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# FARM AND DAIRY

AND  
RURAL HOME

PETERBORO, ONT.

FEBRUARY 18 1909



### A SUGAR CAMP SOON TO BE A SCENE OF ACTIVITY

The history of the maple sugar making industry in Canada has been one of steady advancement. From the crude methods employed by the Indians of old have been evolved the present day evaporator, tin buckets, and spouts, and the modern means of keeping the products of the maple pure and clean. The industry has lost most of its old-time romance and is now one of the profitable side-lines on many Ontario and Quebec farms, and in the Maritime Provinces as well. Read the article on page 3, written by Mr. G. A. Cottingham, of Chateauguay Co., Que., whose sugar camp appears in the illustration.

DEVOTED TO  
BETTER FARMING AND  
CANADIAN COUNTRY LIFE

# Tried - Convicted - Sentenced

AT THE COURT OF APPROVAL  
JUDGE PUBLIC Presiding

## The Trial

After a jury of honorable dairymen, citizens of our own country, men that some of you know, were selected, the counsel for the defendant asked to have the evidence of a large number of dairymen and their wives given to the jury. Judge Public consented. The placing of this evidence before the jury took considerable of the Court's time. After the counsel for the plaintiff had addressed the jury, they retired, and after due deliberation, brought in the following verdict, in which the judge heartily concurred.

**FIRST**—That the defendant was in no way responsible for the damage done to the reputation of the plaintiff.

**SECOND**—That the damages were caused by the extravagant claims made by the agents of the plaintiff.

**THIRD**—That the agents for LINK-BLADE Cream Separators have always told the truth and that the evidence shows that this is the only separator made, that does all that is claimed for it.

**FOURTH**—That false claims made by separator agents about their machines, have caused much damage to the reputations of their firms and no end of trouble to those farmers who purchased the machines.

The jury recommends that in future, persons desiring to purchase cream separators should write to the nearest agent of the LINK-BLADE separator and have a machine sent on free trial, as it is the only sure way of getting the best separator made.

## The Sentence

After the jury returned the verdict, the Judge expressed the opinion that if it were in his power he would sentence every separator agent, guilty of fraud, to a term in prison, and that the dairymen have done right to sentence some separators to the scrap heap for life.

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## Drastic Action About Pedigrees

The directors of the Dominion Swine Breeders' Association recently took decisive action in regard to the state Farm and Dairy, about the business methods of Douglas Thomson of Woodstock, Ont. Our readers will remember that Mr. Parlee, of Lower Millsford, N. B., one of our subscribers last summer that Farm and Dairy some pigs from Mr. Thomson, and that were not as good as he had promised to send and had neglected to send the pedigrees for them. Farm and Dairy endeavored to get Mr. Thomson to send the pedigrees to Mr. Parlee. Mr. Thomson repeatedly promised to do so but the pedigrees were not sent and about a month ago Farm and Dairy published the facts of the case. Later Farm and Dairy called the directors of the Dominion Swine Breeders' Association to deal with the matter. At a meeting of the directors of the association, held in Toronto on Feb. 3, the article that was published in Farm and Dairy was read. The secretary, Mr. A. P. Westervelt, read, also some correspondence that he had had with a Mr. Mabon, of Manitoba, who claimed that he had bought some pigs from Mr. Thomson and that Mr. Thomson had not sent him their pedigrees. Mr. Westervelt said that he had written to Mr. Thomson about the matter without result.

One of the directors present claimed that he had paid Mr. Thomson \$40.00 for some pigs last summer and that he had not received the pigs although they should have been delivered months ago.

### ACTION TAKEN

The view was freely expressed by the directors of the association that the association should deal with the matter. It was suggested that Mr. Thomson should be written to, but the meeting decided that as Mr. Thomson had paid no attention to the letters sent him by Farm and Dairy, nor to the articles published in the paper, it would be a waste of time to write him again. It was finally determined to refuse Mr. Thomson membership in the Swine Breeders' Association in the National Records until he adjusts satisfactorily the complaints mentioned. In this connection the following resolution was put to the meeting and carried unanimously: That no application for registration of pigs or membership fee be received from Douglas Thomson, of Woodstock, Ont., until such time as he fulfills his agreement with Messrs Parlee and Mabon; and that if any further complaints are proven regarding the business dealings of the record he be refused the privilege of ever again re-entring of the National Live Stock Records, and Mr. Thomson be notified of this action by this association.

## Admires the Percheron

Editor, Farm and Dairy:—In recent issues of your paper, I noted with considerable interest several letters on Percherons vs. Clydesdales. Not having seen anything on this matter lately, I beg to add a few words to what has already been said in favor of the Percheron.

I was particularly taken with what Mr. L. J. Flower, in your January 7th issue had to say of the Clydesdales when he wrote, "The Clydes have here are, to my eye, no beauties. Many of them are short-necked, Roman nosed, and hammer headed." This was been exactly my view of many Clydesdales.

The argument is sometimes advanced that the Percheron is not a horse of robust constitution. Those who argue this point claim that the

Percheron stallions imported into our district some 18 or 20 years ago left very few foals that live to be two years old. If such were the case, it must have been due to the individuals rather than to the breed. It is eminently unfair to rate the Percheron breed from two or three individuals that have chanced to be of weak constitution.

The Clydesdale is the horse for the country gentleman of leisure, one who has made his money and is not so particular about making ends meet, as one who must needs be who is not so well fixed. To some the Clydesdale is a favorite horse else it would not be raised so largely. I find them incapable of enduring hard work day in and day out through all kinds of weather. With the Percheron, one need have no fears of the weather, of the roads, or of the loads, they are asked to haul. It seems to make no difference to them what the conditions are, they are always ready for their work and if needs be they can take their load at a trot.

My experience with the Clydesdale has been quite different. It must be pampered, carefully fed and worked at a slow pace. Give him much fast work with heavy loads and he is done for, as under such conditions he loses flesh rapidly and his condition soon becomes an object of pity. That the hard headed, money making American recognizes the truth of this statement is abundantly proved by the preference of Percherons used as draught animals in American cities. The Clydesdale had his inning at similar work in the past, but he has since been proved to strenuous for him and the noble Percheron stepped up to fill his place.—T. R. James, Middlesex Co., Ont.

## Some Comparisons

Editor Farm and Dairy:—You are treating the hog question seriously, and you are quite justified in so doing. I have been in Holland, Belgium and Germany myself, though never a good many years ago, and lived in perhaps the greatest hog-raising town in England. It would take me one letter to write in course of a speech, but I would ask a few questions and at same time suggest a few of the reasons why we are behind others.

There are several causes which work against Canada. Our wretchedly bad system of banking, the banks here only cater for the man with his thousands, or if the town wants to borrow, the bank is always ready to help them, the ordinary individual is not wanted.

Our very high freight rates, our system of land tenure, our unjust taxation on every improvement we make, our want of confidence in each other are all against us. Why not sell your corn and meal to your Canadian brother instead of sending so much away to Dutchmen? We want more co-operation, and greater facilities for obtaining money. In France the pawn shops are run by the state on profitable lines, and yet only a modest percentage of interest is charged. In England you can get an advance on nearly everything you can name. There are also some companies who advance money for the erection of buildings.

In Germany the railways belong to the government and you can send goods from one end of the country to the other, at the most moderate prices; think of sending a piece of pork or any other produce to Winnipeg for a few cents, or 10 lbs. for \$1. This would not be thought surprising in Germany, yet would surmise of some people here.—David House, Lincoln Co., Ont.

Farm and Dairy is certainly a fine paper and I hope to try and extend its subscription list in this settlement.—W. N. Morley, Strathcona Co., Alta.

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Each Week

# FARM AND DAIRY & RURAL HOME

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a Year

Vol. XXVIII.

FOR WEEK ENDING FEBRUARY 18, 1909.

No. 7

## THE MAPLE SUGAR INDUSTRY OF THE FARM

G. E. Cottingham, Chateauguy County, Que.

An Outline of the Industry, as it Exists To-day in those parts of Canada that Produce the Maple Tree, with Some of its Past History. Modern Methods and Equipment are Necessary in the Manufacture of a First-Class Article

THE Maple industry is an old and long established one. It had its origin with the Aborigines of Canada—the Indians who employed only the most primitive and of course wasteful methods. Later on the early white settlers, copying but improving on the methods of the Indians, began by making use of wooden spouts fashioned to fit the holes that they bored in the trees with an auger. The auger-holes took the place of the gouge in previous use. For receptacles, wooden troughs were roughly gouged out; some nearby basswood or pine trees furnishing the material. These served the purpose fairly well, but when the sun shone strongly on the snow on which they were laid, and melted it, suddenly over they would go, spilling the precious contents on the ground.

The gathering was mostly done by hand or by main strength and when the sap was collected it was boiled into sugar in large iron kettles, strung sometimes three or four on a large pole. On account of the great amount of sparks falling into the boiling contents of these kettles, and the fact that it was boiled altogether in an iron vessel, the result was that the finished product was often of a very dark and uninviting appearance.

As "commercial" sugar was rather a luxury in those days and money was proportionately scarce, the maple product supplied the wants of the settlers very acceptably. But, as those who had been making it in a larger way and who sold their surplus make, began to see the possibility of making their maple bushes a source of profit and an additional revenue to their farms, they began to look about for more improved methods of handling the sap. At this point we notice the passing away of much of the romantic part of the industry, where the young people of the settlement were accustomed to gather around the camp fire and enjoy to the full, the fun of the old-fashioned "sugaring off."

Then came the shanty or camp with its brick or stone arch and chimney and large pans and heaters, buckets of tin hung from metal spouts, more trees being tapped, gathering being done by horse and sleigh, syrup being manufactured as well as sugar. As a ready market was found for the product, the business rapidly grew until now we see in many parts of our country, especially in the Province of Quebec, large sugaring camps where the sap, from in some instances 4,000 to 8,000 trees, is rapidly converted into the delicious sugar and syrup of the most beautiful and attractive appearance and flavor.

This could never have been possible without the advent of the modern and up-to-date evaporators and appliances we now have. The business has lost much of the hard toilsome work as well as

much of the "fun" of the antiquated system of the past generation.

The makers of the improved evaporators have only improved on the plan of the pioneers in the handling of the sap; but it is a vast improvement. In the old way the sap was poured into a kettle at one end of the row and dipped from one to another, gradually becoming stronger as it reached the end of the line. To-day we have tinned spouts, tin buckets, tin gathering tanks, storage tanks of the same material. The sap never touches



An Improved Covered Sap Bucket

Those who have them say that covers for their sap buckets are a valuable and an indispensable part of their equipment. Photo taken on the farm of Mr. Marcus Lee, Westworth Co., Ont.

sap from the time it leaves the tree, the sap coming into the evaporator by the force of gravitation from the storage tank and gradually working its way by means of the same force from one compartment of the machine to another until at the far end of the machine it is finished and drawn off as the pure, beautiful and delicious maple syrup.

Owing to the fact that there is only a comparatively small amount of sap over the fire and that for a short time only, the result is a much superior article both in flavor and in appearance. No farmer who has a maple bush large enough from which to make enough syrup for home use should be without an up-to-date evaporator. Anyone who contemplates fitting up their sugar-bush should

first get in touch with manufacturers of such machines who will gladly furnish them with full details of requirements, estimates of cost, etc. In my own bush, I have installed a 5 x 16 ft. Champion Evaporator, manufactured by the Grimm Mfg. Co. of Montreal, which handles very easily the sap from 1,000 trees and can take care of many more if necessary.

I have tried nearly every kind of spout that I have seen and have satisfied myself that there is none to compare with the improved Grimm No. 2. They will soon pay for themselves in the increased flow of sap. I doubted this until induced to try 900 and thus prove them for myself. I distributed them when tapping all through my bush amongst the others I had been using. I was so thoroughly convinced of the truth of the claims of superiority made by the firm, that the next season I used them to the exclusion of all others. Besides, I never have reamed out the holes as my trees are not the largest and I am always well satisfied with the amount of sap I get from the first boring.

The greatest drawback to the sugaring industry to-day—but one which I am glad to say is being gradually regulated by wise laws—is the adulteration of the pure product which has been largely resorted to by unscrupulous dealers, and I regret to say, in some instances though not to any great extent, by makers.

Maple sugar makers can never hope to compete with other manufacturers of syrup and sugar in the open market nor do they need to do so. Theirs is an altogether different and superior article. It is the maple flavor that people demand and which they ungrudgingly pay for once they are satisfied they are getting a pure and unadulterated article. No one who has a good maple bush need be afraid to fit it up, as the demand for pure syrup always is equal to, if not in excess of, the supply and at fairly remunerative prices.

It costs much more now than of old to produce a gallon of pure maple sugar: fuel, labor, camp and all necessary utensils are so much more expensive. But let a farmer begin right, by purchasing the most approved, up-to-date outfit he can procure, attend strictly to every detail, make a strictly honest article, giving good quality, weight and measure, label his goods to show his customers he is not ashamed to have them know who made it, and that he guarantees the contents to be free from any adulteration whatever and he may feel assured that he will enjoy a ready and increasing demand for all that he can supply.

The total pure maple product at the present time is only some three or four pounds per head of the population. It should be more. As I have already noted, one great drawback to the industry is the amount of "compound" and adulterated stuff put on the market some of which has not a drop of pure maple whatever in it but is flavored with a preparation called "Maple Flavor." With this adulterated article bridled by suitable legislation, the pure maple product as manufactured by modern means in a properly equipped sugar camp would enjoy a wider reputation and be more easily sought for by the consuming public, to the mutual advantage of both producer and consumer.

**Have a System in Horse Breeding\***

John Wardhouse, York Co., Ont.

Our Canadian farmers lack a system of horse breeding. When I was acting as one of the commissioners, who some two years ago, investigated the conditions of horse breeding in Ontario, I found that very few farmers had any definite aim when breeding their mares. It seemed that where a man had a glib tongue he was able to get plenty of work for his stallion even when his stallion was inferior. The farmers showed a tendency to drift around from one type of stallion to another. Thus the colts were not as satisfactory as they might have been had better breeding methods been followed.

Before breeding his mare a farmer should have an ideal in view. As a rule farmers obtain better results from heavy horses. They have not the time that is required to make a success of light horses. Be sure you get the right type of stallion. The mare you breed should be a good animal. Some farmers claim that they cannot afford to keep high-class mares. Farmers can't afford to keep for breeding purposes such mares as are being bred on many Ontario farms.

To ensure success in raising horses it is necessary that both the mare, and the stallion to which she is bred, shall be good animals of the right type. It would pay many farmers to sell their poor mares, add a little to their sale price and purchase better animals. If better animals were bred and more systems followed in breeding the average animal in the country would be worth one third more.

The average farmer should be able to keep two good brood mares. Before breeding them he should look them over carefully. If they are weak in any particular they should be bred to stallions that are strong where they are weak. Should they be slow walkers or have poor action they should be bred to stallions that are fast walkers and that have good action. Farmers should not listen too much to what the stallion owners have



A Good Kind to Own

This prize winning Clydesdale mare shows the quality so much desired in Glydesdales. The property of Donald Gunn & Son, Ontario Co., Ont.

to say. They naturally, are inclined to talk up the good points of their animals and to say as little as possible about their weaknesses. They are many men who travel stallions who know very little about breeding.

Farmers should study out for themselves the type of stallion they desire and not be induced to breed to anything else. It has been advocated that a law should be passed to compel stallion owners to guarantee a certain percentage of colts. It would be difficult to obtain such a law as there is no way of guaranteeing that the mares are sure breeders. It would not do to pass a law to benefit the farmers that would be unjust to the owners of stallions.

\*Report of an address delivered at the Ottawa Winter Fair.

**A Commission Would be Advisable**

W. G. Telford, Peterboro, Ont.

The suggestion offered by Farm and Dairy that a commission composed of practical farmers be sent to Denmark to investigate the conditions of hog raising there is a good one. I have been much interested in the discussion that has since taken place in favor of this scheme.

The methods of raising hogs in other lands should be investigated right from the start of the business. Enquiry could be made into the cost of feeding, the price the feeders get, how the pigs are fed, how they are sold, whether they are graded or not and if so how an honest system of grading is worked out. Another item that would be of great interest to our hog raisers, would be to ascertain as near as possible what margin of profit packers in other countries are making.

A proper system of grading is one of the great needs of the swine industry in Canada. It is by no means fair to pay the same price for all kinds of hogs delivered at the packing house. By such a system, some get too much and others not enough. But do they? Is it not a fact that the man with the inferior hogs gets what they are worth while the man with the hog of first quality gets too little?

The packers lose nothing by grading. They have the home market to fall back on and they make good use of it in disposing of stuff that will not grade the best. They do not export this inferior product. Go to any shop in one of our cities and buy pork and what do we get? We pay from 18c to 25c a lb. for it, that is for the boiled ham, and I am much mistaken if this is not the product of the inferior hogs which would do to ship abroad, and for which the packer pays 35c or 4c a lb. Thus it would seem as though the packer makes a profit on such product in two ways, by paying too little to the producer and by over pricing the consumer. A proper system of grading honestly carried out on right principles would do much for our bacon industry and would encourage our farmers to breed the right type of animal.

