

Issued Each Week—Only One Dollar A Year

VOL. XXXI.

NUMBER 27

# FARM AND DAIRY

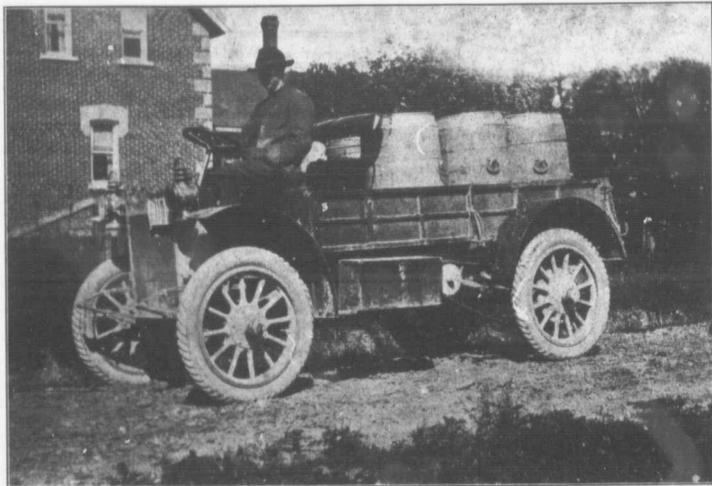
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## RURAL HOME

PETERBORO, ONT.

JULY 4

1912.



### AUTOMOBILES ALREADY ARE TAKING A LARGE PLACE IN CANADIAN AGRICULTURE

By means of this auto, as here shown, Mr. Eimer Harris, of the Oakwood (Victoria Co., Ont.) Creamery, does the collecting and hauling of cream, which previously required three men with separate rigs. Need we say more to show why the automobile has become popular with and is quite generally used by many progressive creamery owners? Then, in general agriculture, too, the auto is coming into use. We have been to visit several farmer readers of Farm and Dairy who have autos, and find them of great service. We are informed that one dealer in a small village in Northumberland Co., Ont., last year sold 16 automobiles to farmers. The day of the auto for Canadian farmers has most surely arrived, even as it came some years ago to farmers in the United States, where farmers' autos now, it is said, number over three to one in excess of those owned in cities.

—Photo by an editor of Farm and Dairy.

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CANADIAN COUNTRY LIFE

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2. Great convenience in cleaning and handling, because the blades do not come apart, and do not have to be re-assembled in any particular order.
3. The device being expandible, and fitting the bowl snugly, it can never become loose, or shift in the bowl, and throw the same out of balance.
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There are several other exclusive features of the Simplex that it will pay you to know about. Send a post card tonight for our illustrated booklets telling you more about this Peer Amongst Cream Separators.

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**THIS** is the season of heavy milk flow, egg, poultry and fruit production, all selling for ready money and lots of it.

Look through this issue of Farm and Dairy and note how helpful it is to any one who farms. It is timely, practical, interesting—worth dollars to our interested people.

Bank on it—you can to your profitable advantage advertise each week to our people through Farm and Dairy.



### HE WHO MAKES THE ROAD CANNOT ALWAYS USE IT

The Ontario Motor League are offering a reward for the apprehension of the party or parties who seeded tracks over a road on the Ontario Lake front, that is much travelled by high power, fast-moving automobiles. Perhaps it was a similar scene to the one here depicted by our cartoonist that induced the sowing of these tracks. Who owns the road anyway?

### Cooperation in Wool Marketing

Editor, Farm and Dairy.—It is seldom that anything in the agricultural press of Canada on sheep or wool escapes my notice. I did, however, miss an article in Farm and Dairy. My attention has recently been drawn to Mr. Murchison's letter in Farm and Dairy of 14th March on "Cooperation in Marketing Wool."

It is quite evident that this correspondent has neither read the report of the Sheep Commissioners carefully nor understands the duties of the Commission. He asks, what have they done to improve the deficiency in the very remunerative and valuable industry of sheep raising. In reply to this question, I should point out that the Commission was not appointed to revolutionize marketing or introduce innovations of any kind, but rather to investigate the industry of sheep raising, including the handling of wool, to report their findings to the Minister of Agriculture and to make such recommendations as seemed to them appropriate. Having done this to the satisfaction of the Minister and to the great majority of Canadian sheep raisers, it seems to me uncalled for and stupid to endeavor to cast reflection on their work.

#### COOPERATION WAS RECOMMENDED

Before writing his letter Mr. Murchison should at least have taken the trouble to run his eye over the Index of the Report to make sure that his criticism was reasonably sound. Had he done this he would not have charged the Commission with neglecting to recommend cooperation in marketing wool. Here are their own words as found on page 171 of the report:

"After carefully studying the various methods of handling wool in successful sheep farming countries elsewhere, we have come to the conclusion that Canadian wool should be handled on cooperative lines so as to combine the advantages possessed by the marketing system of Great Britain with those secured through the organization of Australasia, together with such as would likely be obtained through the adoption of approved methods recently undertaken in other countries. As a means to this end, central wool depots or receiving stations should be established in suitable localities for collecting, warehousing, grading, and classing Canadian grown wool for shipment to the home or to the export trade."

To this I might add that a further section of the original report of the

Commission dealing quite fully with this subject does not appear in the printed volume.

Mr. Murchison deserves the thanks of other sheep raisers for advocating a cooperating system of grading and marketing wool, but he should not have attempted to belittle the work of the Sheep Commission without assuming himself of their duties and powers as well as of their official recommendations as printed in their report.—J. B. Spencer, Ottawa, Ont.

### Its Socializing Influence

Like all cooperative enterprises, the organization of a beef ring, which makes a ready supply of fresh meat, at the lowest cost, an easy possibility in 20 or 25 families, where otherwise it must be a rarity—has the effect of multiplying social contacts, rubbing off the angularities of disposition which result from isolation, and bringing about pleasanter relations between the individuals of a rural community. Indeed, it restores the primary meaning of the word "community," which was a body of people having things in common.

The pooling of interests in this case daily places upon each dinner-table, say, a good roast, a hot steak, a toothsome stew, or an appetizing beef pudding; and who can doubt that the substitution of such viands as these, for the otherwise some monotony of salt pork or corned beef, mellows the relations between those by whose cooperation it has been brought about, and prepares the way for a more fraternal and generous forms of cooperation. People who have united in a beef ring, for instance, will find it easier, ere long, to unite in establishing a cooperative laundry, which shall lift the heavy burden of "washing day" from the shoulders of the wife and mother.

A veteran breeder tells us that he makes it a rule to consider every bull dangerous and the most gentle bull the most dangerous of all. A bull with a ring in his nose and no horns on his head is the safest kind.

Dairy products are too high in price to let our best cow lose her life by being permitted to drink too heavily of cold water just after she calfs it. But this is often done. Give her water warm'd slightly and a little at a time.

A farm scale is useful and should be placed in a convenient place.

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Each Week

Vol. XXXI.

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a Year

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FOR WEEK ENDING JULY 4, 1912.

No. 27

### IS THE MACHINE MILKER A PRACTICAL SUCCESS? WHAT EXPERIMENTS INDICATE

By "Dairyman"

The Milking Machine is already solving the labor problem of the Scotch farmer. It has been tried in both Canada and the United States. A synopsis of results of experiments to date.

UNLESS labor conditions improve, or the milking machine comes into more general use, the cost of living in so far as dairy products are concerned, is almost certain to go higher. During the past two years milk and cream have advanced fully 25 per cent. in the cities of Canada, while good butter and cheese have kept up all through the year and would have gone higher for the former product had not the demand been relieved by importations. The advance is not due to inferior cows, or lack of feed nearly so much as to a deficiency of suitable labor. Women milkers, and these were always most satisfactory, have gone out of the business, and men who will drive a team on the farm and milk 10 or 12 cows properly

and at the present time many are being used to the satisfaction of their owners, which indicates that dairymen need not despair so long as cows will yield the milk.

Mechanical milking has been well investigated by experiment stations. In 1909 the Ontario Agricultural College issued Bulletin No. 159, setting forth the results of a series of comparative tests made of hand and machine milking for short periods. In these it was shown that machine milking is fully equal to inexperienced hand milking. It is shown that young cows respond well to the machine, indicating the value of training. Regarding the quality of the milk, it was claimed that it is possible and practicable for the general farmer to produce pure milk by

day for the 10 cows. The hand-milked gave 4,371 pounds, the machine-milked 4,068.5 pounds. Strippers got 68 pounds a day from the hand-milked cows and 85.2 pounds from the machine-milked ones. The milk drawn by hand tested 3.77 per cent. of fat, as compared with 3.49 per cent. in the machine-drawn milk. This test is claimed by the authors to show that by the use of milking machines the labor is reduced one-half. This makes it possible to retain better men, larger dairies, specialize to a greater extent, and thus secure a better product and price.

#### MACHINE-DRAWN MILK KEEPS LONGER

From 1905 to 1907, milking machines were used on the college herd at Storrs Agricultural Experiment Station, Connecticut. Among other results, it was shown that in the majority of cases machine-drawn milk kept longer without souring than hand-drawn. This occurred in spite of a higher bacterial content in machine-drawn milk. When cotton filters were used for straining, hand-milked milk curdled in 36 hours and machine-milked in 72 hours.

A Kansas Station bulletin by Oscar Erf maintains that the labor saved by the machine working under practical conditions has been conservatively estimated to range from 30 to 40 per cent. Some cows gave a decreased quantity to the machine, while others gave more than to hand milkers. The quality was affected in practically the same way; hence under average conditions as far as has been experienced the machine proves to be as efficient as the average milker milking by hand.

#### DISTRACT THE COW'S ATTENTION

It was found desirable, in the Kansas trials, especially at first, to feed cows their concentrated ration during milking. This has a tendency to distract the attention of the cow

from the milking machine, and seems to induce milk secretion. It is pointed out that it is extremely necessary for the man in charge to fully understand how to operate a milking machine. To reach the highest degree of success, the bulletin claims, the cows should be selected and bred to respond to machine milking. If this factor is taken into consideration milking machines will be equally as successful as the best hand milking.

