding the standard for age, he shall immediately report the facts to the Secretary by wire or registration and shall continue to report until every second day, until such time as another supervisor arrives to conduct a retest, or until notified by the secretary that a retest will not be necessary.

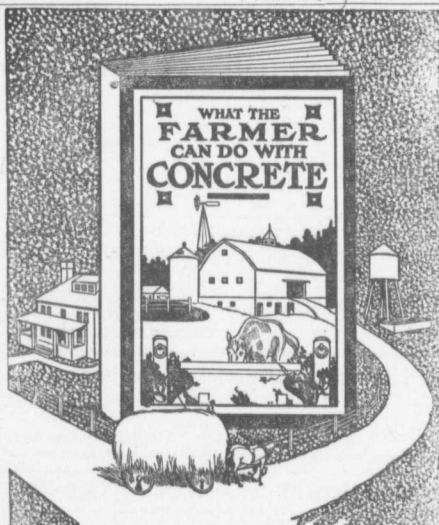
The Annual Banquet. The eighth annual banquet of the Holstein-Friesian Association of Canada will be held on Wednesday, Feb. 2, 1916, at 5.30 p.m., at the Oak-Rite Hotel, Toronto, Ont.

have an idea of the number to prepare for. Tickets \$1.00 per plate. Breeders attending the annual meeting will be able to obtain Single Fare on the Grand St. Lawrence Express. An Agent for the ticket agent for a Standard Certificate to attend the Live Stock Meetings, and make sure the same is procured in time. No certificates will be issued with tickets costing less than fifty cents. These certificates must be valid for a stay of six or at Toronto for which a fee of 50 cents, and for the same length of stay at Port William and points east will be from Jan. 27 to Feb. 4 inclusive, and properly valid certificates will be announced later in the agricultural press. W. A. CLEMONS, Secretary.

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS FROM DECEMBER 13 TO DECEMBER 13