The proposed commission, to be sent to Denmark, could investigate many things that would be of value to the hog raisers of this country. Among other things they could find how the producers in Denmark are made to supply their own factory. I understand they are fined if they do not supply their hogs to their own packing house. The whole trouble of the co-operative factories started in Ontario a few years ago, was that the farmers did not support them. The other packing houses combined against the co-operative concerns to put them out of business. We farmers did not recognize the folly of our action at that time, thus we crippled our own co-operative packing industry.

We farmers are inclined to go to extremes, to overdo things. By all means, let us not lose this pork business. There are other lines that we could take up, but we need the pork to fall back on and to keep up the revenue of our farms.

**The Value of Two Cows**

N. S. McLaughlin, Huron Co., Ont.

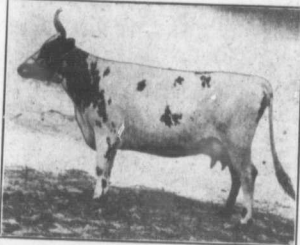
Regarding the discussion invited recently by Farm and Dairy on "How do you value a cow?" the comparison already given of these two cows is very incomplete and misleading, viz.:

COMPARISON OF TWO COWS, SAME HERD (BOBOYGEON)	
TOTAL YIELD OF MILK—SEVEN MONTHS	
The Most Profitable Cow	
Weight of Milk	5695 lbs.
Weight of Fat	185 lbs.
Yield of Cheese	609 lbs.
Value of Milk	\$55.95
Cost of Feed 7 months at \$3	21.00
Profit	\$34.95
The Least Profitable Cow	
Weight of Milk	2790 lbs.
Yield of Fat	110 lbs.

Yield of Cheese	
Yield of Milk	\$72.10
Cost of Feed (7 months at \$3)	21.00
Profit	\$ 6.90

To this should be added, if we are to arrive at anything like a proper conclusion, figures something like the following:

OOW NO. 1	
Am't. to her credit 7 mos.	\$14.95
Probable amt. given, 1,000 lbs. in other 3 mos.	10.50
Probable cost of food in 5 winter mos.	22.50
Net profit 12 mos.	22.95
OOW NO. 2	
Am't. to credit, 7 mos.	\$ 4.90
Probable amt. given, 500 lbs. in 3 mos.	5.00
Probable cost of food, at \$4.50 for 5 winter mos.	22.50
Net loss for 12 mos.	10.60



Matchless Beauty of Nether Lea—1900—Qualified for Advanced Registry with record of 833 lbs. milk; a living proof that beauty and utility can be found in the same animal. Owned by Gus A. Langlier, Stadacona Farm, Quebec Co., Que.

However, this we think a very unfair way of paying for milk, i.e., "pooling" or paying by weight of milk only. If paid for according to fat content with 2 per cent. added to represent the casein value, the result would be somewhat as follows:

OOW NO. 1	
695 lbs. milk, 3.32 per cent. fat.	Value, \$62.32
Cost of Food, 12 mos.	43.50
Net Profit 12 mos.	\$18.82
OOW NO. 2	
320 lbs. Milk, 3.94 per cent. fat.	Value, \$54.60
Cost of Food, 12 mos.	43.50
Net Loss 12 mos.	\$ 8.90

Or, again, if paid for according to butter-fat content alone, which is the only fair way when butter is made, and we believe the most reliable even when cheese is made, the result would be approximately, viz.:

Cow No. 1		Cow No. 2	
% fat.	lbs. fat.	% fat.	lbs. fat.
3.32	230.95	3.94	129.62
Value	\$49.81	Value	\$37.11
Cost of Food 12 mos.	43.50	Cost of Food 12 mos.	43.50
Net Profit 12 mos.	\$16.31	Net Loss 12 mos.	\$ 6.39

It may be shown that 43.50 is too high for cost of food and we believe it is. Where a study of relative values of various goods available is made, feed provided accordingly, and where cows are kept in proper condition the year round, these yields may be obtained at a cost of \$3 a month the year round or \$36 for 12 months. In that case the results would be:

Returns.		Cost of		Profit.	
Cow No. 1	\$49.81	\$36.00	\$13.81	Cow No. 2	\$37.11

As to the value of a cow I have shown cow number 2 to have practically no value in a dairy herd, but rather (excepting under the most favorable conditions) a decided loss. I have done this without any desire to favor one or the other. The figuring out for each of the return of purchase price, with a reasonable amount for interest on investment, risk of loss, etc., is yet to be done. I will



leave this for the present, at least, to those who are in the market to buy or sell, and to those who may follow in this most profitable discussion.

To the Editor of Farm and Dairy I would say that you are doing a most important work in devoting the columns of your paper to such discussions. To the readers of Farm and Dairy I would say let us have a full and free discussion on these topics. I believe from a somewhat long experience in dairying that in cheapening of the cost of production lies our only hope of increasing the profits in this business. We cannot hope for much increase in values of the finished product, neither for the reduction of expenses in the way of manufacture, hauling of the milk, and the marketing of the product.

### Selecting and Cleaning Seed Grain

A. Forster, York Co., Ont.

When we consider the great advantages derived from sowing good, well cleaned seed, of some variety of good reputation, for yield and quality, and one that is suitable to our land, and the purposes for which we wish to use the product, is it not well to procure it before seeding time? We have a good variety that has done well for us, it might not be wise to change, unless we are sure of getting something cleaner and better in other respects. What we have should be cleaned once or twice in the usual way, blowing it quite hard each time. We will thus take out most of the light grain and weed seeds. Then put it through a coarse screen (if for oats say a fall wheat screen) turn slower and give plenty of shake so that we may take out more of the small grains even if the screenings taken out should be 20 per cent, it will be all the better. The larger weed seeds also will then have a chance to go into the screen box.

If we have not already such seed as we desire to sow would it not be well to find out where it may be had, at a reasonable price? It is well to secure your seed in good time, either from a neighbor who can be depended on, some brother farmer who has taken the pains to improve the seed he offers for sale in one or more of our reliable farm journals, or from some responsible seed merchant.

We should never be led away by sensational reports of some so-called new varieties that wonderful yields and great quality are claimed for, by the promoter (a man from Idaho most likely) as in the case of "Polish or Corn Wheat." When enquired into it was found that the same variety had been grown for several years at the O.A.C., Guelph, and it had given a small yield of poor quality. The Alaska wheat is another example. It proved to be of the same variety as the seven-headed wheat now grown at the college. Some of the elder people will remember the "Eldorado Wheat" boom of some twenty-five or thirty years ago when so many farmers lost heavily, for the wheat, although a fair yielder, was of poor quality and so soft in the straw that it could not well be harvested.

Having secured the variety that we think will suit us, we should procure enough to sow at least two acres or more if we have a suitable field for it. We will generally have no trouble to dispose of all we have to spare the next season at a good price.

In selecting oats we should bear in mind that the heaviest varieties are often not the best, for it is their formation rather than their good qualities that causes some varieties to be heavy. After many years of experience at the O.A.C., Guelph, the conclusion arrived at, was that in most cases those varieties that are the heaviest, are the poorest yielders, and are the thickest in the hull, particularly so with the white varieties. This coming season let us put into practice the principals of seed selection that we know to be the best, but may have neglected in the past.

### Dairymen Need Ice

The milking of cows is regarded as a necessary operation by every dairyman. Storing ice should be looked upon as equally necessary. Many regard it as such, but, unfortunately, there are a few who either are not conversant with its advantages or cannot be "bothered" doing it. Such men as these are holding down the standard of Canadian dairy products.

To milk a good cow twice or three times a day is not considered a trouble, it is a part of the dairymen's daily routine. The abandonment of this operation would effectively block all revenues from the dairy farm. Negligence in the matter of providing cooling facilities for the hot summer months will not eliminate the revenue from the dairy but it will greatly lessen it. Proper cooling insures a better quality of milk, consequently superior cheese and butter which will bring a higher price than milk not cooled. And, unfortunately, not only the negligent dairymen suffers but every dairymen suffers by reason of his brothers' sins of omission.

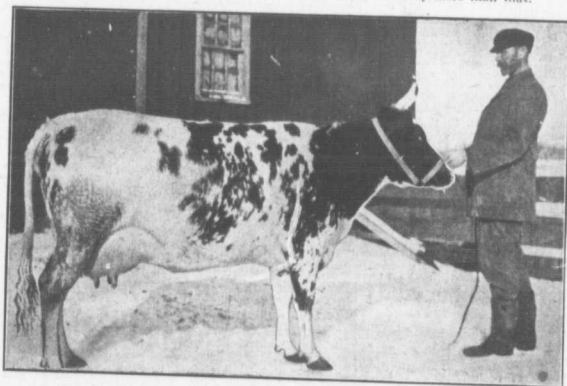
The two chief essentials in the production and care of milk are *cleanliness* and *cold*. The practice of storing ice is advocated here simply because the factors, cleanliness and cold, are not in evidence on every dairy farm. Milk as it comes from the cow is pure, containing only those bacteria that are natural to it. These and the foreign

The use of ice improves the quality of the milk. But it has other advantages. The farmer has need for a refrigerator in his house just as much as his urban brother. The housewife requires facilities for preserving meat, vegetables and so forth. She might want to prepare a dish of ice cream or other delicacy to set before her husband after a hard day's work. These and many other things are made possible through the storing of ice. But don't forget the main feature. It enables you to keep the milk cold, thereby influencing the quality and price of the product made therefrom. —S. H., Middlesex Co., Ont.

### A Rich Cream the Most Profitable\*

James Stonehouse, Kingston Dairy School

Patrons should endeavor to send a rich cream to the creamery. It should test not less than 35 per cent. There are three reasons for this: 1st. More butter can be made from a pound of fat in a rich cream than can be made from a pound of fat in a thin cream; 2nd, a rich cream under similar conditions will always reach the creamery in better shape and with a better flavor than will a thin cream. It is the serum or skim-milk in the cream that sours and goes off in flavor. Therefore, the less we have in the cream, the better the flavor will usually be. 3rd. Skim-milk is estimated to be worth at least 25c a cwt. for feeding purposes; and some say more than that.



Another of the Working Kind That Has Qualified

Adalia 2nd, shown in the illustration, gave in the Record of Performance Test a year ago, 924 lbs. of milk, thereby standing first in her class. She dropped her second calf on Feb. 19, 1905, and gave in the month of March 1655 lbs. of milk. She is owned by Mr. Emerson Colborn, of Middlesex Co., Ont.

germs that gain access to the milk after it is drawn and in proportion to the way it is handled, are inhibited in growth by proper cooling. Our best farmers realize the need for storing a supply of ice that they may have a means of cooling their milk in the hot summer months.

The expense incurred is no justification for dairymen not harvesting ice. The cost of storing 10 tons of ice is about as follows: Cutting, \$2.50; hauling two or three miles, man and team, two days, \$8.00; packing, one man part of two days, \$2.00; sawdust, including drawing, \$2.50 (good for several years); total, \$15.00, or about \$2 a cow. When the ice and sawdust can be secured nearer to the dairy, the cost would be lessened considerably. This cost is very inconsiderable, when the monetary benefits that result from the work are recognized.

The storing of ice is an important operation. Much ice is wasted through not being properly stored. Thirty tons of ice would require about 1,000 cubic feet of space—allowing for waste. It should be packed carefully, the spaces between the cakes filled with broken ice, or preferably snow, and a space a foot wide between the ice and building packed with sawdust.

In 100 lbs. of cream testing 20 per cent. fat and we have 80 lbs. of buttermilk and 20 lbs. of fat. Now 57 lbs. of a 35 per cent. cream will give the same amount of fat and only 37 lbs. buttermilk, making a difference of 43 lbs. of skim-milk which is worth anywhere from 10c to 15c if kept at home; besides the cream is better without it and under proper conditions more butter will be made from the 57 lbs. of rich cream.

Many people have fallen into the habit of neglecting to wash their separators after each milking. The first milk and cream which runs through an unwashed separator is heavily seeded with the putrefactive germs which have been breeding and multiplying in the separator since the previous skimming.

Cream must be well cooled after skimming before adding to the older cream if we are to have a good flavor. If all cream could be kept at a temperature of 50 degrees F. until called for, it would add thousands of dollars to the value of the butter produced in Ontario. It could easily be done if farmers would only prepare for it.

\*Extract from an address delivered at the annual meeting of the patrons of the Harwood, Ont., creamery.



certained by measurement. Of well settled timothy hay it takes about 350 cu. ft. to make a ton, partly settled from 400 to 450 cu. ft., while of new hay it takes 600 cu. ft. and over. Thus a mow 20 ft. square by 14 ft. high, at 350 cu. ft. to a ton, would be 20 x 20 x 14 equals 5,600 cu. ft.; 5,600 divided by 350 equals 16 tons of hay in that particular mow.

**The Feeders' Corner**

The Feeders' Corner is for the use of our subscribers. Any interested are invited to ask questions, or send items of interest. All questions will receive prompt attention.

**Ration for Freshening Cows**

Will you suggest a proper ration to feed cows freshening now. For the first two weeks I usually feed roots and a little bran, but I would like to see a proper ration for a dairy cow in full flow come composed of corn meal at \$30 a ton, bran at \$23 a ton, cottonseed meal at \$35 a ton, testing from 41 to 43 percent, and living linseed oil meal at \$36 a ton.—G. P. E., Dunham, Que.

For cows in full milk I would suggest the ration described below, cows to go on full feed not earlier than two and a half or three weeks after calving.

If roots can be fed, and along with them clover hay and straw for roughage, then one pound of the following mixture for each four or five lbs. of milk produced, would be satisfactory and profitable.

Bran ..... 400 lbs.  
Corn meal ..... 100 lbs.  
Cottonseed meal ..... 150 lbs.  
Oil cake meal ..... 150 lbs.  
Crushed oats ..... 100 lbs.  
Where corn ensilage is fed instead of roots, then I would suggest the following mixture, fed at the same rate as above:

Bran ..... 500 lbs.  
Corn ..... 300 lbs.  
Oil cake meal ..... 200 lbs.  
Crushed oats ..... 100 lbs.  
If neither corn or roots are available, then I would suggest a rather more liberal amount of the following meal mixture:

Bran ..... 600 lbs.  
Corn ..... 200 lbs.  
Oil cake meal ..... 300 lbs.  
Cottonseed meal ..... 150 lbs.  
Oats crushed ..... 100 lbs.  
I suggest the oats in each case on account of their peculiar palatability. They are not, so far as chemical analysis shows, such cheap food as some of the others mentioned, but they are particularly acceptable to dairy cows and cause them to eat their ration more readily.—J. H. Grisdale, Agriculturist, C. E. F., Ottawa.

**Feeding for Cream Production**

Editor, Farm and Dairy:—For nine years I have sent milk to cheese factories. After a creamery was started in the neighborhood, I changed over, sending the cream to the creamery. For the first ten months at the creamery I had seven cows. To see how it was paying, I figured it up. The result was \$327.75 for the first ten months from the seven cows. I was far better satisfied with the creamery than with the cheese factory, and now I have the milk for the calves and the pigs.

I always stable my cows as early in the fall as chilly weather arrives. As I have no silo, I will explain how I feed my cows during the winter. I feed clover hay, pulped turnips and mangels and grain. I furnish the cows lots of salt and clean fresh water to drink. My stable is well ventilated and I clean it twice a day. I am now feeding corn fodder and is ahead of roots for producing cream. I keep from 10 to 12 cows, having them freshen, some in the spring and

some in fall.—George Wright, Ontario Co., Ont.

**What Milk Contains**

The matter of feeding cows is well suggested in the following from bulletin 22 of the Department of Agriculture. It says:

The milk contains water, fat, protein (casein, or curd), sugar, and ash and these are all made from the constituents of the food. If sufficient protein fat, and carbohydrates are not contained in the food given her, the cow supplies this deficiency for a time by drawing on her own body, and gradually begins to shrink in quantity and quality of milk, or both. The stingy feeder cheats himself as well as the cow. She may suffer from hunger, but she also becomes poor and does not yield the milk and butter she should. Her milk glands are a wonderful machine, but they can not make milk casein (curd) out of the constituents in coarse, unappetizing, indigestible swale hay or sawdust any more than the farmer himself can make butter from skim milk.

The cow must not only have a generous supply of good food, but it must contain sufficient amounts of the nutrients needed for making milk. Until this fact is understood and appreciated, successful, profitable dairying is an illusion of the question. Many forcible illustrations of its truthfulness have been furnished by the agricultural experiment stations.

**Our Veterinary Adviser**

**WORMS IN CATTLE**—My Jersey heifer, two and a half years old, has worms. How can I rid her of them?—Ilex, Halton Co., Ont.

Take two oz. each of sulphate of iron, sulphate of copper, tartar emetic and calomel; mix and make into 24 powders. Give a powder every night and morning. In eight to ten hours after the last powder has been taken give a purgative of one lb. Epsom salt and one oz. ginger.

**INDURATED UDDER AND TEAT**—Cow had a sore teat last spring. The milk in this quarter became lumpy, but it milked all right. She's dry now and will be due to calve in April. The point of the teat and the quarter above the teat

are hard. How can I remove this hardness and prevent chunky milk?—F. B., Welland Co., Ont.