In connection with the investigation conducted by the Kansas Station, the subject was studied from a bacteriological standpoint. It is concluded that unless sufficient care is used in cleaning the machine, decaying milk and bacteria accumulate in the rubber tubes and contaminate the milk as it passes through them. When kept in fairly clean condition the machine-drawn milk contains decidedly smaller number of bacteria than the corresponding hand-drawn milk. Placing the rubber parts in brine for



Cattle Appreciate Shady, Well Watered Corners Such as This

The scene of our illustration is on the farm of R. E. Nesb, Howick, Que., a gold medal farmer whose farm will be one of those contesting for Inter-Provincial honors in the farms competition to be conducted by Farm and Dairy this year. In these hot days a shady corner in the pasture is much appreciated by the cattle.

the use of the machine. To do this, either by hand or machine, requires scrupulous cleanliness about the stable, the animals, the person of the milker, the machine and other utensils.

#### UNITED STATES TRIALS

In 1896 the Department of Agriculture at Washington issued a report, "The Milking Machine as a Factor in Dairying." In the first experiment reported, one man running one machine milked four cows twice each day in 26.59 minutes, as compared with 40.59 minutes occupied by a hand milker in milking the same number of cows of equal quality. The machine milked two cows at once. In the second experiment, one man attended five machines. During 20 days, 10 cows were milked daily in 37.07 minutes, while it required 124.4 minutes daily to milk the same number by hand. The saving made by the machine amounted to 117.9 minutes, but counting the time required in manipulating the udder and stripping, the saving was 58.45 minutes a

day for the 10 cows. The hand-milked gave 4,371 pounds, the machine-milked 4,068.5 pounds. Strippers got 68 pounds a day from the hand-milked cows and 85.2 pounds from the machine-milked ones. The milk drawn by hand tested 3.77 per cent. of fat, as compared with 3.49 per cent. in the machine-drawn milk. This test is claimed by the authors to show that by the use of milking machines the labor is reduced one-half. This makes it possible to retain better men, larger dairies, specialize to a greater extent, and thus secure a better product and price.

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several hours after being well washed reduced the germ content of the machine-drawn milk to about one-half that of hand-drawn milk.

In the state of Nebraska 11 dairy farms operating milking machines supplied answers to a number of questions put to them by officials of the Agricultural Experiment Station of that State.

Ten of the farms used gasoline engines for power. The herds milked ran from 10 to 70 head. Most of the owners claim that an operator requires to be above the average hi-end farm hand to operate a milking machine satisfactorily. Stripping after the machine was considered necessary by eight farmers. One man sells cows that refuse to give down their milk freely to the machine.

The author of the bulletin, which reports fully upon exhaustive tests made with the machine as compared with hand milking, concludes that the milking machine is fitted for large herds rather than small ones. The minimum herd is placed at 30 cows milked the year round.

### Prepare now for Winter Dairying

F. K., Elgin Co., Ont.

A study of agricultural conditions down here in Elgin county shows that silos and winter dairying go together. Of the advantages of winter dairying there can be no dispute. Our winter dairymen are making more money than summer dairymen for their milk is produced at the season of the year when it is worth most. Winter dairying also offers the best solution of the hired help question. If then silos are necessary to winter dairying it is up to all of us who would improve our condition financially to build silos.

In West Elgin silos are not plentiful. Farmers go in more for summer dairying and creameries close down in the fall. Consequently, the farmers in that section of our county are not so prosperous financially as are those in the eastern section.

Now is the time to prepare for winter dairying. Erect a silo. It does not matter what style, if it will preserve the silage free from the contact of air. Down here we use cement silos, stave silos, square silos and round silos, and all styles are giving satisfaction. And we note that after a man has used one silo for a few years he soon erects another one. Starting out with Aylmer as a centre, you can find dozens of dairymen who have twin silos, grow lots of corn, practice winter dairying, and claim that they are making more money in the winter from their cows than they ever did in the summer before they "got wise" to the merits of ensilage. It will be a grand day for dairying in this country when we all get wise to the value of the silo.

### The Timothy Seed Harvest

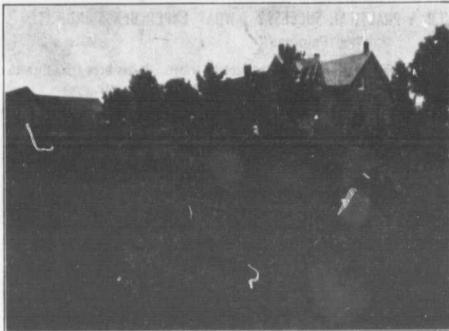
T. G. Raynor, Seed Division, Ottawa

All of our farmers who have a piece of timothy meadow should be able to procure enough clean seed for their own use, at least, even if it is an exceptionally busy time to look after weeds. The time is nearing for making timothy hay. Now that the timothy is in head, a small area of from one half acre to an acre, may be picked out in the field wherever it is the cleanest and headed out the best. If Ox-Eye Daisy, Mustard, Catchfly or other noxious or common weeds are present, now is the time to remove them before they go to seed.

The timothy seed is usually fit to cut at fall wheat and barley harvest. One of the best ways is to cut the stubble high with a binder. It should not be left until too ripe before cutting as a lot of the seed will shake out of the heads and the

birds will take quite a toll when it shells easily. It may be cut with a cradle or reaping machine and bound by hand. In this case it should be cut when damp with dew. After standing in the shock a few days it may be hauled in and stored. If very ripe at the time of cutting it may be hauled in almost immediately after cutting.

The threshing is usually done with the ordinary threshers. If the seed be very ripe and dry when cut a good deal of the hulls shell off. The clover huller should never be used in threshing timothy seed as it hulls it too badly. Flail



This Farmer Does not Need to buy Bran. He Grows its Equivalent

Mr. M. J. McKay, Gungahry Co., Ont., whose alfalfa field is here shown, with his buildings in the background, has been growing alfalfa for three years. He finds that there is nothing to equal it for milk production. Last year Mr. McKay cut 10 tons of alfalfa hay from four acres in two cuttings.

threshed timothy produces fancy show seed and usually brings the fancy prices.

### The Virtues of Corn

A great believer in the virtues of the corn crop for the dairy farmer is Mr. Wm. Stewart, the veteran Ayrshire breeder of Northumberland Co., Ont. Mr. Stewart not only believes in corn but he grows a large acreage of it, feeds it to his high-class herd, and has found it so good a feed that he has no hesitation in recommending it to everyone of his brother dairymen. "I don't know," said he to an editor of Farm and Dairy, "how many men were here last winter and told me that they believed that a crop of corn is as good to fertilize the ground as a crop of clover. They have been led to this conclusion by the size of the crops that they have gotten from the land the year following corn. If there is a spot of land on our own farm from which we can get a good crop of it from the corn field.

"A common idea is that corn is hard on the land. We have a field out back of the barns on which we cannot grow grain for anything except green feed, as the grain lodges. We have grown corn on that field for four or five years in succession, and every crop of corn is better than the one before. We will admit that in the long-run the soil might run out under constant corn cropping, but in our farm practice we return to the land all of the food that is taken from it in the form of manure. If anyone is afraid that corn will lead to a depletion of soil fertility, we would advise the doubting one to try it. If his experience is anything like our own, he will have a bigger acreage in the following year."

No farmer who expects to keep up the fertility of his farm can afford to be without a silo. It is no trouble to grow good crops when plenty of ensilage and clover are fed.

### How to Get Food from the Soil

A. Butler, Haldimand Co., Ont.

We have been told by our scientific experts, the men who should know, that there is enough plant food in the average soil here in Ontario to feed farm crops for the next 100 years, even if we farmers do not return one atom of fertility to the soil. To the uninitiated, then, it would seem that there is no excuse for short crops. Due to a wise provision of nature, however, only a small portion of this great store of fertility is available each year, and as we farmers neglect to add to that store the amount that is made available each year steadily decreases. I guess Mother Nature understood human nature pretty well. She knew that if she gave us free entrance to her storehouse we would all be robbers.

We can get ahead of Mother Nature to a certain extent. We have found that two factors determine largely the amount of plant food that is made available for the use of plants—the supply of water and the supply of air.

Water is the first essential. It is the greatest solvent of any liquid. It is when dissolved in water that plant food is available to the roots. There is no plant that I know of that can take in solid matter (as, for instance, sodium nitrate) and make it into cattle feed. Air, also, has a large influence in converting nature's stored up plant food into available form. The more air we get into the soil the more food plants will get out of it.

Perhaps I am getting at my point in a very round-about manner. Here it is. We should cultivate early, late and often. By cultivating the soil we let in air. But that is the smallest part of it. We also create ideal conditions, first, for absorbing all the water that falls and then, by further cultivation, for getting it all down into the soil where the plant rootlets will get it.

Of course, we all realize that we must cultivate mangle, turnips and corn, but I would carry cultivation further. I regard the roller as one of the most abused implements on the farm. Practically every farmer in this neighborhood rolls his grain just thing and then stands back and looks at the fine level surface, and feels quite proud of the good-looking job he has done. Really he should be ashamed of it. By compacting that land right up to the surface with the roller he has given the soil moisture every chance to escape.

Here is how I got my lesson. A few years ago we left a harrow out in the middle of an oat field. We sowed all around it, and when the oats were up a couple of inches and the field was showing quite green we went out to rescue that harrow. Right up to the time the oats were cut one could trace where we had drawn that harrow. The oats were better there than at any place else in the field. When I got my thinking cap on I could see that it was quite natural. There was more moisture there than at any other place in the field. We do not know of any place where we would use a roller to finish off a field. A light harrow for us every time as the finishing agent.

### Hay

L. K.

When we speak of clover curing, I mean that ago on our farm should be done. I have seen the last score of clover so



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### Haymaking Up-to-Date

L. K. Shaw, Welland Co., Ont.

When we speak of haymaking we really mean clover curing. Timothy went out of fashion long ago on our farm. Our ideas on how this curing should be done have changed wonderfully in the last score of years, and we believe that we now cure clover so as to get a maximum amount of



No. 1. We Used to Swing the Scythe—but that was Years Ago

food value. The biggest mistake that we used to make was in allowing the clover to go too long. We would allow the bigger proportion of the blossoms to become brown before we started the mower in the first field, and then when we did have it cut we dried it until it cracked like kindlings, and if it had been 'given a chance to burn would probably have made very good fuel. But the cattle didn't eat it.

We now start cutting our clover when the first blossoms begin to appear, and we like to have the last field down when the clover is in full bloom. We usually start the machine in the morning after the dew is off and clip down three to five acres. This will be all in the barn the next afternoon if the weather is favorable.

#### DON'T LET LEAVES SCORCH

We do not believe in leaving the clover in one position long enough to be scorched by the sun. To get a green, palatable hay the clover must cure out naturally by evaporation through the leaves. This evaporation ceases just as soon as the leaves are scorched. Just before dinner we run the tedder over the swath, and again at two o'clock in the afternoon. Before quitting for the day the clover is run into windrows with a side delivery rake, in which form it remains all night.