- 1. Angus Patriot Johanna, 9657, 6y. 3m. 154.1; 655.3 lbs. milk, 24.54 lbs. fat, 30.69 lbs. 80 per cent. butter.—Gordon B. Goodham, Clarksburg. 2. Isabel Pontiac Lynn, 15489, 6y. 7m. 10d.; 367.0 lbs. milk, 23.71 lbs. fat, 26.94 lbs. butter.—August Bros., Selwyn, Ont. 3. Evergreen March 3rd, 12659, 5y. 9m. 13d.; 569.5 lbs. milk, 20.34 lbs. fat, 28.31 lbs. butter. 14-day record, 5y. 9m. 13d.; 1119.0 lbs. milk, 39.19 lbs. fat, 41.99 lbs. butter.—Director Experimental Farms, Ottawa. 4. Koba De Kol, 20675, 6y. 6m. 5d.; 587.5 lbs. milk, 23.79 lbs. fat, 24.74 lbs. butter. 21-day record, 6y. 6m. 5d.; 1623.9 lbs. milk, 53.71 lbs. fat, 69.54 lbs. butter.—Colony Farm, Escondido, B. O. 5. Laura Mercena Teako, 15660, 5y. 6m. 13d.; 494.3 lbs. milk, 18.43 lbs. fat, 23.05 lbs. butter.—Alcock Bros., Ottawa. 6. Lady Carmen Pontiac, 15687, 5y. 8m. 13d.; 533.1 lbs. milk, 17.69 lbs. fat, 21.61 lbs. butter.—Dr. de la Harwood, Vaudreuil, Que. 7. Boutaje De Boer Poest, 15341, 6y. 6m. 24d.; 595.5 lbs. milk, 18.08 lbs. fat, 21.10 lbs. butter. 32-day record, 6y. 6m. 24d.; 2102.5 lbs. milk, 68.61 lbs. fat, 85.77 lbs. butter.—Director Experimental Farms, Ottawa. 8. Lady Jane of Buraraas 2nd, 2617, 7y. 6m. 8d.; 525.5 lbs. milk, 16.96 lbs. fat, 21.30 lbs. butter. 14-day record, 7y. 6m. 8d.; 2145.5 lbs. milk, 66.36 lbs. fat, 82.96 lbs. butter.—Dir. Exp. Farms, Ottawa. 9. Hill-Crest Hengerveld, 15335, 5y. 8m. 29d.; 523.1 lbs. milk, 15.13 lbs. fat, 20.17 lbs. butter.—G. A. Brethen, Norwood. 10. Marguerite Brook De Kol, 15133, 5y. 5m. 9d.; 375.3 lbs. milk, 16.01 lbs. fat, 20.01 lbs. butter.—Hayley Bros., Springfield. 11. Snowflake Lillian, 9953, 3y. 1m. 8d.; 409.9 lbs. milk, 24.50 lbs. fat, 21.13 lbs. butter.—Alcock Bros., Ottawa. 12. Queen's Snowball, 2666, 13y. 6m. 16d.; 327.3 lbs. milk, 14.44 lbs. fat, 15.06 lbs. butter.—William H. Gough, Bloomfield. Senior Four-Year-Class. 1. Inaitha Jew Francy, 17459, 4y. 10m. 3d.; 463.9 lbs. milk, 16.61 lbs. fat, 23.26 lbs. butter.—James Rottin, Burgessville. 2. Lakewier Bather 2nd, 15738, 4y. 7m. 20d.; 383.8 lbs. milk, 14.07 lbs. fat, 17.59 lbs. butter.—Lakewier Farm, Bronte. 3. Phyllis Jew Francy, 17459, 4y. 10m. 3d.; 430.7 lbs. milk, 13.33 lbs. fat, 16.69 lbs. butter. 14-day record, 4y. 7m. 26d.; 569.9 lbs. milk, 20.83 lbs. fat, 24.84 lbs. butter.—Sherrill Ringwood. 4. Falwee Koryndie Boon Johanna, 15-628, 30-day record, 4y. 7m. 26d.; 2145.4 lbs. milk, 67.47 lbs. fat, 109.25 lbs. butter.—Dr. de la Harwood, Vaudreuil, Que. Jr. Four-Year-Class. 1. Gracie Mercedes Springbank, 21224, 4y. 6m. 17d.; 429.2 lbs. milk, 15.78 lbs. fat, 23.25 lbs. butter.—T. H. Dent & Son, Woodstock. 2. Coronation De Kol Eolpise, 19566, 4y. 6m. 29d.; 383.1 lbs. milk, 14.78 lbs. fat, 19.94 lbs. butter.—O. B. Bonisteel, Belleville. 3. Nancy Burton, 21224, 4y. 11m. 24d.; 506.9 lbs. milk, 17.55 lbs. fat, 21.90 lbs. butter.—M. W. Lee, Tracy, Ont. 4. Bonnie Belle Hanke, 19081, 3y. 6m. 6d.; 427.4 lbs. milk, 17.36 lbs. fat, 21.69 lbs. butter.—F. W. Lee, Tracy, Ont. 5. Butter King's Dairy, 22233, 3y. 8m. 30d.; 385.6 lbs. milk, 13.96 lbs. fat, 15.07 lbs. butter.—W. J. Taylor, Stager & Son, St. George. Jr. Three-Year-Class. 1. Veeman Lady Harter, 2974, 3y. 4m. 16d.; 373.5 lbs. milk, 15.52 lbs. fat, 19.03 lbs. butter.—N. S. Bender, Tavistock. 2. Veeman Beauty Queen, 2473, 3y. 6m. 0d.; 366.7 lbs. milk, 13.05 lbs. fat, 16.32 lbs. butter.—N. S. Bender. 3. Adeline De Kol Springbank 2nd, 21-