This hardening is very hard to remove. Make an ointment of two drams each of iodine and iodide of potassium mixed with two oz. vaseline. Rub the hardened parts well

with this once daily. The curdling of the milk is due to inflammation in the quarter and all that you can do to prevent it is to take good care of the cow and milk regularly. If milk cannot be drawn from the teat after calving, you will have to get your veterinarian to operate.

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An Absolutely Free Hair Counting Contest Without Money or Purchase Consideration And Open To ANY Farmer, Stockman or Poultry Breeder. Count the number of hairs drawn in a picture of "Forest Patch" bred by Dan Patch, dam of a photo engraving of "Forest Patch," the fine Registered Stallion to be given away and you will want to count the hairs on this splendid \$5,000 Dan Patch Stallion because it means a small fortune free for someone. We paid \$20,000 for Dan Patch and have been offered \$20,000 for him. You may secure this \$5,000 Dan Patch Stallion Absolutely Free. "Forest Patch" might make you a fortune of \$25,000 to \$50,000 at a single race for any county because he will make \$1,000.00, stallion with great style.

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**HORTICULTURE**

**Short Courses in Fruit Growing**

A. J. Logan, O. A. C., Guelph

The second week of the short course in fruit growing at the Ontario Agricultural College began on Monday, Feb. 1st, and was in no way less interesting than that of the previous week.

Monday afternoon was devoted to a lecture and discussion of the injurious insects of fruits. Mr. T. D. Jarvis gave a short illustrated lecture showing the differences between the two great classes of insects, namely those that feed by chewing or biting their food, and those that feed by sucking the juices of plants or trees. He clearly illustrated the impracticability of trying to destroy the latter forms by poisoning the food upon which they subsist with such insecticides as Bordeaux mixture. The latter forms could only be destroyed by applying some substance that would kill them when it came into actual contact with their bodies. Such an insecticide we have in the lime-sulphur spray. Mr. L. Caesar as also the entomological department then briefly discussed the best methods of dealing with many of the most injurious insects to fruit; from this discussion, much valuable information was obtained.

**SPRAYING**

Tuesday was devoted to a general conference on the preparation and application of spraying materials. Bordeaux mixture was made up in barrel lot and its physical properties determined. Lime-sulphur was next made up in the following ways: 15 lbs. of sulphur, 20 lbs. of lime and 15 gallons of water was steam boiled for one hour then made up to 40 gallons; 15 lbs. of sulphur, 15 lbs. of lime and 15 gallons of water was boiled for one hour and made up to 40 gallons; and lastly 15 lbs. of sulphur was made into a paste and then mixed with 20 lbs. of unslacked lime over which two gallons of hot water was poured, this was then

allowed to self boil for 40 minutes. A chemical analysis was made of these three combinations and it was found that the 15-20 formula contained about 13 per cent of calcium sulphide, the 15-15 formula contained about 12 per cent, and the self boiled under 2 per cent.

From these figures it will be seen that the two stemmed boiled sprays were considerably stronger than the self-boiled, but the self-boiled it has been shown is much less liable to injure foliage and serves splendidly as a summer spray.

Professor John Craig, of Cornell University, N. Y., gave a most interesting lecture on the methods of apple-growing in British Columbia, and the states of Washington and Oregon. He brought with him a new series of lantern slides by means of which he was able to illustrate the thorough and careful methods of the westerners in handling their fruit. The thinning of fruit on the trees, close grading, neat box packing being universal practices amongst them.

**THINNING FRUIT ON TREES**

Mr. J. Gilbertson, of Simcoe, gave a short address on the subject of thinning apples. The reasons he gives for thinning apples are as follows: 1st, it will give a good uniform grade of fruit; 2nd, it prevents the trees from bearing an overload of fruit, only half of which will fully mature, and thus much nourishment is lost both to the tree and fruit; 3rd, it encourages the formation of fruit buds by avoiding exhaustion, thus obtaining regular crops each year; 4th, because the greater facility of harvesting fruit that has been thinned will pay entirely for the cost of thinning; 5th, because the fruit thus harvested will run about 85 per cent. first class. Mr. Gilbertson gave an instance of some Spy trees which he had thinned from which he picked 250 barrels, and of this number only 7 per cent. were seconds; that is an average of 93 per cent. firsts.

Mr. W. H. French, of Oshawa, supported the statements by some work he himself had carried on in this line. He found that 1/2 cent him about 5 cents a barrel to thin his fruit and only 20 cents to pick and pack a bar-

rel of thinned fruit, whereas it had formerly cost him 30 to 35 cents a barrel just to pick and pack. Apart from this fact he now obtained a higher average grade of fruit throughout.

**SHIPPING APPLES**

Professor Reynolds, of the O. A. C., gave an interesting account of experiments that had been carried on, in the long distance shipment of tender fruits; experimental carloads of tender fruits were originally sent from Grimsby and St. Catharines. The St. Catharines Cold Storage and Forwarding Co., have since then developed a large business with the growers and placed in freshly iced refrigerator cars, and sent direct to its destination, where it arrives in excellent condition.

**PACKING APPLES**

On Thursday, a demonstration was given in the correct and improper methods of packing apples. Mr. McNeil assisted by Messrs Thompson, Johnson and Kerry, gave to all present a most instructive afternoon. Mr. McNeil advocated the box method of packing; but he contended that if boxes were used, grading would have to be done more carefully, and it was necessary to pack a box from bottom to top, not treat as barrel, and just "head" and "tail" it, letting the fruit in the middle "pack itself."

Mr. McNeil gave many illustrations of the fact that boxed apples shipped better, sold more readily, and procured better prices; but he said he did not advise old barrel packers to take to boxes, for it seemed beyond the capabilities of most men accustomed to the use of barrels to get into the way of handling boxes correctly.

**CO-OPERATION**

On Friday a conference was held on the subject of "Co-operation." The following well-known men were present: Messrs. J. E. Johnson, Simcoe; P. Thompson, St. Catharines; D. Johnson, Forest; A. W. Peart, Burlington; Elmer Lick, Oshawa; each briefly giving the history and development of their several associations.

The Assistant Provincial Secretary explained most clearly the advantages to fruit-growers availing themselves of



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the new Act dealing with Companies and Associations. He pointed out the fact that an association could be legally incorporated without the necessity of issuing shares, which often remained a drag on such an organization and hindered its future development. If money was required it could be obtained by issuing debentures which would enable the debts thus incurred to be paid off.

The short course in fruit growing at the O. A. C., was one of great value to all fruit men, especially to those of this province, and much credit is due to Mr. Crow, of the horticultural department.

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**POULTRY YARD**

**Poultry Institute at O.A.C.**

The Ontario Branch of the American Poultry Association held its annual Poultry Institute at the Ontario Agricultural College, Guelph, from Feb. 10 to Feb. 11th. Although not largely attended it was a success. A number of amateur, as well as practical poultrymen and fanciers from the United States and Canada were present. They discussed freely and fully, without fear or favor the different questions which were brought before the institute. The morning and afternoon sessions were given over to the discussion of practical questions of vital importance to the poultry industry. Miss Yates gave her excellent demonstration in trussing and packing chickens for the market.

**DISCUSSION ON WHITE DIARRHOEA.**  
Dr. Geo. Morse, from the Bureau of Animal Industry, Washington, D. C., gave an excellent address on "Diseases of Poultry," referring especially to White Diarrhoea. He has discovered a micro organism which is always associated with the disease and which he believes causes it. Mr. Baldwin, Deer Park, Toronto, who was the general chairman of the meetings, believes that these organisms aggravate the disease, but that they are not the primary cause of it. Many interesting discussions ensued between these two.

C. K. Graham, of Hampton, Virginia, gave an address on "Successful Poultry Farms." Victor Fortier, from the Central Experimental Farm, gave a decidedly practical paper on "Poultry in Quebec and Eastern Ontario." Mr. Wilbur Bennett, a young but successful poultryman from Peterboro, Ont., read an excellent paper in which he related his experience with poultry. He attended the poultry short course at the O. A. C. three years ago. Here he received an inspiration to develop more extensively the poultry end of farming, at home on his father's farm. He went home and put into practice the knowledge he had gained. The success he has attained should be an inspiration to all farm boys. Mr. Martin from Jordan, Mr. McGrew from Scranton, Pa., and Mr. Putnam from Toronto were other speakers at these sessions.

**CO-OPERATION AMONG POULTRYMEN**  
Mr. G. A. Putnam in addressing the institute referred to the development of the poultry branch of agriculture. He believed that farmers can increase their profit in poultry by co-operation in buying and selling. If the farmers would co-operate they could grade their eggs, stamp them absolutely fresh, pack eggs of one color only in one package, and ship daily consignments to the large markets and receive the highest prices.  
"Co-operation," he continued "is the salvation of the farmer. He must learn the markets and work together with his neighbor in producing a uni-

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**WHITE WYANDOTTES**—Eggs, Pullets and young straight of H. Wash. Will make winners.—Robert Matlack, Powders Corners, Ont.

**BARRED PLYMOUTH ROCKS** exclusively. At Toronto Industrial and Western Fair, London, only females won more Bristle Choice stock for sale. Eggs in combination. Let me know your wants. Leslie Kerns, Freeman, Ont.

form grade of product and in reaching the best markets. Co-operation has been born to the fruit growers of Ontario. Why should it not be of Let the farmers then awake to their opportunities and success will crown their honest efforts.  
Each evening on some illustrated lecture was given on the phases of the poultry industry. These lectures were amply attended by students of the O. A. C. Macdonald Institute and were much appreciated by all.—P. E. Angle.

**A Large Return from Five Acres**

Probably one of the most inspiring addresses for the farmer or farmer's son given at the Poultry Institute, at Peterboro, Ont. He is a young man in a similar position to many other boys on the Ontario farms, and is an example of what may be accomplished on the average farm.

Mr. Bennett began in a small way three years ago with cheap birds. He has now increased his stock to 350 O. A. C. He keeps a Buff Orpingtons and Barred Rocks, but he prefers the Orpingtons. He complains that the Rocks do not mature early enough. He has now increased his stock to 350 equipment equals about \$150 per year. He raises enough chickens each year to obtain sufficient pullets to replenish his flock and cockerels from the early hatches which develop well are shipped to Montreal as broilers. The rest are crate fattened and sent to the same place for roasters in the fall and early winter. For these he receives from 10c to 12c a lb. f.o.b. Peterboro.

From the sale of all the cockerels he makes sufficient to pay the cost of raising all his stock. He ships his eggs to Montreal once a week, and has received as high as 50c a doz. for his hatching all winter. He aims to have May. About winter three years ago spent with his poultry. The balance of the day is given to the general farm work.

The poultry occupies about five acres of ground and from it he makes a profit of \$450 a year, or more than is made from the other 95 acres of the farm. Surely this is an encouraging report, and surely there are more farm boys who can follow his example.

**Succeeding with Poultry**

The question of how to succeed with poultry was very pointedly discussed at the recent poultry institute held at the O. A. C., Guelph, by Mr. McGrew, Scranton, Pa. To succeed in any business a man must obtain as thorough an education as possible along the line he wishes to follow. This particularly in the poultry business a man must be fond of his business. He must have pure bred stock. Poultry needs constant attention 365 days in the year, and it must have the personal attention of the proprietor. The poultry business is not a get rich quick scheme.

Mr. McGrew claims that in incubation it is not necessary to turn the eggs completely over each day and if they are only partly turned each day. He emphasizes the fact that under no considerations should eggs from pullets be used for hatching. Use eggs from two-year-old hens.  
To be successful in feeding a common sense is the most valuable asset a man can possess. Avoid feeding much coarse feed or crude flour.  
The building must be dry, well ventilated, light and airy, warm. The floor may be cement, board or earth, but it must be dry and sufficient litter must be furnished to give the birds exercise in scratching.—P. E. A.

**DOES YOUR POULTRY PAY?** If not, Poultry Pointers, the boiled down monthly journal, can help you. Best writers and to-the-point articles. Special—two years for \$1.00. Single copies, 10c. Poultry Pointers, Box C, Farwell, Mich.

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**Canadian Forestry Association**

Taking an acre of white pine as a unit, Mr. E. J. Zevitz, of the Ontario Agricultural College, at the annual meeting of the Canadian Forestry Association held in Toronto last week, estimated that in 60 years a total expenditure of \$169.34 would result in a profit of \$439.66.

What has Canada really got in the way of timber? Throughout the papers read at the convention, doubt was cast upon estimates made of the timber supply of the Dominion. This feeling was concretely expressed in a resolution asking the Dominion Government to appoint a royal commission to enquire into the whole matter.

Another important recommendation was that several provincial governments, not already having done so, controlling Crown lands be requested to withdraw definitely from location all lands at present open for locations as may be found on inspection, to be that no towns or settlements as yet unopened for settlement that contain less than 50 per cent. of agricultural land be hereafter opened for settlement. In the case of lands now under license, which are found to contain more than 50 per cent of land suitable for agriculture, that previous to the opening of such township or settlement the licensee be given a reasonable

time to take off the merchantable timber.

In discussing what deforestation meant, the Hon. Sidney Fisher, Dominion Minister of Agriculture, said that the general public should have the fact impressed upon them that re-forestation has rendered it necessary to deepen several of the Canadian harbors and is responsible for fluctuations in the depth of the St. Lawrence. Frank Hawkins, Secretary Canadian Lumbermen's Association said that the water in Lake Temiskaming was reported this year 19 feet lower than ever before.

The meeting was attended by Earl Grey, Hon. Sydney Fisher, Hon. J. M.

Gibson, Hon. Mr. Tweedie, of New Brunswick, and a number of other leaders in the re-forestry movement.

**Annual Meeting of Dominion Shorthorn Breeders**

Lack of funds as the result of a considerable decrease in membership resulted in the Dominion Shorthorn Breeders' Association curtailing their grants to the various fairs and exhibitions at their annual meeting held in Toronto recently. The membership for 1908 was 1,612, whereas in 1905, it was 2,588. Sec. W. G. Pettit, of Freeport, Ont., showed that during 1908, there had been 7,033 registrations, 2,272 transfers, 450 duplicate and non-certificates, and 1,612 membership fees received. The cash balance on hand is \$3,040.40 against \$7,000.50 a year ago.

The president, Mr. A. W. Smith, of Maple Lodge, in his address regretted the decrease in membership and the consequent decrease in funds. While such was not desirable, it was hoped that good would result. The apparent depression would mean that many inferior animals would be sold for beef that otherwise should have been used for breeding stock. Communications showing an increased demand for grants from the association were read. As the available funds were considerably less than for several years, it was suggested that \$3,000 be the total grant for fairs and exhibitions this year. This sum was distributed as follows: Ontario, \$1,600; Manitoba, \$800; Saskatchewan, \$1,000; Alberta, \$300; Quebec, \$100; Maritime Provinces, \$50; British Columbia, \$50. The executive were empowered to distribute the Ontario donations as seemed best. The Brandon and Winnipeg exhibitions get \$300 each. The \$300 given to Saskatchewan goes to the Regina Exhibition, Calgary gets the same amount, Victoria receives British Columbia's share, and Sherbrooke gets Quebec's amount while the grant to the Maritime Provinces will go to the exhibition making the largest grants to Shorthorns.

The following officers were elected: Pres., Capt. T. E. Robson, London, Ont.; 1st vice-pres., Peter White, Pembroke, Ont.; 2nd vice-pres., Harry Smith, Exeter, Ont. Directors—Hon. P. Talbot, LaSalle, Alta.; J. O. Gibson, Denfield, Ont.; Jas. Leask, Greenbank, Ont.; John Davidson, Ashburn, Ont.; John Gardhouse, Highfield, Ont.; J. M. Gardhouse, Weston, Ont.; W. A. Dryden, Brooklin, Ont.; Jas. Russell, Exeter, Ont.; F. W. Brown, Portage la Prairie, Man.; James Snell, Clinton, Ont.; Wm. Smith, Columbus, Ont.; J. P. Mitchell, Burlington, Ont.; J. G. Barron, Garberry, Man.; Jos. Washington, Ningsa, Man.; and John Isaac, Markham, Ont.

Delegates to exhibitions were selected as follows: Toronto—W. G. Pettit and Robert Miller; Brandon—G. Gibson and C. M. Simmons; Ottawa—Peter White and A. H. Foster; Halifax—H. S. Kennedy and F. L. Fuller; Fredericton, N. B.—A. Peters and B. Fawcett; Charlottetown—C. O. Gardner and John Richards; Winnipeg, Man.—Walter James and Jas. Yule; Brandon—Geo. Allison and S. Simpson; Regina—Geo. Kinnon and F. M. Brett; Calgary—James Sharrp and John Ramsay; New Westminster—T. W. Patterson and Geo. Shannon; Victoria—G. H. Hawden; Sherbrooke—E. Y. Norton and J. A. McClary; Maritime—Winter Fair, Amherst—Rupert Coates and C. A. Archibald; Ontario Winter Fair, Guelph—W. A. Dryden and Wm. Linton. John Isaac and Arthur Johnston will represent the Dominion Shorthorn Association in the Dominion Cattle-Breeders' Association. Delegates to the National Records Board are: Robert Miller, Harry Smith, A. W. Smith, Peter White, Hon. John Dryden, M. R. Garhouse and W. G. Pettit. Mr. Pettit was reappointed secretary, and R. G. T. Hitchman, of Ottawa, registrar.