The following morning about 10 o'clock, after we have cut another batch, we run the tedder lengthwise of the windrow to kick it out for a little additional curing, and by noon we are all ready for the hay loader and hauling in.

We used to think that we couldn't make good clover hay without cocking, but we are learning better in our old age. If the weather looks particularly threatening we do occasionally put our clover up in neat cocks, but we do not favor this plan, as labor is altogether too expensive. We cut some hay every day, weather permitting, and so always have hay ahead to work on. Likewise we don't cut so much at once that we have to work till nine or 10 o'clock at night to get it safely stored. We object to this practice quite as much as does the hired man.

### Who is Responsible?

Walter Elliott, Halton Co., Ont.

Who is responsible for the false ideas that immigrants to Canada, particularly English immigrants, have of our country? The men who come to our section of Halton county seem to be imbued with the idea that they can almost pick up a living in Canada. They are told what

large salaries laborers get in this country (experienced laborers), and are led to believe that they can get salaries of equal amount from the day they first land in the country.

I recently hired a man in Toronto. First he was dissatisfied with the wages I offered him, although he knew nothing about farm work. Then he did not come to the farm for a week, but expected pay from the first day I had spoken to him. He had been given to understand that it was customary to pay men in that way. He also understood that his wife was to get four days' work a week in the house at \$1 a day, or \$16 a month. We knew nothing of this.

It has been suggested to me that the transportation companies are responsible for these false ideas of immigrants. All that these companies want is the price of the ticket across the Atlantic, and to get the men to come they make the picture of Canadian conditions as rosy as possible. But it means all kinds of trouble for the farmers who must hire these men.

### Two jobs at one Operation

James Creelman, Hants Co., N. S.

We dairymen who have a lot of money wrapped up in pure-bred stock, or even grade stock, cannot be too careful in guarding the health of our cattle. Tuberculosis and other dis-



No. 2. The Side Delivery Rake—Rapidly Becoming a Necessity

eases that get into the herd might in a short time eat up the profits of many years.

"Prevention is better than cure," and one of the means of prevention that I am strong on is whitewash and disinfection. We perform both of these jobs at one operation in our stables. We slack the lime with sufficient water to make a thick paste and then into this mixture we pour about five per cent. of crude carbolic acid. The barrel is then covered with burlap sacks and allowed to steam over night. When required we dilute this paste to a proper consistency to be applied with a spray pump. Carbolic acid will give the whitewash a slightly yellow tinge, but we do not mind the color when we consider the value of the wash as a disinfectant.

The most thorough disinfection our stable gets is when the cows are out at pasture. We are preparing to do it now. The stables are thoroughly cleaned, every bit of straw and dirt being removed and the corners scraped out so as to be exposed to the wash. We then whitewash everything with a spray pump—ceilings, walls, floors, stanchions, mangers, etc. The spray pump is away ahead of the brush. It drives the wash into every corner and does a better-looking job as well.

### When to Cultivate and How

J. Fixter, Commission of Conservation, Ottawa

After planting cultivation is one of the most important operations in growing corn. The land should be harrowed two or three times (after the corn is sown and before it comes through the ground), the last harrowing to be just as the corn is appearing. Should the corn be very thick when it comes up, it may be again harrowed with a tilting harrow when about four to six inches high. The two horse cultivator should be started when the corn is quite small. Arrange the cultivator with narrow teeth and the shields to prevent the small plants from being covered.

#### CULTIVATE FREQUENTLY

At first, loosen the soil deep and quite close to the plants, gradually working shallower and further away as the roots of the corn plant grow very rapidly. After the second cultivation the protecting wings may be removed and wider points put on the cultivator, throwing a little earth to the corn each time, thus encouraging new root growth. The cultivation is continued with the team cultivator as long as possible, then the single horse cultivator or harrow cultivator should be brought into use and kept going at intervals until the corn is well tasseled, then all cultivation may cease.

### Six Feet of Ensilage Worth \$25

W. J. Telford, Peterboro Co., Ont.

Last spring (1911) we had six feet of ensilage left in our 12-foot silo. We fed this ensilage in the period of short pastures with a little meal on it. When we started to feed, the cows went up six pounds each a day in their milk production. We fed about one pound of meal to each cow a day. Valuing the extra milk at market prices and subtracting the cost of the meal, that ensilage made us \$25. Such an experience has set us thinking in the direction of another silo. We are working into

more stock, and believe that a summer silo will pay even better than one filled with ensilage for winter feeding. We have seven or eight feet of ensilage left over this spring that will again be used for supplementing pastures.

Before we had our silo we would sow peas and oats with a little sugar cane mixed in for supplementary feeding. The feed mixture was composed of about equal parts of these three. We believe that the sugar cane makes the feed a



No. 3. A Much Appreciated Aid in These Days of Short Help

little more palatable. Such a course of supplementary feeding is advisable and profitable where one has not a silo. But we are now silo enthusiasts.

**PROOF OF EXTRAORDINARY VALUE**

The following is one of many similar letters The Public is continually receiving from its Canadian and Old Country readers.

129 Hanley Rd., London, May 28, 1912

THE PUBLIC, Chicago, Ill.  
 Dear Sir: Herewith please find enclosed postal order for \$1.50 being amount of my subscription and foreign postage to the last paper on the North American Continent, and for the money the best, clearest and most informative paper in the English speaking world. This is an expression of opinion from a close student of American newspapers for the past twenty-four years and English, Australian, Canadian and other British papers for the past forty years. Good luck always to Louis E. Post and his associates and more power to his pen.  
 YOURS VERY TRULY,  
 EDWARD C. WEATHERLY

THE PUBLIC is published weekly for \$1.50 a year. A FREE book, "The Land Question" by Henry George, just now goes with each subscription. It will pay you to subscribe.  
 The Public, Ellsworth Bldg., Chicago, Ill.

**Economize on Milk for Calves and Make More Money**

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

**CALFINE**  
 "The Stockman's friend"  
 (Made in Canada)

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

Ask your dealer for Calfine. If he does not handle it, send us a money order for \$2.75, and we will send 100 lbs. to any station in Ontario. We pay the freight.

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

**FARM MANAGEMENT**

**Size of Silo to Build**

Prof. C. H. Eckles, University of Missouri.

The size of the silo that should be built will depend upon the number of animals to be fed. As a rule, the mistake is made of building the silo too large in diameter rather than too small. The silo should be small enough so that the animals will consume a quantity each day equal to a layer of at least two inches over the entire surface. Silage keeps better in a deep silo than in a shallow one, because it is more firmly packed and at the same time more feed can be stored in the same space. Except with a very large herd it is not advisable to build a silo more than 16 feet in diameter. If more capacity is needed a second silo should be constructed. As a rule the height of the silo should be at least twice the diameter.

After the silo is opened silage should be taken out regularly, otherwise that which is exposed to the air at the surface will spoil within two or three days. The amount of silage ordinarily fed to a dairy cow, or to a mature beef animal of the same size, is from 30 to 40 pounds a day. Feeding 30 pounds a day will require 1900 pounds a month per animal, or about 5 1/2 tons to feed each animal six months. The figures in the table below give a general idea of the size of silo needed for herds of from 10 to 50 cows. It is assumed that 40 pounds will be fed a day to each animal.

Number of cows in herd.	FEED FOR 180 DAYS.			FEED FOR 240 DAYS.		
	Estimated tonnage of silage consumed.	Size of Silo.	Height.	Estimated tonnage of silage consumed.	Size of Silo.	Height.
10	26	10	25	40	10	25
12	32	10	27	48	10	27
15	34	11	29	52	10	29
20	42	12	32	64	12	32
25	52	13	35	80	13	35
30	62	14	37	96	14	37
35	72	15	39	112	15	39
40	82	16	41	128	16	41
45	92	17	43	144	17	43
50	102	18	45	160	18	45
55	112	19	47	176	19	47
60	122	20	49	192	20	49
65	132	21	51	208	21	51
70	142	22	53	224	22	53
75	152	23	55	240	23	55
80	162	24	57	256	24	57
85	172	25	59	272	25	59
90	182	26	61	288	26	61
95	192	27	63	304	27	63
100	202	28	65	320	28	65

The following table gives further figures regarding the capacity of silos of different sizes:

**CAPACITY OF SILOS OF VARYING SIZES.**

Depth of silage.	Inside diameter of silo in feet.		
Feet.	10	12	14
10	26	36	46
12	32	42	52
14	38	48	58
16	44	54	64
18	50	60	70
20	56	66	76
22	62	72	82
24	68	78	88
26	74	84	94
28	80	90	100
30	86	96	106
32	92	102	112
34	98	108	118
36	104	114	124

**Destruction of Field Mice**

Through cultivation of fields tends to keep down the number of mice, as it destroys weeds and all growths that give shelter to the mice. The mere plowing of a field badly infested with mice is sufficient to drive out most of them.

Strychnine is the most satisfactory poison for field mice. Although deadly, it is less dangerous to handle than either phosphorus or potassium cyanide. Various baits may be used, such as wheat, oatmeal or corn. The bait should be soaked over night in a poisoned syrup, made as follows. Dissolve an ounce of strychnine sulphate in a pint of boiling water, add a pint of thick syrup, and stir thoroughly. The prepared syrup may be scented with a few drops of oil of anise.

This quantity is enough to poison half a bushel of wheat or corn, but smaller quantities of grain or syrup may be prepared as needed. After the solution has been thoroughly mixed, if it is too wet a little dry corn meal may be used to take up the excessive moisture. If it is not wet enough to moisten the grain thoroughly, a little water may be added.

Because of danger of destroying native birds, the poisoned bait should not be placed in exposed places, but under shells which will admit mice but exclude birds. Wide broadcast, being upon thin cross pieces of wood are good.

**Horsery Notes**

"No foot, no horse." There are lots of blacksmiths who don't seem to know this. They would ruin the best foot with their bungling work. Keep your last season's colts growing. A set back now due to neglect will take the whole summer to overcome.

Horses appreciate sweet things as well as we do. A lump of sugar round occasionally will put us on good terms with our equine friends. Prices of good horses have increased 50 to 100 per cent. since the automobile came in vogue. Who talks now of the passing of the horse?

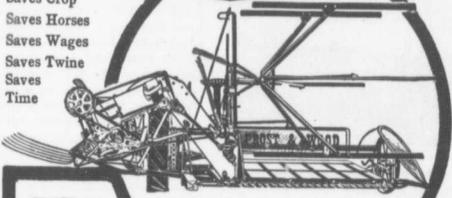
The man who gets stung in the eye business usually has himself to blame. The chances are he started with poor breeding stock.