- 625, 3y. 9m. 29d.; 302.2 lbs. milk, 11.35 lbs. fat, 14.30 lbs. butter.—T. H. Dent & Son, Woodstock. Sr. Two-Year-Class. 1. Manor P. H. Lady, 20804, 3y. 7m. 29d.; 407.7 lbs. milk, 15.28 lbs. fat, 20.35 lbs. butter.—Gordon S. Gooderham. 2. Manor P. H. Gem, 2005, 3y. 8m. 4d.; 417.9 lbs. milk, 15.09 lbs. fat, 19.61 lbs. butter.—Gordon S. Gooderham. 3. Het Loo Boon, 26785, 2y. 6m. 21d.; 447.4 lbs. milk, 14.70 lbs. fat, 18.30 lbs. butter.—Dr. de la Harwood. 4. Princess Dixie Pontiac, 29173, 2y. 9m. 24d.; 343.0 lbs. milk, 11.20 lbs. fat, 15.01 lbs. butter. 14-day record, 2y. 9m. 29d.; 606.5 lbs. milk, 23.53 lbs. fat, 28.49 lbs. butter.—Daniel B. Tracy, Gohburg. 5. Colandia Vahan, 23336, 2y. 10m. 24d.; 372.6 lbs. milk, 12.33 lbs. fat, 15.42 lbs. butter.—Jacob Leussler, Bright. 6. Sadie Boets Korndyke, 23366, 2y. 9m. 20d.; 456.1 lbs. milk, 12.23 lbs. fat, 15.29 lbs. butter. 14-day record, 2y. 9m. 30d.; 668.2 lbs. milk, 33.11 lbs. fat, 28.89 lbs. butter.—Daniel B. Tracy. 7. Olive Francy Schilling, 24269, 2y. 8m. 15d.; 267.7 lbs. milk, 11.83 lbs. fat, 14.93 lbs. butter.—James Rottin, Burgessville. 8. Floesie Hengerveld 2nd, 23301, 2y. 11m.



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## The Primrose



### A "One-Adjustment" Cream Separator

BEFORE the Primrose came, cream separators were machines of many gears and bearings, requiring all sorts of adjustments all the time. If you ever owned one, you know what that means. It was tighten this, and move that—adjustments that you never felt quite safe in making yourself. You knew you were losing cream, but couldn't help it, and you found even a wasteful separator much better than hand skimming.

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Ask the Deering local agent, who sells Primrose cream separators, to show you this machine that anyone can keep in perfect working condition all the time, or, write us at the nearest branch house for complete information. If you're going to buy a separator, you'll never regret the time you spend studying the Primrose.

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## Sydney Basic Slag

Should Be Applied To All Grass Lands

In Pamphlet No. 31, just issued by the Board of Agriculture for Scotland, the following recommendation is given to all farmers:

**That BASIC SLAG should be much more generally used for the Improvement of Grass Lands**

Testimony was borne by many practical witnesses to the increased numbers and improved quality of the stock that could be carried after the application of Slag to old grass and hill pastures, and the Board have no hesitation in recommending very strongly that farmers should greatly increase their use of this fertilizer. In order to produce a sufficient effect on 1916 pasture Sydney Basic Slag should be applied at the earliest possible moment.

For Further Particulars write to:

**The Cross Fertilizer Co. Ltd.**  
SYDNEY, NOVA SCOTIA

## IMPORTANT ANNOUNCEMENT

—REGARDING—

### Our 40 Piece Tea Set



## To Our Women Folks

As stated in our last issue, we have been negotiating with the wholesalers who have been supplying us with our 40-piece tea sets with a view to getting control of the stock of these premiums which they still had on hand. The war has interfered with the trade in semi porcelain and we had expected to hear that the supply was nearing exhaustion. To our surprise we learned that there were

### ONLY 60 SETS LEFT

for us. We at once sent in a covering order reserving them for our women folks, and we are sure that they will not be slow in availing themselves of this last great opportunity of securing this premium. Our 40-piece tea set has proved to be so popular with our women readers that we are sure that when they hear that the supply is so nearly exhausted that the balance will

### Go Like Hot Cakes

and it will only be a short time until we have to drop this popular premium. We are sorry to have to do this, for in the past two years several hundreds of them have been won by our Women Folks and we have received hundreds of letters expressing the surprise and delight of those who have secured them. However, we shall have to bow to the inevitable, and while the supply lasts our motto will be

### First Come—First Served

The set consists of 40 pieces; is in semi porcelain and is decorated with a gold band. It consists of 12 cups and saucers, twelve tea plates, two cake plates, one cream jug and a slop bowl.

Call up your neighbors over the telephone, get four of them to subscribe to Farm and Dairy at \$1.00 each, and we shall order one of the tea sets for you as soon as we receive the subscriptions.

Circulation Department

Farm and Dairy - Peterboro, Ont.