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I. H. C. manure spreaders are made in two styles: Corn King and Cloverleaf.

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Is of the return apron type, the apron on this machine reduces friction to the minimum, even with the heaviest loads. This machine will be supplied with either a ratchet feed or a double pawl worm feed for the apron. Either of these feeds can be regulated to bring the desired amount of manure to the beater. The beater is equipped with long, square steel teeth with chisel points. It is driven by means of a chain from a large sprocket on the rear axle. A vibrating rack is used on this machine to level the load as it comes to the beater. The Corn King spreader has steel wheels of the most serviceable construction and a frame made of thor-

oughly air-dried wood stock and put together in a very durable manner. There are three sizes of this machine: No. 2 small, No. 3 medium and No. 4 large.

**The Cloverleaf** also supplied with two feeds for the apron—ratchet or double pawl worm feed. The beater on this machine is constructed in a vibrating type to level the load as it comes to the beater, has steel wheels and a well made main frame. This spreader is made in three sizes: No. 2 small, No. 3 medium and No. 4 large. It is very attractive, being well painted and symmetrically designed.

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**Ontario Fair Association**

The Ontario Fair Association held one of the most successful conventions in its history last week in Toronto. Supt. J. W. Lockie Wilson's report showed that the progress made by the fall fairs last year had been most marked. It was, he stated, the most successful year in the history of the agricultural societies of Ontario. Gate receipts showed an increase of 50 per cent., and the number of exhibits showed an increase of 40 per cent. over any previous year. The secretaries were doing better work and the forwarding their reports more promptly.

Educational work was being kept to the front. Forty-seven societies took part in the field crop competitions last year, 650 farmers entered, and 6000 acres of land were under cultivation in producing these crops. There was a larger demand for the seed from the prize winning crops than could be met. Out seed sold at high would be continued and we would try to secure an increased grant.

**WARNING TO SOCIETIES**

Mr. Wilson took occasion to warn some societies that had been allowing gambling devices on their grounds which they would lose their grant if such practices were allowed to continue. Besides, the directors responsible were liable to a heavy fine. Departmental judges to the number of 224 were sent out last year and reports from these were on the whole very satisfactory. The number of increased by 400 per cent. had fall the Canadian National Exhibition will give prizes for grain in the sheaf from these competitions and the Department will pay all transportation charges incurred in bringing societies to take the plowing match as an educational feature. Mr. Wilson thought that something should be done towards providing insurance of \$5.00 from each society would form a sufficient fund to make up in receipts from this cause in any ordinary year. The executive will take the matter up and report upon it at a future meeting.

**WANT INCREASED GRANT**

The convention was unanimous in asking for an increased grant for agricultural societies, and waited upon the Government in a body to present their claims. Some difference of opinion was expressed at the convention as to how an increased grant should be apportioned. Six cities which have gone to the expense of erecting suitable buildings for exhibition purposes, ask that a large portion of any increased grant be given to societies which have expended money in building. Naturally the societies which have no buildings objected. It was pointed out that any increase to societies for building purposes, would not lessen the grant which societies that have not gone to any expense in this regard, are now receiving. The Association is asking that the grant from \$70,000 to \$100,000 a year. The meeting passed unanimously.

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resolutions urging upon the Dominion Parliament the need for protecting level crossings on railways and upon the Provincial Government the need for better police protection in rural districts. It also expressed its approval of the proposal for law reform now under consideration by the Attorney-General for Ontario.

**OFFICERS ELECTED**

Officers were elected as follows: president, H. J. Gould, Uxbridge; 1st secretary, Dr. J. T. Simmons, Frankford; 2nd vice-pres., Geo. E. Lee, Highgate; treasurer, Alex. McFarlane, Otterville; secretary and editor, J. Lockie Wilson, Toronto.

Executive: Wm. Laidlaw, Guelph; J. T. Murphy, Simcoe; Robt. E. Cowan, Gal. J. W. Sheppard, Cayuga; John Farrell, Forest; R. H. Leary, Peterboro; and John D. Orr, Meadowdale.

Auditors: R. Agnew, Meaford; Wm. Collins, Peterboro.

**Bedford District, Que., Dairymen**

"The apparent aim of the Quebec farmer is to get his cows through the winter on the least possible fodder," said Mr. J. H. Grisdale, Agriculturist at the C. O. Ottawa, in addressing the annual convention of the Bedford District Dairyman's Association. "The cattle come out in the spring in poor condition and thus the average annual production per cow is kept down to 2,500 lbs. instead of 4,000 lbs. as it should be." Mr. Grisdale pointed out that the increase of quantity of milk of the farmer who does not, in the least, control the price of butter. This served to emphasize the importance of feeding, for the speaker showed that a good cow poorly fed was not so profitable as a poor herd well fed. Thus feeding is actually more important than breeding.

The matter of the adulteration of cattle feed was discussed by Augustus Hayes, of West Gwillim, Geo. P. England, of Dunham and A. A. Ayer, of Montreal. The general trend of the discussion by these gentlemen and by Mr. Grisdale was that the Department of Agriculture, and its board, should be memorialized on this subject, and strongly advised by this convention to resolution to reduce the adulteration of feed sold to the farmers. In reply to a question "How much meal should be added to a succulent ration to get the best results," Mr. Grisdale stated that a cow which produced 40 lbs. of milk a day would thrive best on one third part oil-cake, and one part oats for every four pounds of milk given. On this basis a single cow had produced 53 lbs. of milk with 1 lb. of meal, three lbs. of butter per day from which selling for 35 cents a lb., and giving a profit of 75 cents a day over the cost price of her ration.

**VENTILATION IN STABLES**

The best methods of ventilation of stables was dealt with by the King system and the Rutherford system were fully described and commented upon. It was pointed out that ventilation consists not in a single outlet without any inlet. Ventilation requires a current and circulation of air. Fresh air must enter from the ceiling and bad air make its exit from the region of the floor. The King system is very satisfactory in a new barn but is difficult to establish in an old building. The Rutherford system is cheaper and just as satisfactory.

Four years ago, a cow testing association was organized at Cowanville by C. F. Whitley, who was the next speaker. It had been a success and doing good was still in existence to its members. Mr. Whitley produced a chart to show that an average of 20 cows which started with an average of 4,000 lbs. of milk per cow (Continued on page 10)

**FENCE TALK No. 5**

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Like the Pauline De Kol, 92.5 lb. milk in 1 day; 59.6 lb. 7 days, will be sold; great ones. The service bulls are "Paladin Ormsby," name indicates his great breeding; and "Idaline Paul Veeman," whose three nearest dams average 27 lb. butter in 7 days' test. These bulls will be sold, and many of their get and cows with calf to their service.

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FARM AND DAIRY is published every Thursday. It is the official organ of the British Columbia, Manitoba, Eastern and Western Ontario, and Bedford District Quebec Dairyman's Associations, and of the Canadian Holstein, Ayrshire, and Jersey Cattle Breeders' Associations.

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Recent expert investigation of the problems of our future timber supply emphasizes the fact that the next generation will be considerably limited in the sources of timber supply; that there will be an increased percentage of lumber of poorer quality than at present; and that there will be a steady advance in the price of forest products of all kinds. It is the duty of our government to do what they can to alleviate as far as possible the timber scarcity that, in the course of time, is bound to come.

It is not enough that we conserve our present timber supply. Action should be taken to encourage private owners to take care of their woodlands and a progressive policy should be launched for the re-forestation of many waste areas known to exist in Ontario. These have been described in Farm and Dairy. Such a policy

has been shown to be both practicable and advisable.

These waste tracts of non-agricultural land, consisting for the most part of drifting sands, are to be found in large tracts in Lambton, Simcoe, Norfolk, Northumberland and Durham counties. A start at re-foresting these areas has already been made in South Norfolk County. The beginnings of a provincial forest reserve should be established on these other areas as well. From its geographical position and from its proximity to a railroad these waste areas in Durham and Northumberland Counties offer bright possibilities of establishing a successful forest reserve. The next forward move, towards re-forestry in Ontario, should be made in connection with these latter areas, and it should be made at an early date.

**FARMERS' CLUBS**

At the banquet held recently in Toronto by the members of the Canadian Holstein-Friesian Cattle Breeders' Association, Mr. G. A. Putnam, Superintendent of Farmers' Institutes, made the important announcement that the department has been organizing farmers' clubs at the rate of six or seven a day for some months past and that the number of clubs already formed is about 250. This shows plainly how anxious the farmers of Ontario are to organize. The Department of Agriculture deserves credit for recognizing this fact and for having arranged to assist the farmers to organize.

There is, however, one fundamental weakness about these farmers' clubs. Because they are organized by the department, the department has found it necessary to stipulate that members of the clubs must not discuss certain questions, including political subjects. In taking this stand, the department is acting wisely. At the same time, why should farmers have to wait for the department to help them to organize? Farmers' clubs to be truly successful, should be absolutely independent of every government. Their members should be free to discuss any subject that they consider to have an important bearing on farm matters. For instance, if farmers think that railways are not sufficiently taxed, they should be at liberty to discuss any proposed legislation dealing with such a subject.

What would we think if the members of the Labor Unions in the cities, in order that they might get a small government grant, amounting to only a few dollars a year, agreed not to discuss certain subjects stipulated by the government. The members of the Labor Unions value the liberty of speech too much to consent to any such restrictions. They prefer to be free and to raise the funds they require to finance their own organizations. We, as farmers, should be equally independent of every government. We should have our farmers' clubs and we should finance them ourselves. We would like to see the members of the farmers' clubs that have been organized already, affiliate with the Dominion Grange. Their usefulness would then be greatly extended

and they would then have the priceless boon of freedom of speech and the benefit of being connected with an organization that, for many years, has represented the best interests of the farmers of Canada.

**THE MAPLE INDUSTRY**

Possibly no other industry upon the farm has survived and reached such a high plane of development purely on its own merits, as has the maple industry. To our early settlers, the maple tree was their readiest means of obtaining that household necessity, sugar. Such conditions, however, have long since passed and to-day the products of the maple rank as luxuries rather than as necessities. This being the case, it is to the one who can afford luxuries that this industry must look for a market, both now and in years to come.

In the earlier days of the more modern methods used in the production of maple syrup, consumers thought that the article was not as good as that made formerly. In fact many expressed themselves that this new product must be adulterated for it lacked the dark color and the rich strong flavor of the syrup they had formerly bought.

This stage of the industry has also well passed away. The consumer, once having tasted the delicate maple flavor of the fine products turned out from the well equipped sugar camp, will have no other. In a word he has been educated up to the highest standard set by the best products. Such he demands and for it he is willing to pay the price.

To produce a gallon of syrup is an expensive business at the best of times, as those who have made it know. It is worth all one can get for it. The romantic part of the industry has for the most part ceased to be. Sugar making and the production of syrup has come to be a business proposition and as such it should be recognized. It should be the aim of all to produce a high-grade product and that which will command the best trade and the topmost price.

**FIELD CROP COMPETITION**

The Ontario Department of Agriculture has launched a commendable scheme for the improvement of farm crops in the province in the inauguration of standing field crop competitions. The interest taken and the results to date, as shown by the exhibits of the prize-winning grain at the Winter Fairs at Guelph and at Ottawa are ample proof of the great value of this work. One drawback to the work in the past has been that the competitors, through their agricultural societies, have not been informed about the competitions early enough in the year to enable them to prepare seed specially for these competitions. The competition was announced so late last year that it was necessary to enter fields already sown.

The Department should let agricultural societies know early in the year whether or not they are going to be able to hold the standing crops competition. Unless they know at an early date the competitors are unable to

select their seed and give the attention to the preparation of the land that they otherwise would.

Many that took part in the competition last year, simply entered fields that they had sown without any thought of competition. Their crops were of necessity not nearly as good as they might have been. The East Peterboro Society was one of those thus handicapped last year. This society is willing to enter the competition again but as yet this society as well as others, does not know whether the department will allow the same societies to hold a competition this year as well as last. Thus they are unable to warn would-be competitors to prepare for the competition.

The advisability of holding these competitions has already reached a point beyond discussion. Let us have them by all means and let the members of all agricultural societies know of their opportunity in time, that they may arrange to make the best use of it by preparing their seed and their land especially for this competition, and thus raise even the high standard that has already been reached.

**AN INDICATION OF FINANCIAL CONDITIONS**

Each year the review of the financial conditions in Canada as given by Byron E. Walker, the manager of the Canadian Bank of Commerce, is looked forward to as an accurate indication of the financial conditions of the country. Its completeness of detail is one of its strongest features. As published in our issue of January 28th, it is well worth careful study.

It is hardly necessary to point out that the conditions of business to-day are very different from those of a year ago. The difference is felt on every hand. A year ago the banks were required to meet the serious lessening of our purchasing power because of poorer crops. To the excellent harvest of last year can be attributed the present favorable outlook in the financial situation.

This is shown clearly in Mr. Walker's report. The Canadian Bank of Commerce, with its many branches in all parts of the country is a national institution of which Canadians may well feel proud. Its immense resources and its numerous branches in all parts of the country played an important part in steadying financial conditions in Canada when the panic of a year ago was so apparent in the United States.

The suggestion made recently by Farm and Dairy that a raising of practical farmers and hog raisers be sent to Denmark to investigate conditions in connection with the hog industry there continues to receive indorsement by our readers and others. The article by Mr. W. G. Telford appearing elsewhere in this issue contains food for thought. There is possibly no one thing that has militated more against the hog industry than the lack of a proper system of grading by packers. How to make such a system workable in this country is a problem. Grading has been

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worked successfully in Denmark in connection with their bacon industry. This would be one of the most important things that would stand investigation by the proposed commission.

**Special Magazine Issue of Farm and Dairy**

(Lindsay Eve Press, Daily)

Farm and Dairy and Rural Home, the excellent farm journal, published at Peterboro, is always interesting, always helpful and always pleasing. The issue for Feb. 4th, however, is especially attractive, both as to its matter and the beautiful presentation of the same. The issue is a magazine issue, and the illustrations, the color work and the special articles, not to mention the extra pages, make this issue a particularly pleasing one. It is the intention of Farm and Dairy to issue eight of these magazines during the year, and if they keep the others up to the high standard of this number they certainly will have reason to continue to hold the highest place in the esteem of progressive people on farms who desire helpful literature in attractive form. Farm and Dairy is an undoubted influence for better farming and for the advance of Canadian country life generally, and the paper is also a credit to its publishers and a delight to all readers.

**Raising of Dairy Cattle**

The following questions concerning dairy cattle were recently submitted to our associate editor, Mr. W. F. Stephen, by C. H. Eckles, Professor of Dairy Husbandry, University of Missouri. The questions and his replies taken from his experience with Ayrshire cattle are herewith given:

Q.—How long have you been breeding dairy cattle, and how many animals are included in your experience?  
A.—Over 30 years; possibly 300 to 400.

Q.—Do you believe from your experience that a dairy cow may be injured from being allowed to become over-fat when young?  
A.—Yes, injured beyond recovery, even if they are of good dairy breeding and type. Keep the young stock growing and developing but not allowing them to fatten.

Q.—Are there any feeds that should especially be avoided in this connection?  
A.—Yes, corn-meal and all highly carbonaceous feeds.

Q.—State briefly how you feed a heifer up to the time she drops her first calf?  
A.—New milk for two or three weeks turning gradually to skim milk at end of third or fourth week, add sweet crushed oats, bran and oil cake meal to be fed in conjunction with, from 3 quarts to 1 gallon of skim milk fed twice each day, until calf is six months old. Keep during this time in stony box stalls, if in summer add a shady pasture. At six months add roots or silage to the ration if for winter feeding. Give good pasturage and wintering until they drop their calf. Avoid getting them fat.

Q.—How would you proceed, if you wished to develop especially large animals?  
A.—Feed well when young especially, a choice quality of roughage also bran, oil cake meal and crushed oats. At the same time care must be exercised not to overfeed and injure the digestive organs of the "baby cow."

Q.—Does heavy feeding when young result in a larger cow or earlier maturity than light feeding?  
A.—Yes, decidedly so.

Q.—Does your observation indicate that the liberal feeding of roughage while young helps to develop a strong digestion?  
A.—Yes, only by that method can a dairy animal be properly developed.

Q.—What effect has age at first calving on the dairy qualities of the cow when mature?  
A.—The earlier they can be brought to milk consistent with maintaining constitutional vigor the better will the dairy capabilities be developed.

Q.—What effect has age at first calving on the dairy form or dairy type when the cow is matured?  
A.—If they freshen too early in life they will have the habituated appearance indicated by the ewe neck, lack of vitality and small size. If freshened about the right time these will be absent. If allowed to become too old they will have that strong beefy appearance and the milk-qualities will not be as acutely developed.