**Dry Months Best Dairy Months**

"Last year, August and September were almost our best dairy months while with most farmers, due to the great drought, they were poor months. The secret came in feeding

**FROST & WOOD BINDERS**

Saves Crop  
 Saves Horses  
 Saves Wages  
 Saves Time  
 Saves Twine  
 Saves  
 Time



**USE this Binder and harvest with your grain with the least waste of time and energy.**  
 Frost & Wood Binders cut rapidly, elevate thoroughly, and tie each sheaf securely. Ample power is generated by the main drive wheel to cut under all conditions. Every shaft, axle and working part is fitted with a large size Roller Bearing making this the easiest running Binder on the market. There is no friction, no binding of gears, no chance of driving shafts getting out of alignment. A Frost & Wood Binder has permanent light draft. See the third roller on Upper Elevator, also the Relief Roller between the lower Canvas and the deck. These two assure you that the heaviest or the lightest grain will be brought up by the canvases and passed on to the Packers without any choking of Elevators or crowding on the deck. Reel and Table are controlled by conveniently located hand and foot levers; so light, heavy, tangled or downy grain can be brought to the Cutter Bar and nothing wasted.



The long spokes of the Eccentric Sprocket used on Frost & Wood Binders give the necessary power to compress and tie each bundle thoroughly, then the short spokes make the discharge arms act quickly and get that sheaf out of the way of the next. This feature is worth any man's while to investigate. It and numerous other distinctive advantages of this machine are described in our Binder Booklet. It will pay you to get posted.

**THE FROST & WOOD COMPANY, Limited**  
 SMITH'S FALLS, ONTARIO

For Sale in Western Ontario and Western Canada by  
**THE COCKSHUTT PLOW CO. Ltd., BRANTFORD, WINNIPEG**

**Auto Truck**

In a recent issue a Wisconsin man's experience with his dairy farm's existing comparison of horse versus auto follows:

"Among the advantages I can deliver my milk to the railroad station, and be home in my hitching up or a with a horse, groom, clean stable, and I can have a runnaway all go to the breakfast."

Take a man five miles from creamery to travel 2,555 miles a farm team has to travel nine or half-past



that team can get tired and unfit for gain. With the car trip in one-third of a fine ride besides so many trips and make that can't be farm team.

IN TRUCK berries which I sell in Kenosha give me two trips every Saturdays and a always cool in a that I am driving I used to drive with me 14 and 15

like me seven or eight weeks in my family to work and have as nice a touring car. The way as the finest car of as structures as I had with solid trip, accomplish as much on same.

"The question is can you get along on a large farm, 'No.' There for the women folks some horse can draw their errands on the same way."

"As to the expense they cost less than the first four months 1,870 miles at a cost show from 600 to 1,000 or horse work winter feed, 1000 per 150 bushels in 1200 a bushel, \$67.50; and at \$16, or \$30; or more. The auto repays its little idle."

"On the other hand but \$50 and the truck it, is a second

Auto Truck vs. The Horse

In a recent issue of Board's Dairyman a Wisconsin dairy farmer tells of his experience with the auto truck on his dairy farm and draws some interesting comparisons on the problem of horse vs. auto. He writes as follows:

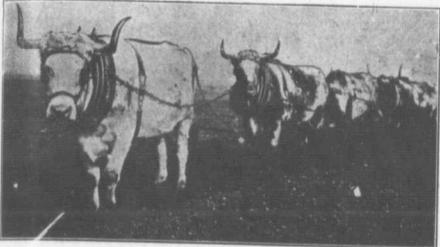
"Among the advantages of the car, I can deliver my milk one mile to the railroad station, get my empty cans and be home in 15 minutes without hitching up or unhitching, where, with a horse, one has to feed, groom, clean stable and hitch up and unhitch. And I am pretty sure of not having a runaway. The teams can all go to the fields at once after breakfast.

Take a man living three and a half miles from creamery or milk platform. He has to travel seven miles a day or 2,565 miles a year. And if the farm team has to make this, as they usually do in this locality, it is nine or half-past nine o'clock before

would be very hard to sell at half price. A team would remain or increase in value and be serviceable for 12 to 15 years. I think three years would be the extreme life of a car, or it would cost more for repairs than it would for a new one. And with a team, one it pretty sure of getting home sometime, while with a car one is often harassed with doubts. In the use of a car to be successful, it requires one that has talent and a liking for machinery.

SOME DISADVANTAGES

"The farmer is usually required to run his own car which takes his time away from home and his time is or should be far more valuable than the hired man's. While with the horse the boy or the 'poor' man on the job can draw the milk. But under favorable conditions autos are convenient and a time saver. For about six months in the year while every horse is pressed into service and time is very valuable, they are certainly very satisfactory. But when the



An Asiatic Idea on the Subject of Farm Power

that team can get to the field, and tired and unfit for work into the bargain. With the car one can make the trip in one-third of the time and have a fine ride besides. And there are so many trips and errands one can make that can't be made with the farm team.

IN TRUCK FARMING

"I use it in delivering all my strawberries which I sell to the grocery-men in Kenosha eight miles away and make two trips every day and three on Saturdays and am not tired as it is always cool in a car and no thought that I am driving a tired, hot team. I used to drive with horses and it took me 14 and 15 hours and now it takes me seven or eight hours. Having two seats in my car I can take my family to town Saturday evenings and have as nice a ride as in a \$2,000 touring car. The auto truck rides as easy as the finest car, and I am sure of no punctures as the truck is supplied with solid tires. One can accomplish as much on the road as three teams.

"The question is often asked me, 'Can you get along with less horses?' On a large farm, 'Yes'; on a small farm, 'No'. There should be a horse for the women folk anyway and that same horse can draw the milk and do other errands on the small farm.

CRAPERS FEED HORSES

"As to the expense of using them, they cost less than a team of horses. The first four months I ran my car 1,870 miles at a cost of \$60.62 and drew from 800 to 1,500 pounds. A man or horses worked to their limit would require 40 pounds of oats daily or 150 bushels in 120 days at 45 cents a bushel, \$67.50; and two tons of hay at \$15, or \$30; or \$97.50 for feed alone. The auto requires no care or attention while idle.

"On the other hand, the auto costs about \$500 and the second day you run it, it is a second hand car and

muddy and rough roads come it is pretty certain one will fall back on the old stand-by, the faithful horse whose hard work is over and he rather needs the exercise.

"As soon as manufacturers of the auto trucks do not have the large selling expense they now have and can manufacture them cheaper, the auto trucks will be more common on the roads than teams."

Notes on Dairying

A big bill for feed is all right if the production of the herd is in proportion. In fact the men who make the large net profits are the most likely to have a big feed bill as well.

The cow that is compelled to stand in the hot sun all day during summer months, will suffer while she fights the flies that congregate upon her body and suck her blood. Large trees should grace the cow pasture. Here the cow will rest and chew her cud in contentment, while the over-spreading branches protect her from the sun's scorching rays.

Put a little salt in the cow's mashed feed or chop. It enhances the flow of the saliva while the animal is taking her feed, which is a good thing for an animal as well as for a human being. It is no good to force the cow to eat more salt than she needs, so only a little should be given in the feed, and then free access to rock salt will permit her to eat what she wants.

Give the dairy cow clean water to drink in the summer. Stagnant ponds furnish disease germs for milk and butter and are very unwholesome drinking places for all kinds of animals. A windmill and tank will supply cool, germless water, which will be appreciated by the dairy cow.

Canadian Airmotors Provide Power FREE for Pumping Water. Includes an illustration of a windmill and text describing the product's benefits and contact information for Ontario Wind Engine & Pump Co., Ltd.

Why Not Sell It? Have you any surplus STOCK for which you want a buyer? Do you want to SELL YOUR FARM? Have you an IMPROVED CUBATOR for which you want a good price? OR EGGS FOR HATCHING to sell? Remember YOU CAN GET next nearly 15,000 POSSIBLE BUYERS of what you have for sale AT A VERY LOW COST by placing your advertisement in the columns of Farm and Dairy.

Cut and Deliver Your Corn By Our B 9 Blower Cutter. Includes an illustration of the blower cutter and text describing its features: Fourteen-inch Mouth, Three Knives, Carrier Feed Table, Simple Construction, Does the Work Moderate in Price, J. FLEURY'S SONS, AURORA, ONT.

WANTED-CREAM Highest Toronto prices paid for Cream delivered at any Express Office. PAYS ALL CHARGES. FURNISH CANS FREE. PAY ACCOUNTS fortnightly. ENGAGE MAN TO COLLECT AT SOME POINTS. JOB NOT ESSENTIAL. Write for particulars. THE TORONTO CREAMERY CO., Ltd., Toronto

\$25 Buys a Sureshust Tile Machine. Includes an illustration of the machine and text describing its uses for spring use, capacity depending on size of the operator, ranging from 300 to 500 lbs per day. See literature. WILLIAM JOT, Box 276, Niagara, Ont.

Reliable help for the farmer. Farm labour is scarce. Wages are high. All the more need for a Barrie Engine. Soon pays for itself in time and labour saved. Includes an illustration of the Barrie Engine and text describing its features and agents.







### Natural Gas a Great Convenience

The discovery of natural gas on the farm has worked a great improvement in the home and farm buildings of Mr. J. W. Richardson, of Caledonia. Since Richardson's farm is well known to the readers of Farm and Dairy, it having won the second prize in 1910 in the Prize Dairy Farms contest, open to the farmers of Ontario. Since we last described this farm in "Farm and Dairy" a number of great conveniences have been added by the discovery of gas on the farm.

An editor of Farm and Dairy, who recently visited Mr. and Mrs. Richardson, found that within the past year six gas wells have been opened on the farm. Part of the gas from one of these wells has been piped to the house and farm buildings and the surplus is sold, as is the gas from all the other wells, to a private company at a rental of from \$50 to \$75 a year each. Mr. Richardson's home and barns are now lighted throughout by gas. Gas jets are located even in the cellar and on the outside verandas. The house is heated by the gas, pipes having been run into the furnace in the cellar. The cooking in the kitchen is also done by gas. In the parlor is a gas grate. Of all these conveniences, Mrs. Richardson appreciates the most the presence of gas in the kitchen. It makes it easy to light the stove and saves the trouble and dirt incident to the carrying in and handling of wood. It is not so heating to work with in the summer, and can be turned off in a moment.