Q.—Although of this latter stamp, if they are from a good milking family, may they produce offspring with greater vitality?  
A.—Do you consider it desirable to have dairy heifers mature at as early an age as possible?  
A.—Yes, in nearly all cases, although one must be guided largely by the individuality of the heifer. At from 30 to 34 months they should freshen.

Q.—At what age on the average, do cows of your breed reach their full size?  
A.—At from 6 to 8 years.

Q.—At what age, on the average, do the heifers first come in heat, and why is this important?  
A.—At from 30 to 34 months, consistent with size, constitutional vigor and development, so that they will develop milk producing habits which combined with inherited milk producing characteristics goes to make cows capable of turning the roughage and other turn in milk.

Q.—At what age do you prefer having your heifers drop their first calves and why is this important?  
A.—At from 30 to 34 months, consistent with size, constitutional vigor and development, so that they will develop milk producing habits which combined with inherited milk producing characteristics goes to make cows capable of turning the roughage and other turn in milk.

Q.—At what age do you prefer having your heifers drop their first calves and why is this important?  
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**Fitted to Less Than a Hair's Breadth**  
**De Laval Cream Separators**

When you buy a DE LAVAL Cream Separator you buy mechanical perfection. You get the product of the greatest painstaking mechanical skill and the finest of manufacturing tools. Of special note in this connection is the fact that the bearings of all DE LAVAL Spindles and bearings must be fitted to less than the one thousandth part of an inch, or, in other words, to about one-fifth the breadth of a human hair. Such a degree of exactness is invisible to the naked eye and can only be determined by the finest of gauges. It is nevertheless the set standard to which all DE LAVAL Spindles and bearings must be fitted. Any parts which do not come within this degree of accuracy are thrown aside by the DE LAVAL factory inspectors and much material and many hours of work are sacrificed in this way annually. It is this very sacrifice, however, that makes the DE LAVAL cream separator so extremely durable and capable of lasting from fifteen to twenty-five years under the hardest of farm usage and of always doing easily the very best work under any and all conditions. It is the reason for their remarkable ease of operation and absolutely perfect working in every part. No other separator or farm implement made to-day has anywhere near the care, time, or expense devoted to its manufacture than the DE LAVAL has. When you buy a DE LAVAL you get the separator way. Moreover, you pay less for it than for any would-be competing separator of similar actual capacity. The DE LAVAL catalogue explains and illustrates these all-important points. It is to be had for the asking. Write to-day.

**THE DE LAVAL SEPARATOR CO.**  
173-177 William Street  
MONTREAL  
14 and 16 Princess St.  
WINNIPEG

**Concrete**

"Mixing and Placing Concrete by Hand," is the title of a bulletin recently issued by the Association of the American Portland Cement Manufacturers, Philadelphia, Pa. With the rapid decrease of our timber supply and the resulting increase in the price of lumber there comes the necessary demand for a new building material. This demand has been felt keenly on the farm, where timber has been practically the only building material. The doubling of lumber prices has practically doubled the cost of the average farm building. Accordingly the progressive practical farmer has hailed with delight the advent and the

rapid rise of the use of cement—a manufactured stone as durable as rock, stronger than brick or rubble-stone masonry, adaptable to practically any form of building detail, and lastly, but far from least, cheap and fire-proof.

In view of the fact that cement is becoming so largely used, any information dealing with this question is particularly welcome. Those who contemplate doing cement work in the near future should obtain a copy of bulletin No. 20, which can be had for the asking from the Association of the American Portland Cement Manufacturers, Land Title Building, Philadelphia, Pa.



**More Corn in the Crib**

is the result of the vigorous, thrifty plant growth insured immediately upon the application (at planting time) of

**Nitrate of Soda**

Test it for Yourself Entirely Free

Let us send sufficient Nitrate of Soda for you to try, asking only that you use according to our directions, and let us know the result. To the twenty-five farmers who get the best results, we offer, as a prize, "Feed Your Best" most valuable book on fertilizers, their composition, and how to use for different crops. Randomly bound, 32 pages.

Apply at once for Nitrate of Soda by post-card as this offer is necessarily limited. "Great Growing for Profit," another book of useful information will be sent to the farmer who sends the present edition last, if paper is mentioned in which this advertisement is seen.

Send names and complete address on post-card  
W. S. HERSH, Director, John Street and 71 Nassau, NEW YORK

## Creamery Department

Butter Makers are invited to send contributions to this department, to ask questions on matters relating to butter making and to suggest subjects for discussion. Address your letters to the Creamery Department.

### Preventing Mouldy Butter Boxes

The spores causing mould are practically omnipresent and so all boxes may be considered as harboring them. If the wood from which the boxes are made is not properly seasoned, or if the boxes are kept in a damp place, they are usually heavily infected with spores, which will surely develop and cause the boxes and butter to have an unsightly appearance.

Some form of prevention or treatment is advisable. A common form of treatment is to soak the boxes overnight in a hot brine solution, or hot brine and formaldehyde. Paraffining the tubs if properly done is now favored by up-to-date butter makers and is largely practised by creamerymen in the United States.

### Eastern Townships, Quebec, Produce Co.

Ed., Farm and Dairy:—Believing it may be of interest to some of your readers I send you herewith the statement in connection with the Eastern Townships Dairy Produce Company, of Ayr's Cliff. It is as follows: The amount of butter manufactured during the year was 785,375 lbs. The gross amount of money received for butter was \$192,519.35; amount paid for manufacturing was \$19,633.90; in creameries, and cream and milk in patrons was \$172,772.95. Amount of butter fat during year, 670,332.824 lbs.

Average price per lb. for butter 34.51 cts.

Average price per lb. of butter fat 25.78 cts.

The price of manufacturing for milk and gathered cream being .02 1/2 cts. per lb. This charge covers every expense and marketing the product.

Patrons delivering their cream received 1/2 ct. rebate from this charge.

Amount of rebate to delivered cream patrons, \$1,275.26.—John Manson, Compton Co., Que.

### Richness in Gathered Cream

In reply to the question: "What percentage of fat do you prefer in gathered cream and why?" asked by H. Weston Parry, Oxford County, Ont., says:

"I prefer 30 to 33 per cent. of fat in gathered cream. Firstly, because that percentage is attainable if pains be taken to educate patrons up to it. I doubt if a higher average test can be readily obtained in practice, and even if it were, there would be drawbacks nearly sufficient to discount apparent benefits. Cream testing from 33 to 40 per cent. is very apt to adhere to the cans, pails and often to the inside of the bowl of the separator itself in actual practice. There is no doubt but that cream of a higher percentage of fat than 33 is most likely to receive some dilution from the addition of can, pail, or separator rinsings. I don't like to have to add them myself, and I don't like to know of tuel being added on the farm, for water supplies and cannot possibly benefit the quality of cream.

"A 30 to 33 per cent. cream is rich enough for all practical purposes; it will stand up to a sufficiently low temperature for the best results; it con-

tains a large enough proportion of milk sugar to form a medium for the starter to act upon. Mind, I do not say that a richer cream would not give equally good results, but base my answer to this question upon what is practically attainable under average conditions, for ideals are not always practicable.

"The disadvantages of this cream here. Suffice it to say that the poorer transportation, the larger storage capacity more inferior is the product, and the greater the losses in churning. My experience is that a patron sending 30 to 33 per cent. cream is more likely to feel satisfied than a patron whose cream tests several points lower or higher, because he is more likely to receive Justice.

"The average farm separator is a very uncertain skimmer in the hands of the average farmer when a cream richer than 33 per cent. is taken; on the other hand, cream testing below 25 per cent. is an almost sure indication of a poor make, cream testing below 25 per cent. is an unintelligent farmer, cause for depriving his stock of six to every 100 lbs. of whole milk that he produces."

### Our Decreased Exports

"Some dairymen seem to be alarmed," said Dairy Commissioner J. A. Ruddle, while speaking at the Annual banquet of the Belleville cheese and butter convention, "over the decrease in our exports of cheese and butter. Our exports appear to have reached their maximum in 1893, and the decline caused some apprehension. These people, apparently do not take into consideration the fact that our home

consumption of cheese and butter has increased greatly during the last few years, due in part, to our increased buying capacity of our people.

"The fact that New Zealand has greatly increased her exports of cheese to Great Britain, has also created a fear that it may weaken the position of our Canadian cheese in the British market. While the dairymen of New Zealand have a great natural advantage in their climate, which is very uniform, I do not believe that they will ever be serious competitors of Canadian cheese in our trade here. There is no danger of our trade being seriously injured by outside competition, as long as we furnish a good product. There has been a great deal of talk in Canada about our methods of selling cheese, but there is only one really important point, and that is that our cheese must be of the finest quality.

"Few realize how important our home trade is. We produced in one year, thirty-six million dollars worth of creamery butter and cheese, twenty-two million dollars worth of dairy butter, one million dollars worth of condensed milk, and about thirty-five million dollars worth of milk that goes into direct consumption. The fact that we export only about one-third of the dairy products we produce, shows how important is our home market. We should pay more attention to catering to our home markets. We have been in the habit of exporting our best cheese and selling our poorer cheese in Canada, and the result is that it is difficult to get good cheese in the average grocery store. Were we to give our Canadian consumers good cheese, we could greatly increase the consumption of cheese in Canada."

Renew Your Subscription Now.

## Ask the WIFE SHE WASHES IT

The easy cleaning of the light, simple Sharples Dairy Tubular Cream Separator bowl will please your wife. Its simplicity and durability will please you. The upper left hand picture shows it, their many exclusive advantages.

The Sharples Dairy Tubular bowl has only three pieces—the bowl itself, the bottom which closes the lower end of the bowl, and the tiny smooth piece that slips inside the bowl. Other separator bowls, as shown in the lower right hand pictures, have many pieces—some almost fifty—all separate in some bowls or joined together in others—but all much harder to wash and much quicker to rust and wear than the Sharples Dairy Tubular.

Show your wife these pictures, from actual photographs of cream separator bowls taken apart. Ask her which she would rather wash? She will say the Tubular every time, and thank you for saving her needless work.

Talk this over together. You'll agree that Sharples Dairy Tubulars, made in Canada and one of Canada's leading industries, are the finest, lightest running, most convenient cream separators money can buy. The lower left hand picture shows the Tubular.

Built on 29 years experience. 1908 sales way ahead of 1907—out of sight of any other catalogue No. 253.

The Sharples Separator Co.  
Toronto, Can. Winnipeg, Man.

## She Will NOT Want These



What woman would choose to wash any of these heavy complicated 'bucket bowls' when she can have a simple Dairy Tubular instead? What man would expect any of these complicated 'bucket bowls' to be as durable as the simple Dairy Tubular?



It is desirable to mention the name of this publication when writing to advertisers



Washing the Sharples Dairy Tubular bowl. Only three pieces. The brush, the girl is using, cleans the inside in a moment. Easier washed, more durable than any other bowl.



This is the Sharples Dairy Tubular. So simple and perfect in construction, that the medium sizes can be turned by one who is seated. Self-rolling enclosed gears. Low, steady supply can.



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TO

## Cheese Department

Makers are invited to send contributions to this department, to ask questions on matters relating to cheese-making, or to suggest subjects for discussion. Address your letters to the Cheese Maker's Department.

### Cool Curing of Cheese\*

J. A. Ruddick, Dairy Commissioner, Ontario

My opportunities for getting information on this subject have been many. I state most positively, after comparing the results of hundreds of tests, that I have invariably found the cheese cured at 60 degrees and under to be in better flavor and texture than other cheese from the same vat, cured at higher temperatures. I do not ask you to take my unsupported word for it. I refer you to the pages of my annual reports for opinions of cheese merchants in Great Britain; ask any honest buyer in this country; ask Mr. Publow, the chief instructor; ask any of the instructors whose territory includes cheese factories with cool curing rooms; ask the representatives of any of these factories, and be guided by what they say. I will be glad to send anyone a list of all the cheese factories in Ontario which are equipped with cool curing rooms. Here is what some of them say:

#### PAID FOR ITSELF IN NINE YEARS

Mr. J. A. Holgate, patron and salesman of the Foxboro factory, in a letter recently received from him, makes the following statement: "I have tried to make a careful estimate of the matter, and I am convinced that in the last two years, during which we have had a cool curing room, we have had at least \$800 a year profit from cool curing, on an output of 200,000 pounds of cheese, besides the satisfaction of having an article of cheese that all the buyers want. Our factory cost us about \$800 more with the cool curing room than it would cost without the ice chamber. That is to say, they were repaid for the outlay in one year."

Mr. G. A. Gillespie, of the Central Smith factory, writes: "It is quite safe to say that they (the patrons) have realized \$900 in three seasons from an outlay of about \$400."

Mr. J. H. Anderson, a patron of the Mountain View factory, says: "I can honestly say that we are pleased with the cool curing of cheese here."

Mr. T. E. Whattam, dairy instructor in Prince Edward County, writes: "In talking with the factorymen who have cool curing rooms, I find them well pleased with the results they have had, and confident that there are better things in store in the future than the benefits of cool curing are better known to the trade as a whole. There is no comparison in the quality of cheese cured in the ordinary way and curing in the cool rooms. Cool curing has helped the industry in this district more than any other advanced step in dairying in late years."

\*Extract from an address delivered recently at the Eastern Ontario Dairyman's Association

I could cite any number of similar statements. The gains mentioned are made up partly by saving of shrinkage and partly by increased price as compared with what would have been received for the same cheese had they been ordinarily cured.

#### PREMIUM ON COOL CURED CHEESE

Cool cured cheese do not receive the premium that they should over ordinary cured, but would like to point out that the value of cool curing is not to be measured wholly by the relative price at which the cheese sell. There are many advantages besides an advanced price for the cheese. In the first place there is a saving of shrinkage, which is very considerable, amounting to about one per cent. In many cases there is a saving of cuts, because there are many cheese which pass without question when cool-cured, that would have developed undesirable flavors and other objectionable qualities if cured at ordinary temperatures. The patrons of factories with cool curing rooms receive more money for their milk than they would do if the cheese were ordinary-cured.

Then I would remind the dairymen of Eastern Ontario that every pound of cheese they have sold during the past season brought a higher price, relatively, than it would have done if a certain number of the factories had thus raised the general average quality of all the cheese, and increased the demand by encouraging consumption. I have not heard that any of the factories where the improvements have been made, have objected to receiving the premium on the price of their cheese.

The cool curing movement has emphasized the importance of cool transit and has attracted attention to that end of the business. The result is that all Canadian summer cheese are now landed in Great Britain in cooler condition and milder in flavor than they formerly were, a circumstance which has materially helped to give tone to the market.

### Too Many Makers Work for Small Wages

Editor, Farm and Dairy:—I am in favor of every cheese-maker holding a certificate from some dairy school or having it granted for at least five years' experience. I have had nine years' experience and do not get the wage that I should for the reason that there are so many who will work as apprentices for a season or two and then agree to take charge of a factory at smaller wages. Those who have had experience in making have to come down in their wages in order to get or keep their positions.

I have always been in favor of some sort of cheese-makers' association or union that would fix a scale of wages which makers would have to work for or not be allowed to continue in the business. Such an association, I think should get some help from the government. The Makers' Association in Wisconsin does, and there is no reason why a similar organization here should not.

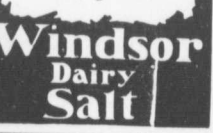
I am a reader of Farm and Dairy and get a great deal of useful information from it.—Jas. H. Hicks, Frontenac Co., Ont.

In his recently published book, "Practical Dairy Bacteriology," Prof. Conn says that the most striking fact about the bacteria found in milk is their extreme minuteness. "When we hear of 100,000,000 in a single drop of milk," he says, "we are apt to be incredulous, feeling that there could be no room for them, quite failing to appreciate their minuteness. There can easily be 100,000,000 in a drop, and still be room for more. The space the size of a pin-head may hold 8,000,000, and 100,000,000 will have plenty of room in a drop of milk."

You will surely miss Farm and Dairy if you don't renew your subscription.

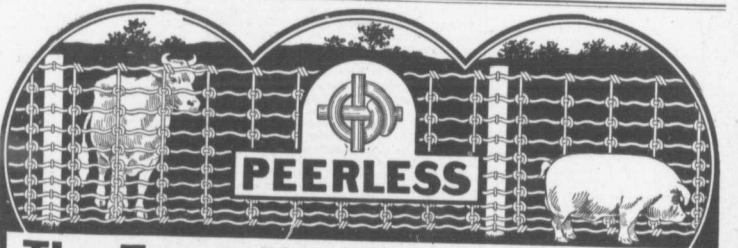
CREAMERY WANTED—To buy a small creamery in a town or village in Western Ontario. State full particulars and lowest price. Address, Box "E," Farm and Dairy.

If you should ask prize Butter-Makers what salt they use—they would say, "Windsor." For Windsor is the choice of Canadian dairymen everywhere. Ask your grocer.



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## Watch and Wait

For our next magazine number "The Garden and Orchard Annual"—out on March 4th. . . There will be much in it that will interest and benefit you.

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AFTER much meditation and experience, I have divined that it takes as much sense and refinement and talent to cook a dinner, wash and wipe a dish, make a bed and dust a room, as goes to the writing of a novel, or shining in high society.