Not content with having all of these conveniences in the house, Mr. Richardson has run the pipes out to his hen pens, where food is cooked in winter by the means of gas. Mr. Richardson likes to give his pigs a warm drink in winter as he finds that they like it and seem to thrive on it.

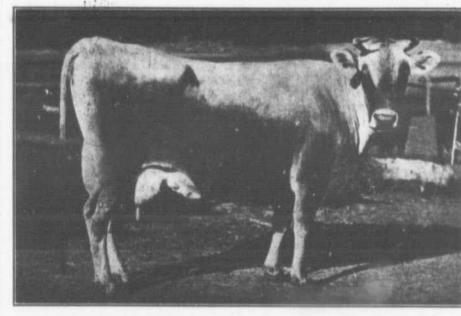
#### GAS SUPPLIES POWER

In the barn there has recently been installed an eight horse power gas engine, which runs so well and does so much work that the hired man told our editor that his only wish was that they could use gas to run the plow. This gas engine is being used to run the feed chopper, to separate milk and to pump water. Mr. Richardson

estimates it will save a month's labor in cutting and hauling wood this winter, as compared with the time that was formerly employed to do this work. He expects also to save \$100 a year in heating and light. Incidentally we might say that the light furnished in this way is bright and clear. Its only drawback is that it consumes considerable oxygen, making it necessary to ventilate the rooms more frequently than otherwise would be the case.

#### MANY FREQUENTS

So many gas wells have been drilled in the Caledonia district that several large companies have been formed who either purchased the wells outright from the farmers or lease them. Mr. Richardson believes that some made a mistake when they leased their farms or portions of them



Animals Such as This One Would be "Credit to Any Breed"

"Lilac of Pender," the heifer here illustrated, shows what Jerseys can do in the producing line. At two years and 25 days of age she was entered in Record of Performance Test, and in 385 days produced 6,574 lbs. of 6.5 milk and 24,115 lbs. of butter fat. She is owned by A. H. Menzies & Son, Pender Island, B.C. Notice the splendid dairy conformation, the capacious shapely udder and large, well placed teats of this cow.

to these companies. They neglected to stipulate that new gas wells should not be located within 40 rods of old ones. In consequence many wells have been sunk and many of them close to one another. Not infrequently one well interferes with the producing qualities of others near it.

Within 10 miles of Mr. Richardson's place, possibly 75 wells have been established. There are 10 wells in the village of Caledonia alone, and if the worst development continues it will not be long before there will be wells on almost every farm in the vicinity.

#### BUNDLES HAVE GAS

Gas is so cheap that hundreds of farmers in the district, both when they have wells on their farms or not, are introducing gas in their homes. As our editor drove along the road he noticed gas pipes on the surface of the ground running along beside the road. There are many miles of them. The heaviest wells are located at Sibirik, on a strip of land running from Lake Erie to the Grand River, the gas rock of which extends from the United States, under Lake Erie, reaching the Grand River. The wells drilled a few miles north of the river are light and unprofitable. The wells near Caledonia are 650 feet deep. As it costs \$800 to \$900 to drill one well, it will be seen that those prospectors who do not succeed in locating gas can soon lose a lot of money. The companies that are leasing these wells have laid lines of piping to Brantford, where gas is sold in the city.

In Welland county, there is said to be 337 producing wells, with a production of over 1,000,000 cubic feet. In Halton county there are 444 producing wells, with a production of almost 2,500,000 cubic feet. Last year 159 new wells were drilled—7 in Hal-

dimand, 34 in Welland, 21 in Brantford, 11 in Norfolk, 5 in Wentworth, 2 in Elgin. There is no means of knowing how long these gas wells will continue to produce, but under proper management they should continue productive for many years.

### He Has Four Silos

J. L. Davis, Grenville Co., Ont. I have used a silo for 12 years and should have used it 12 years sooner. At present I have four silos, two stave and two square ones inside the barn. I require one more for the summer. I prefer the round cement silo, but the stave silo is 100 per cent better than none at all. When I stop feeding ensilage I shall stop farming. I would advise all my brother farmers who have no silos to prepare to build



## The First Big Ben Cost \$12.85

Big Ben is the result of 26 years of fine clock making. The first Big Ben cost \$12.85 to make. The first hundred cost \$3.50 each. But the great demand has brought the price down to everyone's pocketbook.

### Buy Him Now for \$3.00

Big Ben the national sleep-meter, is arousing thousands of farmers on time. Everywhere, every day, the gentle, insistent voice of Big Ben taps the "sleep heads" to toious action. This "time-man" starts the day with a smile. Big Ben never fails—his on the job always. He rings 5 minutes straight, or at intervals of 30 seconds for 10 minutes. He tells the truth and gets you and the farm hands up "on the dot."

Big Ben is hand-built, like a fine, time-tested watch, and "time checked" for 140 hours for accuracy. 1,088 skilled watch-makers build Big Ben—the clock that's the pride of our famous Westclox Community of La Salle, Illinois.

2,500 Big Bens now leave the factory every 10 hours and the demand gets larger daily. Big Ben has tucked himself into peculiar favor because he is built right, runs right and is priced right.

Big Ben is sold by 3,000 Canadian dealers. If you cannot find him at yours send us \$30 today and we will send him by return express, duty charges prepaid.

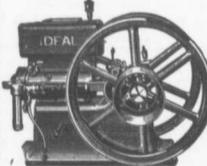
## Big Ben

WESTCLOX, La Salle, Illinois

### GASOLINE ENGINES

11 to 30 H.P.

Stationary Mounted and Traction



#### WINDMILLS

Grain Grinders, Water Boxes, Steel Saw Frames, Pumps, Tanks, Etc. GOOLD, SHAPLEY & MUIR CO., LTD. Brantford Winnipeg Calgary

## Investor's Notice

An established Canadian automobile company is prepared to place \$50,000.00 worth of common stock on the market to take care of the volume of business the company is receiving. Shares \$100.00 each.

This is a gilt edged investment that will pay good dividends. If interested, write for information.

Address, Box 464  
Farm and Dairy, Peterboro, Ont.

## CANADIAN NATIONAL EXHIBITION TORONTO

AUG. 24TH -- 1912 -- SEPT. 9TH  
\$55,000 in Prizes for Products of the Farm, the Garden and the Home

ALL ENTRIES CLOSE AUGUST 15th  
For Prize Lists and all information write

J. O. ORR, Secretary and Manager - TORONTO

## FARM AND DAIRY AND RURAL HOME

Published by The Rural Publishing Company Limited.

1. **FARM AND DAIRY** is published every Thursday. It is the oldest organ in British Columbia, Manitoba, Alberta and Western Ontario, and Bedford District, Ontario. Daily rates for postage are of the Canadian Holstein, Ayrshire and Jersey Cattle Breeders' Association.

2. **SUBSCRIPTION PRICES** for a year, strictly in advance. Great Britain, \$1.50 a year. For all countries, except Canada and Great Britain, \$2.00 for postage a year's subscription free for a club of two new subscribers.

REMITTANCES should be made by Post Office or Money Order, or Registered Letter. Postage stamps accepted for amounts less than \$1.00. On all checks add 20 cent for exchange fee required at the bank.

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5. **ADVERTISING RATES** quoted on application. Copy received up to the Friday preceding the following week's issue.

6. **WE INVITE FARMERS** to write us on any agricultural topic. We are always pleased to receive practical articles.

**CIRCULATION STATEMENT**  
The paid subscriptions to Farm and Dairy exceed \$1000. The actual circulation of such literature in the form of paper sent subscribers who are but slightly in arrears, and sample copies, varies from 1400 to 1500 per week. The circulation is accepted at least than the full subscription rates.

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

**OUR PROTECTIVE POLICY**  
We want the readers of Farm and Dairy to feel that they can deal with our advertisers with our assurance of our advertisers' reliability. We refer to our columns only the most reliable advertisers. Should any advertiser have cause to be dissatisfied with the treatment he receives from any of our advertisers, he will investigate the matter thoroughly. Should we find reason to believe that any of our advertisers are unreliable even in the slightest degree, we will discontinue immediately the publication of their advertisements. Should the circumstances warrant, we will expose them through the columns of the paper. Thus we will not only protect our readers, but we will not only protect our advertisers as well. In order to be entitled to the benefits of our Protective Policy, you must only include in all letters to advertisers the name, "I saw your advertisement in Farm and Dairy." Complaints must be made to Farm and Dairy within one week from the date of any unsatisfactory transaction, with proofs thereof, and within one month from the date that the advertisement appears, in order to take advantage of the guarantee. We do not undertake to adjust trifling differences between readers and responsible advertisers.

## FARM AND DAIRY PETERBORO, ONT.

### EASILY MADE MONEY

"The property at 9, 11 and 13 West King street, and with a 'through depth to Melinda street, which was purchased three months ago from the Cavathras by W. S. Dinnick and his brother, A. G. C. Dinnick, has been turned over to 'the latter to a group of English 'capitalists at \$500,000.'"—Toronto World.

The property referred to was purchased by the Messrs. Dinnick three months ago, according to The World, for four hundred thousand dollars. Thus in three months these gentlemen have cleared one hundred thousand dollars by the advance of land values in Toronto. It is time that as farmers we began to realize that we have a vital interest in transactions of this kind. The men who have obtained this one hundred thousand dollars did nothing to earn it. The increased values were created by the community at large and the benefits

should be returned to the public that created them.

Every time land values in Toronto, or in other business centres, advance, the effect is to increase the cost of doing business on that land, and thus the public at large is taxed for the benefit of the speculators who handle this land. The great difference between the price the farmer obtains for his products and the price the consumer pays for it is due in the main, not so much to the much abused middleman, as it is to the excessive cost of doing business in towns and cities, caused by the enormous land values in the business sections of such centres. By and by we will get tired of allowing others to benefit without labor and with but little risk by merely buying and selling city and suburban land, the increases in the value of which are created in a large measure by the productive work of the farmers of the surrounding country.

### HARD ON LAND

We recently had a talk with a young farmer who has inherited a prejudice against the corn crop and the silo. He advanced every argument that he could think of why he should not erect a silo and, knowing himself, that his arguments had not been convincing, he at last gave out one that he considered unanswerable. "It's hard on the land," said he. "Last summer, for instance, I sowed a bit of corn along with my potatoes. You can tell in the grain crop this year just where we had that corn. The growth is not nearly so good as on the adjoining potato ground."

Of course corn takes much from the land. A good crop of corn, say fifteen tons to the acre, will take from the land about eighty-four pounds of nitrogen, thirty-three pounds of phosphoric acid, and one hundred and eleven pounds of potash. This is more than twice as much as we would carry away in a two hundred bushel crop of potatoes. In two hundred bushels of potatoes there is only thirty-eight pounds of nitrogen, fifteen pounds of phosphoric acid and fifty-five pounds of potash. But from an acre of corn properly housed in a silo we will get two and one-half times as much feed as from an acre of potatoes, and we will return two and one-half times as much fertilizing nutrient to the soil to aid the growth of plants. And the labor expense for producing that fifteen tons of corn is not so great as the expense of producing two hundred bushels of potatoes.

It is well to conserve soil fertility, but the ideal conservator is not the one who takes nothing from the soil, but the one who returns to the soil as much as he takes. According to our young friend's standard, the North American Indian was an ideal conservator. He took nothing from the soil. We know how prosperous he was. According to modern standards, however, the ideal conservator is the progressive farmer who grows a big crop of corn, the bigger the better, houses it in a silo, feeds the silage to dairy cows, and then in the manure returns the fertility back to the land where it belongs.

Of course corn is hard on the land in the sense that it takes much from the soil. So is every crop worth while.

### ANENT HIRED HELP

The hired man's side of the help problem was well expressed to an editor of Farm and Dairy a few months ago by an able-bodied working man of the city of Peterboro. This man was out of work and we asked him why he did not go to the country and get a job. "I could get ten jobs in the country a few weeks from now," said he; "in fact, the farmers will be falling over themselves to get help. But I could not get a job now at a decent living wage. The most that many of them would want to give me would be my board."

Here is something for us farmers to think about. This man was considered a good workman. He had had several years experience on the farm. Could he have gotten an opportunity for a year round job with a decent cottage for his newly made bride, he would have preferred country work to any other. But he could not. There are lots of men like him. If we will provide suitable accommodation for our hired help there are lots of good men around the country who would be glad to work for us.

### ALFALFA AND DRAINAGE

No fall will show the beneficial effects of tile drainage quicker than alfalfa. When judging fields entered in an alfalfa growing competition, conducted recently by Farm and Dairy in Peterboro County, our editor inspected several fields that were only partly tile drained and in all cases the growth was markedly better in the tile drained portion of the fields than in those portions where drains were lacking. In many other fields not tile drained at all the most vigorous growth we invariably found on those parts of the fields that were naturally well drained, while springy places almost invariably showed a weak, under colored growth.

Alfalfa is rapidly increasing in popularity. One of the indirect blessings that may come from the increasing acreage of alfalfa will be the increased interest in tile draining. The average farm crop will pay the cost of the tiling in the increased yields of two or three years. In some of the fields that we inspected we believe that the increased crop of the first year would pay for the tiling if we put a price on the alfalfa commensurate with its feeding value. In preparing land for alfalfa in future we will be wise to take tile drains into consideration if the field is not already underdrained.

### ON STRIKE

Most of us farmers feel that an eight or 10-hour day is an impossibility in the country. When we hear of such time limits being imposed by the working men's organizations in the cities, we thank fortune that farm laborers have no such organizations. Some of us even think that it is impossible to get work and chores done

by six o'clock in the evening. The farmer who works till nine o'clock at night does not see how his work could be done in shorter time. But we could finish our work in good time if we would. What one man can do another can.

An editor of Farm and Dairy recently visited a farm where the whole system of work had been reorganized. "We all went on strike this spring," said one of the sons of the family, to our editor. "We told our daddy early in the season that the work had to be done, chores and all, at six o'clock. We told him that if we arranged things right and used our heads to save our heels we would get through more work in less time. Father agreed to give our plan a trial and now even he admits that we are getting more work done than in previous seasons, and we have always stopped at six o'clock."

What are we here for anyway? The farmer whose life is one round of drudgery is getting very little out of his stay here. He is shortening his own years and sickening his children of farm life and farm work. Working long hours is more a habit than a necessity. Let us break the habit.

The best to-day is not good enough tomorrow. Keep improving.

The land values would pay all our taxes if we would only let them. Land values are the natural source of revenue.

There may be a place for dual purpose cattle in our farm economy. It has been argued that there are lots of our farmers who are not sufficiently good stockmen to handle specialized dairy cattle. But why should we be farming at all if we are not going to know all we can about our business and be able to handle any kind of cattle? Those of us who wish to get to the top in this specialized age will follow specialized farming with specialized cattle—the kind that will bring the Liggett results.

### The Value of a Dairy Sire

(Hoard's Dairyman)

A car load of grade Guernsey cows left Iowa for Kansas a short time since at an average price of \$175 per head.

How much do you think their mothers could have been bought for, supposing they were ordinary native cows?

We will be liberal and say \$50 apiece. So then it is clear that a registered Guernsey bull added to the commercial value of every one of these cows \$125 of cows, these are high figures. But they point the way just the same.

The farmers of Wisconsin, who, years ago, bought pure bred bulls and so established herds of grade Jerseys, Holsteins, Guernseys, and, in a few instances Ayrshires, built a broad, strong foundation for profitable business beneath them. They have been producing milk and beefs and cows for sale, all made more possible and more profitable by the pure bred sire.

And yet there are farmers right in such communities who will not buy about for a cheap grade bull to breed from, with all these facts before their eyes.

### Why Not Retire

By W. Retiring from the most serious of all ills. Especially a farmer. Usually young. Life in to get from life on a farm. Adapt himself of a that period in being out of environment. From factor in the fraction becomes a young, or even we young. Why move to given for moving educating the ch

### XX

"Take it from us. For your advice write copy to our partner, or Jones, or the Lit'ontists!"  
Don't even w your prospective Write it to AT TENTION, to I INTEREST, to DESIRE for you INDUCE THEM.

Then you are o for getting sales, you want.

Advertising is d

of your unsold

salesmen to less without talki right way to ap owners, to explain convince them of value and to creat omers an overwh your goods, such them to act and for the goods.

When you adv things in mind if copy.

Make your com mere plac. Make it real. Sell the goods. Space costs mo know. If you find not attempt to l letter. Pick out sales argument.

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We have no qu who favor ge copy,—but we why? Copy—goo dence winning cop to "getting it ove immediate and d

We believe in advertisement well ing it attract atten esting, convincing action.

And then we belie advertisement PL would have your ONLY AMONG PANY such it is to be in Farm a

A Paper Farm

Why Not Retire on the Farm?

By W. C. Palmer.

Retiring from one's work is one of the most serious steps that a man can take. Especially is this true of the farmer. Usually it means moving to town. Life in town is entirely different from life on the farm. One accustomed to farm life can hardly adapt himself of himself to town life at that period of life. This results in being out of touch with one's environment. From being an important factor in the farm community one becomes a negligible one in town, or even worse—a knocker. Why move to town? The reasons given for moving to town are many—educating the children, modern en-

veniences in home, less work, etc., etc. The schools in towns are as a rule better than these in the country, but the reason they are better is that the town people tax themselves so as to have the money necessary to maintain a good school. By consolidating the schools and putting up the school tax as high in the country as in the city just as good schools can be provided in the country as in the town.

IN THE COUNTRY TOO

The modern conveniences can be had in the country now as well as in the town and starting at a less cost.

Less work in four-lea work of some kinds—but after all no one can be happy and healthy unless the mind is occupied. The one who is used to active, muscular work for a good many years will not remain healthy without some exercise.

A good way for a farmer to retire is to select a lot of five to 15 acres on the farm and build on it the modern house, a small barn, also with modern conveniences, and a poultry house. Here one can live the life that one is used to in the way that has become second nature to one. Here there will be something to hold one's attention and to supply some work to take the place of the accustomed activity.

TAKE THE SCHOOL TO THE COUNTRY

The school problem can be solved by consolidating the schools. In this way as good schools can be had in the rural district as in town. In fact, it will be a better school, as we will be in closer touch and harmony with the farm and farm life.

In most cases it is a sad mistake for the farmer to retire to town, and especially so when the things that he moves to town for can be had on the farm and with all the advantages of the country into the bargain.

Queries re Hydraulic Ram

We have a spring about 350 yards from our house, and are thinking of trying to bring the water from this spring to house. There is quite a hill from spring for some distance, and the spring is on edge of a knoll about a foot above the level of the house. The spring could be raised by putting in a cement curb. What fall is required from spring to ram? What size of pipe would be required from spring to ram and from ram to house. Any other information on this subject as to cost of a ram and probable cost of job would be appreciated.—Subscriber.

A hydraulic ram will operate on as little as 18 inches of fall, but it is better to have four or five feet, or possibly more. There are several sizes manufactured, the smallest of which requires a flow of two gallons a minute from the spring in order to operate it. This ram will cost \$9 or \$10, and would require a three-quarter inch drive pipe and a three-eighth inch discharge pipe. However, it would not be advisable to install such a small one. Probably a No. 4, which would require eight gallons a minute to operate, would be the best one to buy for ordinary farm use. It would cost from \$14 to \$15, drive pipe one and a half inches and discharge pipe half an inch.

The price of pipe you can learn from your local dealer, and the cost of installation can be estimated at the price of labor for your locality. The whole installation would cost somewhere in the neighborhood of \$75 to \$100. The distance is considerable, and so the cost of piping is large; also the cost of laying and laying the pipe. If your house is on the same level as the spring this ram should deliver in the neighborhood of five gallons a minute.—Prof. Wm. H. Day, O. A. C., Guelph.

I received my camera for securing three new subscribers to Farm and Dairy, and am well pleased with it.—Myrtle B. Fraser, Dundas Co., Ont.

DE LAVAL CREAM SEPARATORS

The Best and Most Profitable of All Summer Farm Investments

A DE LAVAL Cream Separator is the best and most profitable of all farm investments at any time—and even more so in summer than at any other time.

The waste of butter-fat without a cream separator is usually greatest during the summer months and the quality of cream or butter produced without a separator the most inferior.

Moreover, the bulk of milk in most dairies is greatest at this season, so that the loss in quantity and quality of product counts greatest. It must count more than ever this year with the extremely high prices prevailing for cream and butter of good quality.

A DE LAVAL cream separator not only enables the production of more and better cream and butter than is possible by any gravity setting process but as well by any other separator.

Then there is the great saving of time and labor accomplished by the separator in the handling of the milk and cream, which counts far more in summer than at any other time and alone makes the separator a profitable investment.

In this respect again the DE LAVAL excels all other separators by its greater capacity, easier running, greater simplicity, easier cleaning and greater sanitariness. All of these considerations are points which every DE LAVAL agent will be GLAD to DEMONSTRATE and PROVE to the satisfaction of any prospective buyer of a cream separator.