Rose Terry Cooke

## The Domestic Adventures

By Joshua Daskam Bacon  
(Continued from last week)

"YOU are too delicious," Mrs. Stuyvesant assured me, "I am sure. If only she would, she could take care of you so nicely. Do you know, it's the only way to do—to have just one. Then there are no quarrels, no jealousy, really, I've often said that people fortunate they admit." "I don't realize how

"That is very true," said I grimly; "it quite frequently do."

"And the servants themselves," Mrs. Stuyvesant continued plaintively, "one would think they would like it, too. There would be no others to interfere with them and complain of them and they could do as they pleased."

"Ask Maria if she would appreciate all those advantages—with us, I think so?"

"Maria is just original enough and obstinate to do it."

"You understand, Maria," I said, as she stood respectfully before me, "that even though the washing and part of the ironing are done for you, there is still a very different sort of work from what you would do in a large house like Maria's."

"Perfectly, Madam," said Maria; "but a girl is often better for a change to the work, does not Madam think so? And I do not mind to work. I am more happy to be busy. May I watch the rooms to see how many I shall have, and what time does Madam dine?"

I told her, and began to outline a trial dinner.

"Suppose if I should cook Madam her dinner the best I can from what I said Maria gently."

And since that dinner I have never ordered another nor said anything further than "That will be very good, I am sure, Maria."

Chloe turned in her chair and stared frankly at the non-committal features under the cap—for I never saw a less vicious-looking person than our new maid.

"Yes, Maria," she stammered. "I miss Chloe," said the Terrible Treasurer gravely, offering her the rolls.

She makes the most delicious rolls in bewildering variety: we pointed ones for dinner, crusty brown ones for breakfast and the most mysterious luncheon.

Sabina stared, too, but at me, not Maria.

"It is the merest folly to suppose

that one can possibly fathom the character of any one on earth!" she answered. "And when it comes to prophesying the actions of one's friends, what are indeed years?"

"What, seven?" I answered pointedly. Sabina did not drop her eyes, precisely, but they ceased to meet mine.

She shows very well that what I resent is not the fact that Mr. Van Ness chose to confide his disappointment and her rage than to me; that what is very natural, and, for that matter, I have never been able to get over a foolish little awe of him that would have made such a confidence rather alarming to me than otherwise.

But why Sabina should feel that a sense of honor or propriety, or whatever she may call it, prevents her mentioning her information to me in any but the most guarded and evidently uncomfortable way, I fail to understand, especially as in the beginning we discussed it frequently with me and with perfect ease. In the same way I am far from feeling that Chloe ought to rush to me, or anybody else, with the news of her engagement to Mr. Ogden, unless she wants to—though I must say that to do so would be far more like her than to set as she does at present. I understand that people are likely to be shy and coning on these trying occasions—and how trying they can be I never guessed till I participated in one—but why, since she must know that Sabina is acquainted with one half of the situation—I assume that she knows it, her intuition ought to tell her a thing like that, if there is anything in popular thought that she should not indicate something of the other half by even the faintest appeal for my sympathy or congratulation, whichever she may be plying that nothing has happened, or is likely to happen, in view of the circumstances, is simply disingenuous, and I haven't even the satisfaction of discussing the matter at all, for some reason.

It is the irony of the fate that watches over housekeepers that now, when we are in a position to entertain our friends easily, with no worry and effort, we seem to have no worry to entertain Mr. Van Ness comes no address. Mr. Ogden, in a hurried note and charming "dear," regrets that great pressure of business, incident to the settling of two large estates of which he has recently been appointed manager, keeps him at work in his

office on Saturday, and reading in the law library on Sunday; and as visiting any other guests, I hold my peace. I asked Chloe if there was no one she would care to have for the week-end, and she replied hastily: "Heavens, no! It will be a great comfort to be alone for once, and get some mending and letters done."

This I accepted politely at its face value; I understood that while there was even a chance of Mr. Ogden's getting out on Sunday evening, Sabina wanted to keep it free for him, but was a little surprised when on asking Sabina if she would like to work in one of her semi-business luncheons on Sunday, she told me that it was not in the least necessary to do that; people out in the whole, to take

"And then it doesn't bother you," she added considerably.

There were only two weak points in this; one of Sabina's reasons for coming out here was to give me an opportunity to entertain in just this way and at present it would not bother me at all.

Not that I particularly expect this smooth-flowing household current to continue; I have given up any expectations along those lines. Whether I be dumfounded on the solution of the problem and might count on living peacefully under Maria's efficient management for an indefinite period or whether, as Chloe warned me, we were basking in the lull before the tornado, and that on any morning to find our few jewels gone from the wreck of a wild debauch littering out the placid home, who could tell? In either case I cannot see that the risk involved any greater than that of Bolly's measles, which might have been malignant diphtheria.

When I mentioned this view of the case to Chloe she looked at me in amazement.

"You, of all people!" she cried. "Did Anna tell you about the dreadful case of persons that came to see the Paragon? And she says she would disappear for two days at a time!"

"I did not engage Maria for the sublimity of her moral qualities," said I. "I had to view her capacity for accomplishing the definite duties required of her, and so long as she does these I cannot see that her personal character is any concern of mine. Do you know that the piano tuner is not a bigamist, or that guarantee have you that your dentist is not a confirmed gambler?"

She gasped and shook her head. "She has bewitched you!" she declared.

"We should never have acquired her for you," I returned affably.

I do not think it is certainly very pleasant to be so well looked after. Ever since the second day of her reign, when she appeared before me in the later afternoon to remark deferentially, "I have laid you with a blouse for Madam, and if she could be with you to come upstairs for this time, before I begin at my dinner, I shall help her with her dress," I have never lacked the services of a personal maid, to such extent as my simple habits require one. My room is kept in beautiful order, my bureau drawers, though arranged after the most systematic, always intelligible, to me, display system well worth a little mental effort; the book I am reading, the embroidery I am at work on, are sure to be near my hand.

Mamma always bore me a grudge, I know, for interfering, as I often had to, with her decorative leisure; May frankly admired Chloe to the exclusion of the rest of me, and took a keen interest in the family, and looked at me with the most triumphant possibilities; Mary, in so far as she had any respect for people of our low social position, reserved it for Sabina's professional success and money-earning capacities. But Maria, in consequence of her deference toward the other

two, reserves her personal interest for myself, and in my office as her employer. Me only she calls "Madam," for me she mends and brushes, and cleans boots and gloves. To me she condescended the existence and address of a little dressmaker, employed occasionally by Anna Stuyvesant, with great success but at small expense, who would undoubtedly do something for me at Maria's request, if approached in the usual way, but I found it myself this morning with two very pretty dresses that seem cheap even to my necessarily economical eyes.

The porter assured that Chloe's invitation had not played her false, for a telegram from Mr. Ogden begged that he might come to luncheon after to-day, his work having unexpectedly shortened itself. I arranged with Maria for an exceptionally nice luncheon, and when I had ascertained that Sabina would be busy in her study all the afternoon I promptly decided to feed the poultry man, and bring these chapters to what is, I suppose, almost their close. My leaving the two alone must show that the necessity of anything else is at an end now, and may precipitate an explanation at last.

I went long after the others had gone back to catch Maria on her way upstairs, and ask her to bring the chicken for luncheon—the poultry man is very unreliable—but she did not come. I went down to the kitchen; she was not there, and the disorder of every stage of dinner crowded the room. Twice during the night I stole to the door, but Maria never passed it. At eight o'clock this morning I looked again; only a discouraging picture of last night greeted me.

Maria could not possibly have known that we were invited to breakfast at half-past nine with one of our neighbors, and only invitation was delivered after dinner, and in its originality—we were to eat some freshly caught fish which our host

insisted on his ability to bring home—indeed, only a very small quantity was offered. But I knew it, and did not mention to Chloe or Sabina that I had a very early breakfast. The invitation, however, was prolonged unexpectedly; it was nearly twelve before we started home, and still I had not spoken—I don't know why, I was plying for a drink to the shore, and luncheon there, as was opened the hall door, when a glance into the dining room arrested my steps. The table was nearly set, and around it flowed Maria, haggard and white, one hand pressed to her head, the other feverishly straightening the lunch cloth!

She did not look at me, and I had taken time to make the beds and arrange the rooms. I knew that the luncheon must suffer—but still I did not speak.

I might have spared myself any worry, for the luncheon, though quite different from the one I had planned, was perfect. Oysters, poillon that I only would surmise to be best tables, the fluffy omelet, a salad that baffled my eyes, and peaches, appeared in turn before us; and if Maria's face was drawn and her hand trembled, who noticed it but her "Madam"?

Not Sabina, for her mind was utterly away from us; she was withdrawn, though her outward courtesy was perfect. I saw that she was too gay and excited; I have rarely seen her so brilliant. After luncheon, suddenly she ran a head into the living room, while Mr. Ogden stopped to light his cigar, and I kissed me simultaneously, even as I was telling her that I must and I must excuse myself.

"You dear!" she whispered, looking at me so strangely, "you perfect old dear!"

I went away quickly; the swift career, so like our old Chloe, moved me too much.

(Continued next week)





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calling all who long for happiness, to come unto Him and rest.

Christ never asks us to give up something merely for the sake of giving up. It is always to give place to something better. If we accept the teachings of Christ, we must believe that men are not wrong in wishing for happiness, but only wrong in their ways of seeking after it.

Four things have been truly said of happiness. It is inward, and not outward; and so it does not depend on what we have, but on what we are.

It cannot be found by direct seeking, but by putting our faces toward the things from which it flows; and so we must climb the mount if we would see the vision; we must tune the instrument if we would hear the music.

It is not solitary, but social; and so we can never have it without sharing it with others.

It is the result of God's will for us, and not of our will for ourselves; and so we can only find it by giving our lives to His submission and obedience to the contrivance of God.

We should truly accept the teaching of God in regard to the possibility and the duty of happiness. The attitude of the New Testament is not gloominess; but gladness; not despondency but hope. The man who is not glad to be a Christian, is not the right kind of a Christian.

The first that commended the Church of Christ to the weary and disheartened world in the early years of her triumph, was her power to make her children happy—happy in the midst of their afflictions, happy in release from the burden of guilt, and happy in the assurance of an endless life.

Was not St. Paul a happier man than Herod? Did not St. Peter have more joy in his life than Nero? If we want the Church to be a mighty power to win men, and to be a source of light in darkness, we must remember that to each one of us as individual members of that Church, we must live in the spirit of Christ, and show the true relation of the true religion to human happiness.—M. C. B.

**Women's Work in the Institute**

Mrs. Frank Webster, District President  
West Victoria Women's Institute

The institute is an organization in which all women may meet on a common level, un denominational, to study the very best methods of doing their work and teaching their children.

It also teaches us, that to make a success of our lives, we must live for others, and by our own teaching and influence make the lives of those around us brighter because we have lived. What would this world be to any of us if it were not for little words and acts of kindness that we receive from others?

That man had the right conception of life who said, "I would rather save a million of men than save a million of dollars." Women are awakening to their opportunities, to enter as influential constructive factors into the currents of human history, and leave the whole world better because some of them have lived and done their part faithfully.

It is said that there are four things that bind men together: a common hope, a common work, disservice from a common peril, and loyalty to a common friend. Mrs. Hunter in her reply to the address of welcome at the last convention at Guelph, asked these questions:

What have these years brought to us?

Have we received any benefit from the institute?

Are we more efficient home makers? Better wives? Better mothers? More kind to each other?

Are we any more loyal to our homes?

Are we more helpful to our husbands? Better teachers and compan-

ions to our children? And all together more necessary to every person we know?

She also said, "Future Canada is rocking in the cradles of our homes."

What an undertaking for the mothers of this present Canada. What a very great responsibility is resting upon the mothers of to-day. Napoleon cherished a very high conception of a mother's ability and influence when he said, "that the great need of France was mothers."

We hear much talk nowadays about political corruption and crime.

"Where did this originate? Has dishonesty been taught in the homes by some of the mothers that have lived, and perhaps are living still?"

Why it is practised? Simply because those who figure in it, see a few dollars for themselves, and they will sell name, character, and soul, for something that can at most give them but a passing pleasure in this world. But what about eternity?

We must teach honesty in our homes if we wish our children to live honest and useful lives.

Is it not time we were awake to the fact that there must be something done for humanity?

There is great need that honesty should be taught to our growing Canadians.

Who can do this work better than the mother who teaches the baby lips to lisped their first little words. But for us to accomplish this work we need all the good influence, and sympathy, that the fathers can lend us.

It is necessary for us to be very patient. Let us remember that the characters of good men and women were not formed in a day.

We must teach the very best we know how to teach, and continue doing this, just as long as we are able.

Then let us live in the bright hope of having our labor rewarded some day.

We must live for the people, for our sons, our daughters, our neighbors, our friends "and our enemies, too," if we are to be useful in this world.

We must not give so much thought to the things that to-day are "and," to-morrow are not.

Money would be very little use to any of us if we were sick and had no friends.

We cannot live successfully without our friends. I think that there is a very great missionary work to be done right here in Ontario, and when we start out to do it, let us look well into our own homes first.

Perhaps we will be surprised when we really look for such work at home. We would say to each member of the institute, let us all join hearts and hands for this good work; always remember to teach right at home first, and then what time we have to spare, let us help others along the pathway of life.

If we can only give a smile or a word of comfort and cheer it is not lost. Through co-operation with our complish at least some of the good work of living for others.

The satisfaction we will take in doing this, will more than repay us for all the trouble this labor of love has cost us.

\*\*\*  
**Hang Clothes Well**

Many clothes are ruined from being hung wrong on the line to dry. If hemstitched pillow-slips are hung with the hem folded over the line, the hem will not whip out or wear off until the rest of the slip is worn out. If hemstitched sheets are folded with the hems together and these hems put over the line to dry, the hems will not whip out with the wind. The same rule applies to all hemstitched articles.

If drawn-work scarfs and tray-cloths and similar articles are hung over sheets or pillow-slips, or even folded together, then they will last much longer than if they are hung in direct contact with the wind. Fancy silk-embroidered pieces can be hung between any thin fabric and their colors as well as the material preserved.

A little care will give a double length of life to many delicate pieces, as well as to those of heavier fiber.

\*\*\*  
**To Protect Washstands**

A house keeper may protect washstands from ugly rings and scars by pads made of common outing flannel of delicate hue and pattern. Double a yard of the material; spread several layers of paper between the folds and then buttonhole the edges with pretty silk thread. When it becomes soiled, clip the stitches.

\*\*\*  
Some claim that swallowing the white of a raw egg will immediately dislodge a fishbone in the throat, though a better and quicker method is to break off a piece of dry bread and swallow it without chewing. No difficulty is found in this simple method. It usually removes bone.

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Write direct to Household Editor, Farm and Dairy, Peterboro, Ont., for sample copies.

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**THE COOK'S CORNER**

Send in your favorite recipes, for publication in this column. Inquiries pertaining to cooking are solicited, and will be replied to as soon as possible after receipt of same. Our Cook Book sent free for two new yearly subscriptions at \$1.00 each. Address: Household Editor, this paper.

**COCOANUT MACAROONS**

One-half lb. cocoanut, 1 tablespoon flour,  $\frac{1}{2}$  cup white sugar, yolks of 3 eggs beaten, white of 3 eggs beaten. These are better than boughten macaroons.

**GINGER BREAD**

Scant cup brown sugar,  $\frac{1}{2}$  cup butter,  $\frac{1}{2}$  cup sour milk,  $\frac{1}{2}$  cup molasses,  $\frac{1}{2}$  cups flour, 2 eggs,  $\frac{1}{2}$  teaspoon soda. Preserved ginger.

**OATMEAL BREAD**

In Cook  $\frac{3}{4}$  cups oat meal until done, then add  $\frac{1}{2}$  cup sugar or syrup, 1 tablespoon salt, and when lukewarm add 1 pt. light bread sponge. Mix well, then knead in enough flour to make stiff. Mold into loaves, let rise until light, and bake about  $1\frac{1}{2}$  hours. This bread is very nice for school children's lunches.

**ECONOMICAL BROWN BREAD**

Soak  $1\frac{1}{2}$  cups stale bread in 2 cups water over night. Next morning add  $\frac{1}{2}$  cup molasses or brown sugar,  $1\frac{1}{2}$  cups each white flour, corn meal and Graham flour,  $1\frac{1}{4}$  cups cold water in which dissolve 2 teaspoons soda and  $1\frac{1}{2}$  teaspoons salt. Steam  $3\frac{1}{2}$  hours.

**CORN BREAD WITH "CRACKLINGS"**

Into 1 qt. corn meal stir 1 tablespoon salt and 1 cup fine "cracklings." Mix well and then pour in boiling water, stirring constantly until the consistency of soft mush. Spread in a warm ungreased pan and bake not too fast—about  $\frac{1}{2}$  hour.

NOTE—"Cracklings" are the residue of the leaf lard, after being rendered. The leaf lard should be cut very fine, then tried out, and the "cracklings" should be crisp and brown.—Household Editor.

**HOT WATER GINGERBREAD No. 1**

One-half cup of sugar,  $\frac{1}{2}$  of molasses,  $\frac{1}{2}$  cup of flour, 1 teaspoon of cinnamon,  $\frac{1}{2}$  teaspoon each of ginger, and salt,  $\frac{1}{2}$  teaspoon of nutmeg, 1 teaspoon of soda,  $\frac{1}{2}$  cup of boiling water. Bake in moderate oven.

**HOT WATER GINGERBREAD No. 2**

One-half cup of molasses,  $\frac{1}{2}$  cup of shortening, one level teaspoon of soda, one cup of flour, spices as in No. 1, and a scant half cup of boiling water. Bake in a moderate oven.

**PRUNE SOUFFLE**

For prune soufflé, wash and pick over  $\frac{1}{4}$  of a cupful of prunes. Put in a sauce pan, cover with cold water, and let stand, six hours. Cook in the same water should be nearly evaporated. Remove the stones, and cut the prunes in small pieces; then sprinkle with  $\frac{1}{4}$  cupful of sugar. Beat the whites of 4 eggs until stiff, and add the prunes gradually. Pour into a slightly buttered pudding dish, and bake in a moderate oven until firm. Chill and serve with custard sauce: Beat the yolks of eggs slightly, and add 3 tablespoons of sugar and a few grains of salt; then add gradually, while stirring constantly,  $1\frac{1}{2}$  cupfuls of scalded milk. Cook in a double boiler until the mixture is thick, stirring constantly. Strain, chill, and flavor with vanilla.

**EMERGENCY PIE CRUST**

I make an excellent pie crust by chopping 2 cups lard into 4 cups flour, with salt to taste, and cold water to mix to the proper consistency. The lard should be thoroughly chopped through the flour—I use a common meat chopper knife for this purpose. Sometimes I mix up a larger batch of flour and lard than I need for immediate use, and set the rest away in a cool place. Neither lard nor flour will spoil, and when I must make pie on short notice, I only have to mix up a little water to this flour and lard.

**HAM CAKES**

Take remnants of cold boiled ham,  $\frac{1}{4}$  part lean and  $\frac{1}{2}$  part fat, chop fine, and add an equal quantity of bread crumbs, 1 beaten egg, 2 tablespoons water, 1 onion chopped fine, salt, pepper and sage to taste, and flour enough to mold into flat little cakes, using no more flour than necessary. Fry a nice brown in hot drippings.

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**ART EMBROIDERY**

If we do not publish designs you desire, write and ask for the kind you would like. This department is for the benefit of our readers. Address, Art Editor, Farm and Dairy, Peterboro, Ont.

**An Attractive Pillow Top**

This pretty pillow top design, showing the old home surrounded by a ribbon and violets is very pretty when tinted in colors on ecru art cloth. The design should be heavily outlined with colored cotton. When finished this pillow top makes a most welcome Easter gift.



Sofa Pillow No. 101

Perforated pattern, which can be used an unlimited number of times, and all necessary materials for stamping is 35c.

Hot Iron Transfer Pattern, (the simplest transfer pattern) is 10c. The design stamped in natural colors on Art Cloth is 30c.

Fourteen skeins of Utopia Colored Silky Cotton to outline 30c extra. All above prices include postage.



Braid Center-Piece No. 103

The graceful braided center-piece No. 103, shown here is particularly popular on account of the simplicity of the work and because it is quickly made and is very attractive and showy when finished.

The price of the perforated pattern, size 18 x 18 inches, which can be used an unlimited number of times, including the stamping preparation is 25 cts. The Ideal Transfer Pattern, (the simplest hot-iron transfer) is 10 cents. Design stamped on Imported Linnin 18 x 18 inches is 35c. Coronation Cord (white or red), and 6 skeins of Utopia Silky Cotton for working, is 60 cents extra.

All above prices include mailing charges.

If your tubs become stained or rough, rub them thoroughly in a mixture of corn meal and vinegar. If the vinegar is very strong, dilute it slightly with water.

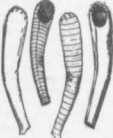
A good tooth powder is made of two parts precipitate chalk, one part baking soda, and half part powderedorris root. This will clean and whiten the teeth, prevent decay, and sweeten the breath.

When using flour for thickening, if you will first mix it thoroughly with the sugar, the sauce or filling will never become lumpy.

**The Sewing Room**

Patterns 10 each. Order by number and size. If for children, give age; for adults, give in three sizes, small, waist, and waist measure for skirts. Address all orders to the Pattern Department.

**PLAIN AND TUCKED ONE-PIECE SLEEVES 6274.**



Long sleeves are becoming more and more general. The plain sleeves can be utilized for heavy materials or for the ready tucked thinner ones, while the tucked sleeve is suited to thin materials that are to be tucked as illustrated.

Each sleeve is cut in one piece. Material required for the medium size is for the plain sleeves  $1\frac{1}{2}$  yds of material, 18, 21 or 24 in wide;  $\frac{3}{4}$  yds 25, 28, 32 or 34, medium, 36 or 38, large 40 or 42 in bust measure and will be mailed on receipt of ten cents.

**NIGHT DRAWERS 6276**



No sleeping garment suits the young child better than this one. In the illustration it is finished with feet, but this is optional and the leg portions can be cut off at the ankles if preferred.

The pattern is cut in three sizes, small, for the medium size (6 years) is 4 yds 27 or 3 yds 36 in waist.

The pattern is cut for children 2, 4, 6 and 8 years, and will be mailed on receipt of 10 cents.

**BLOUSE OR SHIRT WAIST 6235**



The shirt waist made with tucks over the shoulders is very generally becoming. It can be utilized for the heavier ones, and is made in shirt waist style, with regulation sleeves and it can be utilized for more delicate and dainty materials of a dressier sort and made with the plain, one piece gathered back that make the latest decree of fashion.

For the medium size will be required 4 yds of material 21 or 24, 27, 32 or 2 yds 44 inches wide.

The pattern is cut for a 32, 34, 36, 38, 40 and in bust and will be mailed on receipt of ten cents.

**GIRL'S SAILOR COSTUME 6227**



Sailor costumes continue to be favorites for girls. The costume consists of skirt and body lining, the blouse and the shield. The blouse is cut; separate and is drawn over the head.

Material required for the medium size is 6 yds yards 24 5 yds 32 or 4 yds 44 in wide for the body lining, 5 yds yds of braid.

The pattern is cut for girls 6, 8, 10 and 12 yrs of age, and will be mailed on receipt of ten cents.

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Choice between these two machines depends in a large degree upon soil conditions. The hoe drill is better for sandy soil and rooky and stony ground.

Both have a double run force feed which insures an even distribution of seed. The amount of seed being sown can be accurately regulated and just the right amount will be deposited.

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Each drill is equipped with grass seeding attachment. Each has strong wheels and staunch frame which cannot be wrenched out of line to cause poor working of the feeds. Each has ample clearance for trawls.

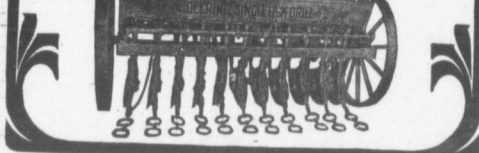
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### Bedford District, Que., Dairymen

(Continued from page 11)

in 1905, had with 300 cows in 1908 reached the average of 600 lbs., the income from each cow being on the average in 1905, \$52, and in 1908, \$77, a gain of \$25 a cow.

#### AERATION OF MILK

Mr. George H. Barr, Assistant Dairy Commissioner, gave an popular illustrated lecture on "The Care of Milk for Cheese-making" which address given at Prescott was fully reported in our issue of January 14th. Some exceptions were taken to Mr. Barr's deductions by President Foster and by Mr. Robt. Wherry, formerly cheese inspector in this district who pointed out that prize winning cheese from Bedford district had all been made from aerated milk. Mr. Wherry had introduced aeration of milk into the district and it had done away with floating curds. Mr. Barr in reply to the public. He was himself a cheese-maker of long experience. He had had to contend against gassy curds and all the rest of the evils. He had found that the shutting up of the milk at once did away with all dangers. The aeration of milk would be all right if it could be carried on 40 rods from the barnyard with the wind blowing in the opposite direction, but the spot where the aeration was carried on would need to be altered every time the wind changed, but aeration did no good and laid open the danger of great harm. Mr. A. J. Stevens of Bedford gave a deal of practical light on the subject by giving testimony that he had owned a factory whose output was spoiled by the milk of one dairy. On investigating it was found that this milk was aerated on a nice green lawn away from the barn; that the milk was always all right when the wind blew from the lawn to the wind blew in the opposite direction.

Speaking upon the theme "Problems

of Agriculture," Prof. Arkell of Macdonald College stated that the time had gone by when any sort of man can be a farmer. The farm need trained men to-day. We are wasteful of our land and do not farm nearly as much as we are able to do. The science of farming is much more developed in Europe. The professor pointed out that the profit in farming comes from the margin at the top. Farmers are not business men, they do not combine or organize as do any other class of business men. Physical energy is not the whole of it. Fore-sight and calculation are better. It is better to till 10 acres well than 20 acres poorly.

George H. Clarke, Seed Commissioner, talked about the best methods of exterminating weeds. He illustrated his remarks by means of a multitude of lantern slides projected on to a curtain. The worst control act has done something to reduce the quantity of weed seeds which were not ground finely enough to prevent their regenerating. These seeds were consumed by the cattle and passed through in the manure, and then made their appearance in our fields just as they had done in the Great Canadian West. Mill men should be required by law to grind these seeds finer. Mr. Clarke stated that mustard seeds could be killed by leaving it to remain dormant for 15 years while oats would lose their vitality in seven years.

The problem "How to get more produce from the farm and how to keep more cows and how to make each give more" was handled by Mr. Ayer. He spoke in favor of under-draining much of the land. He deprecated the habit of planting small potatoes and the sowing of oats and other grain. At the end of his discourse, he stated that the inspector should leave factories alone for one year, at least, and go after the dirty dairies and get them cleaned up, and thus clean up much of the trouble at its origin.

#### SWINE FEEDING

Mr. J. H. Grisdale spoke about the best methods of feeding swine. The feed of swine is generally a breeder holder's best way they can be fed much more cheaply than bought. Mr. Grisdale told about how he had kept brood sows right out of doors in the snow all winter. They slept in small cubina built like chicken coops large enough to contain six or seven. Last year Mr. Grisdale had produced pork at 35¢ to 4c a lb.; so that left a margin.

A resolution was passed by the convention recommending the minister of agriculture for the province to arrange for the cheese and butter inspectors to spend most of their time during this coming season of 1909 in visiting the dairies that supply milk and cream to the factories and creameries. For the purpose of saving the cows milked and that the milk is handled in the best sanitary manner, and further that such necessary additional work be handled as will make the milking and handling and delivery of milk generally in a sanitary manner.

#### OFFICERS

The following directors were appointed: Missisquoi County, Messrs. E. H. Morgan, Stanbridge Stations, A. J. Stevens, Bedford, and John Butler, Swainsburg.

For Bromes County, H. S. Foster, Knowlton; J. E. Miller, Swainsburg, and William Curley, of Sutton.

For Shefford County, H. L. Lawrence, West Shefford; M. Edward Dunlavey, West Shefford, and J. Augustus Hayes, of Sheffordton.

At the directors' meeting, held later, Mr. H. S. Foster was appointed pres., and Mr. P. C. Duboyce, sec.-treas.



MARKET REVIEW AND FORECAST

INCORPORATED 1885

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Toronto, Monday, Feb. 15, 1909. — The general feeling among many wholesalers seems to be that the trade of the country is in healthier condition than it has been for some years. The experience of the last three months of 1907 and the first six of 1908 had served to put business on a sounder basis which boded well for the future. The business of 1908 in many lines has turned out better than expected, as the annual statements of many concerns show. The volume of business done has been smaller but in many cases a good profit on the year's transactions was shown. Money continues in fair demand at steady rates. Four per cent. is the ruling figure for call loans and 5½ to 6 per cent. on real estate.

WHEAT

The "bulls" are having their innings in the speculative market just now. At Chicago the wheat crowd are in the ascendant and prices are gradually mounting upward. Prices advanced 3c to 4c during the week there and as high as \$1.13 was paid for May wheat. The strength of the market is shown in the gradual advance in price, though weekly shipments show a considerable increase. The Argentine and Australia continue to send forward large quantities though it is believed that exports from these countries will soon begin to fall off. The European situation is strong and though the market is quiet at the recent advance, holders are not anxious sellers. English farmers are said not to be marketing their wheat, which tends to keep the British market strong. Cash wheat is much in demand in Winnipeg. Exporters have been very active on that market, and at the end of the week cash wheat ruled to above current option. No. 1 Northern is very hard to obtain and dealers here will not promise delivery without first finding out if the wheat is to be had by communicating with Winnipeg. The market for

Ontario wheat is strong and the advance in price has had the effect of increasing deliveries. Buyers of wheat here are asking \$1.04 and dealers are quoting \$1.02 to \$1.05½ for Ontario wheat at country prices. On quality, On Toronto farmers' market fall wheat is at \$1.02 to \$1.03, and goose at 94c to 96c a bush.

COARSE GRAINS

The oat market is firmer and higher owing to light receipts. At Montreal a good demand is reported from country towns and prices are higher at 48c to 47c for Ontario and 46½ to 46½c for Western oats. Dealers here quote oats at 48c to 48c outside and 48c to 49c on local farmers' market. Barley seems to be in good supply and prices rule steady. Malt barley for malting is quoted at Montreal at 63½c to 66c for quality and 56c to 55½c for western feed barley. Dealers here quote barley at 53c to 57c outside and 56c to 57c a bush on Toronto farmers' market. Peas are quoted steady here at 80c outside and 80c to 90c on the local market.

FEEDS

Mill feeds are scarce and the market is very firm at quotations. At Montreal Manitoba bran is quoted at \$22 and shorts at \$24 a ton in bags in car lots, and Ontario bran at \$22 to \$22.50; shorts at \$24 and \$24.50, and middlings at \$24.50 to \$25 a ton in bags in car lots or truck there. Dealers here quote bran at \$22, and shorts at \$22 to \$24 a ton in bags in car lots outside and 56c to 57c a bush at Montreal at 70c to 72½c a bush, in car lots and here at 70½c to 72c for American, and 70c to 71c for Canadian in car lots and Toronto freight.

SEEDS

There are no new features in the seed situation and it looks now as if no better prices than those now ruling will prevail this season. The demand at the moment is quiet. Dealers here quote seeds as follows: In stock, Alsike, \$7.75 to \$8.25; red clover, 85c to 85; and timothy, \$17.75 to \$23.25 for good clean seed. The quotations at country points rule at \$6.75 to \$7.75 for Alsike, a little higher for fancy lots; \$4.50 to \$5.50 for red clover, and \$1.50 to \$2.10 for timothy, as to quality.

HAY AND STRAW

The hay market rules about steady, though larger quotations rule at Montreal for No. 1 quality, which is arriving there in larger quantities than the market. There was a bad break in the Glasgow market during the week. At Montreal hay in car lots on track there is as follows: No. 1, \$9 to \$10; No. 2, 85c to 89c for No. 3; 87.50 to \$9.50 for clover mixed and 87 to 87.50 for clover. Cuts of baled hay are quoted on track here at \$11 to \$11 for No. 1, and 87 to 91c a ton for undergrade, and \$5.50 to \$7.50 for baled straw. On Toronto farmers' market timothy sells at \$13 to \$13.50; mixed at \$10 to \$12; straw in bundles at \$12 to \$13, and loose straw at 87 to 88 a ton.

POTATOES AND BEANS

An advance of from 2c to 5c a bag is reported at Montreal for potatoes. There is no change reported here and the market rules steady at 40c to 42c a bag in car lots on track Toronto. On the farmers' market here potatoes sell at 75c to 90c a bag.

The bean market is stronger and prices are higher. Western Ontario beans are quoted at Montreal at \$1.18 a bush, for three pound pickers, and 87c on track there. Dealers here quote bean at \$1.17

to \$1.80 for primes and \$1.90 to \$2 a bush for hand-picked.

EGGS AND POULTRY

Supplies of hen eggs are getting scarce and trade is mostly in new-laid, which are coming in more freely. New-laid are quoted at Montreal at 33c for straight receipts and 32c to 34c for selected new-laid. Receipts of new-laid are increasing here and sell at 28c to 29c in case lots and storage at 25c to 26c a doz. On Toronto farmers' market new-laid sell at 30c to 35c a doz.

Poultry receipts are light and quotations are largely nominal. There is demand at Montreal for poultry for carnival week and any shipments sent there will realize good prices. The market here is quiet at steady prices. Dealers quote chickens at 13c to 15c; fowl, at 10c to 11c, and turkeys at 18c to 19c a lb. dressed weight. On Toronto farmers' market dressed chickens sell at 15c to 16c; fowl at 12c to 13c, and turkeys at 19c to 22c a lb.

DAIRY PRODUCTS

The cheese market continues firm with stocks light. London cables quote Canadian cheese at 65c to 68c. At Montreal finest white is quoted at 12½c and colored large at 11c. The local market here is firm at unchanged prices. Dealers quote large at 13c to 15½c and twins at 13½c to 15½c a lb.