Why not look up the nearest DE LAVAL agent at once, and if you don't know him write us directly, as below.

DE LAVAL DAIRY SUPPLY CO., LIMITED 173 WILLIAM ST., MONTREAL 14 PRINCESS ST., WINNIPEG



How To Paint

You can make it worth a whole lot to yourself to know how to paint. Your buggy, your farm wagons, your farming tools, your barn, your outbuildings and your house, will stand the wear and tear of the weather and last much longer when you keep them properly painted.

We have received a copy of a splendid book on painting. It comes right to the point and is so practical that we felt our people would like to have this book. We have therefore made arrangements to handle it for you.

"Everybody's Paint Book" is the title of this work, which is written by a thoroughly practical painter. It is a complete guide to the art of outdoor and indoor painting. It is designed for the special use of those who wish to do their own painting. It gives practical lessons in plain painting, varnishing, polishing, staining, paper hanging, kalsomining, etc.

It also teaches how to renovate furniture and gives many hints on artistic work for decorating a home. Precise directions are given for mixing paints for all purposes.

By keeping your farming tools and farm vehicles well painted they will last twice as long, and you can do the work of painting yourself when you are aided by the information you can secure from this book. The book is handsomely bound in cloth.

A copy will be sent you postage prepaid on receipt of price \$1.00.

Send us one NEW subscription to Farm and Dairy taken at only \$1.00 and we will send you a copy of this book free and postage paid for your kindness.

FARM AND DAIRY Peterboro, Ont.

XXXVI

"Take it from us:"

For your advertisement don't write copy to please yourself, or partner, or your wife, or in-jures, or the Literary gentleman upstairs!

Don't even write it to please your prospective customers!

Write it to ATTRACT THEIR ATTENTION, to AROUSE THEIR INTEREST, to WHET THEIR DESIRE for your goods and to INDUCE THEM TO ACT!

Then you are on the right track for getting sales, and it is sales you want.

Advertising is simply a matter of salesmanship—salesmanship in print.

You would not expect your personal salesmen to get much business without talking, talking in the right way to appeal to your customers, to explain your goods, to convince them of their superior value and to create within the customers an overwhelming desire for your goods, such as would lead them to act and sign the orders for the goods.

When you advertise keep these things in mind in preparing your copy.

Make your copy more than a mere placard. Make it talk. Have it of real sales stuff,—talk that will sell the goods.

Space costs money as you well know. If you must limit it, then don't attempt to fill it with a long letter. Pick out your leading sales argument. Write it out as if you were sending a telegram. Then put this telegram in the space for your advertisement.

We have no quarrel with those who favor general publicity copy,—but we believe in "reason-why" copy—good, strong, confidence winning copy, when it comes to "getting it over" and bringing immediate and direct results.

We believe in having the advertisement well displayed; having it attract attention; then interesting, convincing and stirring one to action.

Then we believe in having the advertisement PLACED, like you would have your travellers keep—ONLY AMONGST GOOD COMPANIES such it is ALWAYS sure to be in Farm and Dairy, which is "A Paper Farmers Swear By!"

## Creamery Department

Butter makers are invited to send contributions to this department, to ask questions of our writers relating to butter making and to suggest subjects for discussion. Address letters to Creamery Department.

### To Preserve a Delicate Flavor

J. D. Leclair, St. Hyacinthe Dairy School

In this country, where the production of dairy products is intermittent, the consumer has to live during the intervals upon stock accumulated in the productive period. He wants to be supplied during the non-productive seasons with sweet, delicious butter, the same as during the productive seasons. By consumer I mean both local and foreign consumers. Both must be supplied with butter that has kept its original flavor. This requirement must not be overlooked if we want to develop our trade in dairy products.

The quality of rapidity depends upon the fermentation. Then by what process shall we impart to the butter its long keeping quality? General experience in all butter producing countries is, that if aroma and flavor are but slightly developed at first, they will gradually get accentuated to reach a maximum after several weeks and even months. On the contrary, if aroma and flavor are highly developed at the beginning, another fermentation will generate upon the remains of the first, and will soon become predominant with its characteristic flavor known to every one.

#### PERCENTAGE OF FERMENT

The pure culture ferment should be used with moderation and discernment. In our dairy practice at the St. Hyacinthe Dairy School

we have found that ferment at the rate of 20 per cent of the cream, during summer, and 25 per cent during winter, gave general satisfaction. The ferment is added to the cream after the latter has been sufficiently cooled to be churned without too large a loss of fat. In some instances it is a good policy to increase the usual rate of ferment, such as in the case of bad flavor in the milk for one reason or another.

It is also our practice to develop the acidity in the ferment to 100, and the acidity of the mixture cream and ferment, ranges between 27 and 29.

### Are Hauler's Samples Accurate?

J. F. Singleton, Kingston

In Eastern Ontario creameries the common practice is to keep composite samples of the cream delivered by each patron, and to test only once a month. In order to get accurate results in this way, the composite sample must represent the average quality of the cream delivered by the patron during the month. If the composite sample is to represent the average quality of the cream delivered during the time over which it extends, each sample added to the composite jar must represent both the quality and the quantity of the delivery from which it is taken.

As most Eastern Ontario creameries use the large cans for collecting the cream, the sampling must usually be done by the haulers. No special effort is made to have the quantity of each sample taken proportionate to the quantity of cream received from the patron. In order to ascertain whether or not the samples taken by the haulers represent the quality of the cream received from the patron, I have occasionally had the hauler place a sample of cream, taken in his usual manner, into a jar. I would then

carefully pour the cream several times more and sample it myself, placing jars being labelled and numbered to distinguish them. These samples so taken were tested at the creamery and the following are some of the results obtained:

Patron	Hauler's Sample	My Sample
A	..... 29	..... 29
B	..... 34	..... 34
C	..... 27	..... 27.5
D	..... 24	..... 24
E	..... 36	..... 36
F	..... 26.5	..... 27

I have never found any marked variation between the sample taken by the hauler in his usual way and the sample taken by myself. One of the Eastern creameries has done some work along this line with the same results, and it would seem that the hauler's samples represent quite accurately the quality of the cream received.

### A Simple Device

Alex. McLachlan, Grey Co., Ont.

Weighing the samples does not take so long as uniting the sample with the acid. To overcome this difficulty we have a rack that will hold 24 bottles. We can shake 24 samples at once and empty when done testing.

To make this stand, we take three boards, 13 inches long and nine inches wide. Holes are bored in the top board of such a size that the board will fit down nicely on the board where the neck of the bottle starts to taper. The holes in the second board should fit around the body of the bottles. The bottles rest on the bottom board. The top board should be hooked in such a manner that it can be removed readily.

"Clean up and keep clean" applies as well to the stable as to the dairy house.

### Cooperation in Saskatchewan

J. W. Wilson, Dairy Commissioner, Sask.

The policy of centralizing judiciously creamery work has been well tested in Saskatchewan, and the results which have been achieved prove its wisdom. The justification of this course lay in the fact that within a territory in close proximity to any creamery, and under existing conditions, there was not sufficient cream to warrant profitable operations. It was felt that shipments of cream from adjacent territory served by railways should be encouraged rather than the formation of companies for the purpose of erecting new creameries. The number of creameries is not always evidence of progress, but rather the business done at each, and the satisfaction given to those who patronize them.

The tabulated statement seems to justify the conclusion on that the dairy branch is pursuing a policy that makes for permanent progress, and it is suited to the needs of the province.

Season's make of butter, lbs.			
Creamery	1912	1911	1910
Birch Hills	45,498	118,365	126,360
Meatcraft	7,865	12,865	12,865
Moonbeam	28,982	81,816	104,128
Qu'Appelle	20,775	44,891	62,133
Tantalus	38,460	68,297	63,828
Lloydminster		30,054	43,440
Wadena			6,208
Shellbrook			22,616
Langenburg	77,645	67,134	62,628

Season's totals 220,225 462,216 792,816

The increase in the make of butter is almost half a million pounds in four years. The number of farms supplying cream increased from 33 in 1908 to 1,536 in 1911. The progress in winter dairying is even more marked. Four years ago none of the creameries did business during the winter months. Last year 100 per cent of the government creameries continued operations. It is evident that the farmers have had proof, in a very practical way, that there is profit and safety in cooperative dairying in Saskatchewan; also that the conduct of the business at the creameries has been satisfactory, otherwise such a marked increase in so short a time would scarcely be possible.

### Items of Interest

The seventh annual National Dairy Show will be held in the International Amphitheatre, Chicago, commencing October 24.

H. L. Hutt, Professor of Landscape Gardening at the O.A.C., and R. B. White of Ottawa, are leaving for Great Britain to make a special study of landscape gardening in this country.

Mr. E. S. Archibald, who for the past few years has held the position of Professor of Animal Husbandry and Farm Superintendent at the Agricultural College, Truro, Nova Scotia, is being succeeded at Truro by Mr. L. S. Stevenson, B.S.A., formerly of the Ontario Agricultural College in 1912. Mr. Stevenson is a son of Mr. R. S. Stevenson of Auster, well known to many Farm and Dairy readers as one of the foremost breeders of Holstein cattle in Ontario. For 15 years prior to entering the Agricultural College at Guelph Mr. Stevenson, jr., was a practical manager of his father's farm at Auster, and has, in addition to his scholastic training, a splendid practical experience in farm management.

If the evening's milk is to be preserved by itself, cool it to 65 degrees if it is to be delivered with the morning's milk cool to 60 degrees or less

## Cheese

Makers are invited to send contributions to this department, to ask questions of our writers relating to cheese making and to suggest subjects for discussion. Address letters to Cheese Department.

### Authorities

Geo. Barr, Chicago

The first connection with our cheese makers was made by the fact that the problem of making a uniform method of dividing into what we call Canada agreeing paying for milk, we must get at the thing. The securing of the foundation of the minute of agreement for milk, one man want to like the test but. Another will not pay for it to get these men are three meth milk? The farm for the stand the when they had agreeing. The try, the men we give the best a as to what is the have a campaign division of products

### In Canada

J. A. Rudolph, age 60

Let me draw change which Canadian cheese the increased and. I am exactly the of Northern Hemis begins to arrive season in Canada ditione the New plus, to some which formerly cheese during this there is not a store as much dian cheese for formerly was. The point I this: When the land cheese became supply the constant the time it say from Norway cheese will very largely due which is in progress this is already tent. Our cheese than ever for tion. That should be well them on the Canada is more mature easy under the they were held age.