The butter market runs along about as usual. Receipts have ruled fairly liberal of late, though at the end of the week some Toronto dealers reported a falling off. There is a wide range of prices quoted at Montreal, some quoting fresh creamery at 27c and others at 24c, and held fall stock at 25c, and others at 27c. This is due to the variation in quality. Wholesale quotations for butter are: Creamery, 22c to 24c; dairy tubs and large rolls, 20c to 21c; and inferior stock at 18c to 19c a lb. On Toronto farmers' market dairy prints sell at 25c to 26c and stock at 24c to 25c a lb.

UNION STOCK YARDS HORSE EXCHANGE

The horse market is considerably brisker and business is more active. Prices, however, rule about the same, with higher quotations for choice quality. At the Horse Exchange, West Toronto, about 100 horses were sold last week. Two car loads were shipped to Brandon, and another carload to points in the west. One car load went to Burford, one to Peter-

boro, and others to various points in Ontario. Heavy draft horses sold at \$160 to \$190; general purpose horses and farm chunks at \$140 to \$180; wagon horses at \$140 to \$210; drivers at \$90 to \$150, and \$40 to \$90 each. The top prices herein quoted are for horses of good quality, well broken and in their primes.

LIVE STOCK

Receipts at the cattle market fell off somewhat during the week and trade ruled firm and brisk at the closing market, especially for choice cattle. There were some good cattle on the market which were quickly picked up at high prices. The percentage of common and medium quality is still larger. The price of all grades was a little higher at the end of the week.

Exporters show little change in prices, which range from 85c to 85c for export steers, and \$4 to \$4.50 for bulls, with one or two of better quality, selling at \$4.75 at \$5.50 a cwt. On Thursday one load of good exporters brought in by Alfred Spens, Agricuter, averaging 1300 lbs. each, sold at \$5.50 a cwt. These cattle were bought as feeders on Nov. 20, at which time they weighed 1150 lbs. each. London cable quote cattle steady at 12½c to 12½c a lb. dressed weight.

Choice butchers' cattle are in demand. Several light exporters were bought for the butchers' trade at \$5.25 to \$5.50 a cwt. Choice loads of Ontario cattle sold at \$4.75 to \$5.10; loads of good cattle at \$4.50 to \$4.50; medium, \$4 to \$4.40; common, \$3.75 to \$4.1; cows, 85c to \$4, and canners at \$1.50 to \$2.50 a cwt.

Trade in stockers and feeders ruled slow during the week and prices were a little off. The best feeders, 900 to 1000 lb. each, sold at \$3.75 to \$4.25; medium, \$3.50 to \$4; \$2.75 to \$3 a cwt. Flock steers suitable for short keep feeders sold to \$3.50 for butchers' purposes for feeders to handle.

There was one of the strongest markets of the year for milkers and springers last week, especially so for good of choice quality. Prices ranged from \$35 up to \$75 each. Only one, however, was good enough to bring the latter figure, though several sold at \$70 each.

Under moderate receipts the price of calves remains unchanged at \$5 to \$6.50 a cwt. Veals are quoted at Buffalo at \$7 to \$9.50 a cwt.

Under moderate receipts the price of sheep and lambs ruled higher. Export ewes sold at \$4 to \$4.50; rams, at \$5 to \$5.50; grain fed lambs at \$6 to \$6.50, and

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**WATERVILLE.**—The winter of 1909 will be remembered as one of many thaws. Since Jan. 1st there have been three big thaws which have taken the snow away and exposed the roads for a time, but it has put an end to the water famine. The ice storms which caused much destruction in the west did very little damage in these parts. Although the snow has nearly all disappeared the farmers have their season's wood all hauled. The price of feed and provisions remain about the same. Eggs are 30c to 40c a doz.; butter is 25c to 35c a lb.; and pork \$9 to \$9.50 a cwt.—J. M.

**CHATEAUGUAY CO., QUE.**

**HOWICK.**—Although the weather here has been cold, we have had no severe storms, nor any late trains. The country roads have been fine for teaming. There is very little wood hauling, as the bush lots are about used up; most of the farmers burn coal. Farmers are busy drawing ice, which is about 22 inches thick. A great quantity is stored for dairying purposes, as from this station alone over 300 (3 gallon) cans are shipped daily winter and summer to Montreal. We realize 22c a gallon from the 1st of Oct. to the 1st of May. The freight costs 2c a gallon, which nets us 20c a gallon for the milk. This price may seem high, but it does not pay as well as in former years, when the price was lower and feed was more plentiful, and could be got at about half its present price. On account of the drought for the last two years crops have been below the average. Hay and grain especially have been poor. Enslage corn was extra good last year which will help draw in many to sell through the winter without buying much rough feed. Our creameries closed in Jan. They paid \$1.10 a cwt. for milk. Fresh milkers are scarce and hard. Good beef is scarce, a few sold at 5c a lb. live weight. A few cars of beef have been brought in. It sells at \$10.50 for nice grades, selling to \$12.50 to \$13 for timothy. This experience is something new. A great quantity was shipped out in former years. Straw sells at 8c to \$5.50; bran (Mauls), at \$25. The population in this county is about equally divided Scotch and French. Both parties together in harmony all municipal and political matters.—D. G.

**ONTARIO**

**STORMONT CO., ONT.**

**CANNAMORE.**—Farmers are busy hauling and cutting their supply of firewood, putting in a supply of ice for summer, etc. Water is plentiful since the recent heavy rain. Stock is wintering in fairly good condition. The majority of the farmers in this locality will have sufficient feed until the grass comes. Good hay is selling from \$10 to \$12 a ton.—E. L. M.

**CARLETON CO., ONT.**

**MERIVALE.**—Cattle are wintering well, although they must quarter rather than in flesh, owing to the poor pastures last fall. There is going to be enough feed for all stock as it has been taken care of since prices remain steady and are not so high as last winter, with the exception of pork. It is \$10 a cwt. but the quartering will bring 8c to 8 1/2 cts. according to quality; frosts, 8c to 8 1/2; butter, 35c to 36c; eggs, 30c to 40c a doz.; hay, \$14 to \$17 a ton; potatoes, 90c to \$1 a bag; barley, 50c to 75c a bush; peas, \$1 a bush; oats, 45c to 48c a bush. It has been a very fine winter for haul-

ing wood, ice, etc., on account of the good roads.—G. B.

**GRENVILLE CO., ONT.**

**PRESCOTT.**—There seems to be no scarcity of fodder here. Farmers are trying to make it do. As a consequence farmers are coming out on the thin side already. Timothy hay sells for \$16 a ton; clover hay, \$15 a ton; alfalfa, 45c a cwt.; a bush, corn, 72 1/2c a bush; wheat bran, \$28 to \$23 a ton; middlings, \$27 to \$28; linseed, \$24 a ton; potatoes, 30c a bush; creamery butter, 20c a lb.; potatoes, 60c a bush; springers, \$30 to \$35 each; calves, 7c to \$3; beef, 4c to 4 1/2c a lb.; hogs, 7c to 7 1/2c a lb.; hides, 5c to 9 1/2c a lb.

**HASTINGS CO., ONT.**

**TURBIE.**—We hear of no scarcity of fodder, but oats, peas and potatoes are scarce. As this country suffers every dry season from forest fires, some people are declaring their intention of putting out the forest for all the snow now when the spring sun has dried up brush heaps. This clearing of the woods would be the salvation of oats, as it is one kind of forestry that would not cost much.—W. H.

**HASTINGS.**—The weather so far has been really fine; enough snow for good sleighing, with no severe frost. Some farmers are still in need of rain to raise their crops. The wells, but the majority have enough. Dairy cows are doing well, are ranging from \$20 to \$30 a piece. There are no complaints as yet about feed being scarce; hay keeps in the neighborhood of \$15 a ton, corn at \$28 a ton retail.—H. W.

**NORTHERNBERLAND CO., ONT.**

**EVILLIE.**—The farmers are having trouble with their turnips. They are rotting badly; from what cause it is hard to say for the winter has been of about the usual temperature. Some attribute it to their not maturing well, owing to the dry season last fall. It seems a pity that this should happen in this year of short crops when otherwise they would be of much assistance in wintering the stock.—H. H.

**VICTORIA CO., ONT.**

**WOODVILLE.**—The market for hogs is steadily improving; farmers unloaded their hogs this week for \$6.50. Feed is not very plentiful here. The whole cattle are looking extra well. There is not a great deal of grain being marketed, probably on account of the condition of the roads. The market for hogs is about \$1 a bush; barley, 55c; oats, 45c.—J. R.

**OAKWOOD.**—Farmers are taking advantage of the good condition of the roads to haul their stock. The who are fortunate enough to possess an ice house are profiting by the recent cold snap to secure a supply of ice for next summer's use. Feed is holding out better than was expected at the beginning of the winter, although some have barely enough to winter their stock, particularly with regard to roots. Hogs are selling well.—R. W. H.

**HALIBURTON CO., ONT.**

**HONDALE.**—Cattle are looking fine. The feed is all right; the weather is still not stay too long, there will be plenty. There was a fall of snow on Candlemas morning, then the sun came out bright and clear. There will be his shadow most of the day.—J. P. H.

**HIGHLAND GROVE.**—Farmers fear that the lack of snow will bring disappointment to the hay crop next year. It is liable to freeze out the new seeding. The lumber men have had to stop teaming. Feed seems to be quite plentiful as yet, and cattle look very good compared to other years. Hay and straw are no higher in price than in the fall. Potatoes are very scarce, oats are somewhat the same for I hear a great many farmers talking of buying already. They will need to turn over more soil next year. Some of the people are ploughing in early spring, but we will likely know more about that by the first of May, or later on.—F. N. E.

**WELLINGTON CO., ONT.**

**BELWOOD.**—The farmers are busy getting their supply of wood out. A few are hauling manure but this is not done extensively on account of the heaviness of the soil. The prices offered for hogs and cattle are more encouraging this year than they were last. Hogs sell for \$6.75 and cattle from \$5 to \$6.25. Some have even been offered \$6 for May delivery. Hay is selling for \$9 a ton; oats, 39c to 48c a bush; wheat, 94c a bush. Horses, except good ones, are rather dull.—R. H. S.

**LIVE HOGS**

We are buyers each week of Live Hogs at market prices. For delivery at our Packing House in Peterborough, we will pay equal to Toronto market prices. If you cannot deliver to our Packing House, kindly write us and we will instruct our buyer at your nearest railroad station, to call on you.

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**LAMBTON CO., ONT.**

**WYOMING.**—Although we have a mild winter, it will be well to be careful of the feed. No one can predict at what time spring will come. It is a better policy to keep feed now than have to buy in order to pull through. Don't be afraid to run seed grain through the fanning mill. Now is the time to clean it, and clean it well. It should be run through two or three times. The stock will take care of all the screenings. If you want a good crop take no chances with poor seed, but save the good plump and clean grain. Farmers were plowing here on Saturday, Feb. 6th. Many got two weeks' plowing done in Jan.—J. H.

**HURON CO., ONT.**

**BLYTH.**—We are having very pleasant winter weather, but no snow of any account, which is very unusual. Hogs fairs are being held in many of the towns and are being well attended by both sellers and buyers. The buyers want hordes of all ages but they must be in good condition. Very fair prices are being real-

ized by those who are disposing of their animals. The Farmers' Institute meetings are being held throughout the county, and are fairly well attended; consequently the topics are well discussed. More of these gatherings in the way of farmers' clubs would be beneficial to the agriculturist. They could gather together once in two weeks and discuss topics peculiar to their particular environments. The farmers' market is improving somewhat. Eggs have gone down a little; butter is firm, while grain and live stock are slightly better in price.—R. R. B.

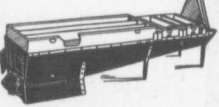
**BRUCE CO., ONT.**

**WALKERTON.**—Fodder is plentiful; the great bulk of it is fed to stock for spring shipment. Hogs are selling for \$5.50; butter, 25c; eggs, 25c; potatoes, 50c a bag; hay, \$10 a ton; oats, 45c; wheat, 90c a bush. Stock of all kinds is doing well. Hauling manure to the fields is the order of the day with most farmers. Some are spreading it; others are putting it in small heaps, while others are putting it in larger piles.—J. A. L.

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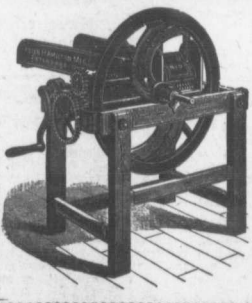
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# Lightning Insurance Policy

## With Every Roof Covered With SAFE LOCK SHINGLES

**E**VERY Canadian farmer who expects to build or re-roof his house or barn should write us to-day for details of our Free Lightning Insurance Policy in connection with Safe Lock Metal Shingles.

We give it to you without any conditions whatsoever, except that you roof with Safe Lock Shingles. Such an offer is unprecedented, but we can afford to make it because we know absolutely that Safe Lock Shingles will insure safety from lightning.

It is absolutely free. You do not have to pay one cent for this protection, either directly or indirectly.

Insurance records show that nearly one-half the fire losses on barns in Canada result from lightning. This loss, running into the hundreds of thousands of dollars, can be entirely prevented if Safe Lock Shingles are used.

We know this, and we back up our statement with a Free Insurance Policy payable under its terms in cash.

Safe Lock Shingles are sold at the same price as shingles known to be inferior in quality of steel, galvanizing and construction.

We have been manufacturing Safe Lock Shingles for over ten years, and roofs laid when we started in business are still "as good as new," to quote from hundreds of letters we have on file in our office from our pleased and satisfied customers.

In all this time these roofs have not cost one cent for repairs of any sort.

In all these years no building covered with Safe Lock Roofing has ever been destroyed by lightning.

Do you know that Safe Lock Shingles fully meet the rigid requirements of the British Government for Admiralty and other public service. Think what that means. Let us illustrate.

Every farmer knows from experience that ordinary galvanized fencing seldom lasts longer than two or three years without showing signs of rust. On the other hand, galvanized wire for Government use gives years and years of service, owing to the splendid galvanizing insisted upon.

Safe Lock Shingles are galvanized the same as Government wire, and therefore may be depended upon to give long service. We really do not know how long they will last. Safe

Lock Shingles in use for more than ten years show no signs of wear.

To-day we are using better material in their construction than ever, the steel is of higher grade, and the galvanizing is heavier. We have also made several improvements in manufacturing. For instance, every shingle is cut accurately to size before it is galvanized, thus protecting the edges of the shingles instead of leaving them raw and exposed to the decaying action of moisture.

We want you to remember the

thus causing a leaky roof.

Safe Lock Shingles cannot be blown off, nor can they be pulled apart by warping of the sheeting, or any other cause.

Study the small illustrations on this page, and you will be convinced of the truth of this statement.

**FIG. 1**  
 In Fig. 1 the solid black line shows the top lock, the shaded line the bottom lock. Notice that a

contraction due to heat and cold. They cannot unhook.

Illustrations 3, 4 and 5 show the construction of other metal shingles.

**FIG. 3**  
 No. 3 is the old-fashioned cleat shingle now almost entirely driven from the market by the Safe Lock. These do not always shed water, and it is almost impossible to keep them from leaking after they have been on for a season or two.

**FIG. 4**  
 Note in No. 4 that the nail is only about half way driven into the sheeting, leaving a large surface exposed to the weather. This makes a very insecure fastening for a roof, and this is still further weakened by the springiness of the steel, which has a tendency to pull out the nails, causing a loose, leaky, rattling roof.

**FIG. 5**  
 No. 5 is a side slip pattern, similar to many now on the market. The one shingle slips into the other, but does not lock. Shingles constructed in this way pull apart easily and must not be confused with the positive lock in our Safe Lock Shingles, as shown in Fig. 3.

Safe Lock Shingles are absolutely uniform. We have spent time and money to perfect their construction, which is fully protected by patent. They are now easier than ever to lay, and a Safe Lock roof cannot leak, if the shingles are laid in accordance with our printed instructions.

### SAFE LOCK SHINGLES are the only shingles that—

1. Give you a positive guaranty against Lightning, backed up by a policy signed and guaranteed by the manufacturers.
2. Meet fully the rigid requirements of the British Government for Public work.
3. Lock on four sides, and cannot be pulled apart.
4. Have three (3) thicknesses of metal along upper edge at point of greatest strain.
5. Completely protect nails from weather.
6. Have edges galvanized after being cut to exact size.

name Safe Lock. No other shingle has that name.

No other shingle is a Safe Lock Shingle.

Safe Lock Shingles lock positively on all four sides. Other shingles grip only on two sides. This is not enough for a permanent, durable roof. We know of many instances of buildings covered with these shingles being entirely unroofed in a stiff breeze. Another objection is that these shingles are apt to spread apart owing to the warping of the sheeting to which they are nailed,

double fold forms the top lock instead of a single fold, thus giving twice the strength at the point where the greatest strain comes.

With Safe Lock Shingles the nails are driven full length into the sheeting, and are protected by the peculiar lock construction from any possibility of water backing up and starting rust.

**FIG. 2**  
 Fig. 2 shows the side locks. Note the deep firm grip which allows ample room for expansion and

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