### Who is

I need not pay cheese-makers to this respect for be exactly the should have been into the question. In addition to the unrecurred cheese, and the seller n. Admitting that parties to the "Extract from a

## You are losing money every year you put off the installation of an IDEAL GREEN FEED SILO



### SPECIFICATIONS

Material: Canadian Spruce especially selected for our use.

All lumber is saturated with a solution which prevents rot and decay and increases the tenacity of the staves to swell or shrink and last two to three times the life of the Silo.

Hooped with heavy round spruce every 12 inches apart. Only malleable iron lugs are used.

Doors are only 6 inches apart, can be removed instantly and are always airtight.

The roof is self-supporting; silo clear to the top. All silos furnished.

A GOOD SILO is a necessary part of the dairy equipment of every cow owner who wants to realize a profit from his herd.

If you haven't a Silo a little investigation will be sure to convince you that you ought to erect one. Most likely you have already come to that conclusion.

Then the question is "When shall I buy and what Silo?"

Don't buy anything but a Wood Silo. Cement or brick or stone not only cost much more than wood in the first place, but there is too much waste from spoiled silage with anything but a wood silo. If there is the slightest doubt in your mind about this we will be glad to give you full information on this vital subject.

### The Best Wood Silo is the Cheapest

It costs less in the first place and gives you the best service.

We are the odest and best known Silo manufacturers in Canada. Thousands of our Ideal Green Feed Silos are in use on the most prosperous farms and they have always given satisfaction.

Ideal Green Feed Silos are of the very best material, and everyone contemplating the erection of a silo this year will find it to his advantage to get our specifications and prices before contracting for the erection of a Silo.

Write For Our New Silo Catalogue Today

DE LAVAL DAIRY SUPPLY CO., Ltd.

LARGEST AND OLDEST SILO MANUFACTURERS IN CANADA

172 William Street, MONTREAL

14 Princess Street, WINNIPEG

### Cheese Department

Makers are invited to send contributions to this department, to ask questions on the subject, to discuss cheese making and to suggest subjects for discussion. Address letters to the Editors, Cheese Department.

#### Authorities Should Agree

Geo. Barr, Chief, Dairy Division, Ottawa.

The first consideration in connection with our cheese industry is pure milk. We must have sanitary milk to make the finest cheese. The second consideration is the relation of the problem to the divider of the profits. We are making a mistake right today in methods of dividing the profits, and until we get our dairy authorities in Canada agreeing on some method of paying for milk in the cheese factory, we might just as well sit down and let the thing go the way it is.

The securing of a uniform method is the foundation of the whole thing. The minute one starts talking of payment for milk there are three facets.

One man will say, I do not want the test. Another man says, I like the test but I want it straight flat. Another will say, I want to add 100 per cent to you and you get these men together when there are three methods of paying for milk? The farmers cannot be blamed for the stand they are taking to-day when they find dairy experts talking against. The experts in this country, the men who are supposed to give the best advice, should decide as to what is the right method. Then there is a campaign of education for just division of profits.

#### In Canada Talking Second Place\*

J. A. Reddick, Dairy and Cold Storage Commissioner.

Let me draw attention to the change which is coming over the Canadian cheese trade as a result of the increased supply from New Zealand. The New Zealand season is exactly the opposite to that of the Northern Hemisphere, their cheese begins to arrive in England a little before the close of the manufacturing season in Canada. Under these conditions the New Zealand cheese supplies, to some extent, the demand which formerly existed for Canadian cheese during the winter months, so there is not now the necessity to store as much summer made Canadian cheese for winter use as there formerly was.

The point I wish to emphasize is this: When the quantity of New Zealand cheese becomes large enough to have a negative demand during the time it comes on the market, say from November to June, Canadian cheese will have to be consumed very largely during the period in which it is already felt to a limited extent. Our cheese are needed more than ever for immediate consumption. That being the case, they should be well cured before we put them on the market. They should be more mature now than was necessary under the old conditions when they were held much longer in storage.

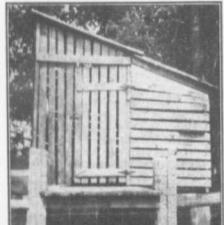
#### WHO IS TO BLAME?

I need not point out to Canadian cheesemakers that our practice in this respect for several years past has been exactly the reverse of what it should have been. I am not going into the question as to who is to be blamed for the loss of green cheese incurred because. Possibly the buyer and the seller may both be to blame. Admitting that there may be two parties to the act, and that the

\*Extract from an address.

cheese producer may shift part of the responsibility on to the buyer, it is he, the producer, and he only who must face the results and bear the inevitable loss. It must be conceded, also, that he has the remedy in his own hands. Here is what one of the leading importers says on this subject in a recent review:

"There is one thing, however, that might be done to make Canadian cheese more suitable to our trade during the months of June to September, and that is to delay shipping them until they are more mature. During these months they arrive in far too "green" a condition, and this of course depreciates their value. The reason for shipping them so early is easily understood, but there is no doubt whatever that the makers have to pay the penalty by realizing lower prices than they otherwise would. In July, August and September, prices for New Zealand cheese in London are always above those obtainable for Canadian, while



#### Very Cheap and Quite Efficient

One does not need to make a large expenditure to provide a suitably covered milk stand. The one here illustrated on the farm of T. Graham, Peterboro, Ont., will keep milk quite as well as the most elaborate stand, and has the additional recommendation of being cheap.

-Photo by an editor of Farm and Dairy.

for the remainder of the year Canadian makes more money than New Zealand. The sole cause of difference in the two articles during these three months is the immaturity of the Canadian."

#### WHAT IT COSTS

The difference in price referred to was from half a cent to three-quarters of a cent a pound. This is a direct loss, serious enough in itself, but the loss of reputation is even more serious. The saving in shrinkage, which is supposed to be made by shipping green cheese, is a paltry matter compared with the injury done. Moreover, the gain through saving of shrinkage is an imaginary one, because the cheese continue to shrink no matter who holds them, and the loss eventually comes out of the producer.

The New Zealand cheese cannot be placed on the market in the same green condition that much of the Canadian cheese is. Time and distance stand in the way, for it takes at least two months to transfer New Zealand cheese from producer to consumer, and more often it is nearer three months.

#### COOL CURING THE REMEDY

New Zealand cheese is practically all cool cured, and it is carried on all cool voyages from the Antipodes at a proper curing temperature. It has the further advantage of being landed in cold weather. The natural advantages are undoubtedly on the side of New Zealand. Canadian

cheese factories have been shown very plainly how they may, by adopting the cool curing principle, meet this competition on even terms, and that, too, without the expenditure of a cent which will not be repaid inside of two years.

I cannot conceive of a more suicidal policy than to continue to ship these green, immature cheese, which give so much dissatisfaction to our customers. We are spending thousands of dollars annually to bring the art of cheese manufacture to the highest possible pitch of perfection. We nullify the good results which should and would follow if we allowed sufficient time for the full development of those high qualities which the skill of the cheesemaker has put into his product. A good reputation for quality of product is essential in these days in any line of production. He who neglects it will go to the wall sooner or later.

#### Pasteurizing Increases Value

F. Burd, Dairy Instructor.

When is one of the greatest sources of contamination of milk. It appears that the time has come when all factories manufacturing cheese will have to pasteurize the whey from outset to finish, especially where the whey is being returned in the same cans in which the milk is delivered. This is the system commonly practiced.

Patrons ask highly of the feeding value of pasteurized whey when the work is well done. They claim that pasteurized whey is equal to skim milk for calves. If this is the case, there is no reason why more of it should not be used this season. Some of the benefits derived by having whey pasteurized are that it destroys the bulk of the germs in the whey injurious in cheese making, it imparts a greater feeding value by more sugar being retained and the fat being more evenly distributed throughout the whey. There is less danger of the cans being injured by acid when whey is pasteurized and cans are much easier cleaned.

Now that pasteurized whey has all these good qualities not possessed by the unpasteurized whey, why not fit all factories for this work? The cost of pasteurizing this whey is a trifling sum. Moreover, it is not very much for patrons to pay when they know that the work is well done.

#### We Can Control Quality

B. A. Reddick, Northumberland Co., Ont.

My experience as a cheesemaker is that to absolutely control the quality of milk taken into the factory is quite a hard problem. I have no hesitation in saying that I believe the authority that the cheesemaker has been given has been abused in many respects, thus making it hard for his neighboring maker who is determined to manage his part of the dairy business as it should be.

There is no doubt that the maker who is determined to do everything the best that it can be done will have more or less trouble with his patrons at first. He may find it hard to hold his position, but he is sure to win out in the end and will be better liked than the careless man.

## Milks Any Cow For Less Than 1¢

We want to send you our latest catalog—an interesting book that tells all about the



### SHARPLES Mechanical Milk Separator

We want to show you how this marvelous machine will milk any cow in your dairy for less than one cent—including both the cost of the power and wages of the operator. If you hire hand-milkers you know it will cost you three times that amount for labor alone, to say nothing of the cost of board and the continual worry and disappointment.

This saving twice a day on every cow you own amounts to a single year to a clear extra profit of \$1.00 from each cow, or a total saving of from \$300 to \$1,000 according to size of your herd.

We offer to place a Sharple's Mechanical Milk Separator on your doorstep—give simple ideas for trial with the understanding that you are to be thoroughly satisfied or they will be free.

Write today for Catalog No. THE SHARPLES SEPARATOR CO. WEST CHESTER, PA.

TORONTO, CAN. WINNIPEG, CAN.



## Cheesemakers' Buttermakers!

You can increase your income, make your work easier, and dispense to the winds many of your troubles. You can improve the quality of your milk and cream you receive and get more of it from your patrons by inquiring of them to read Farm and Dairy weekly.

#### We will pay you

Just now we offer you an unusually liberal cash commission for each new subscription to Farm and Dairy you send us. We will send you sample copies for each of your patrons. Write us a letter to-night asking for our proposition.

Farm and Dairy, Peterboro, Ont.

## CREAMERY FOR SALE OR RENT

In good dairy section. Large building in good repair with best of equipment, doing a good paying business. A bargain for the right party.

R. V. HUCK - Ulverton, Que'

#### LOW COST, BIG RETURNS

THIS SIZE SPACE (one inch) costs 50 cents per insertion in the display columns of Farm and Dairy. This is a flat rate—giving small advertisers the same advantages as users of larger space, and avoiding the confusion discount scale.

2 cents a word per insertion—the rate for For Sale and Want advertisements.

## CHEESEMAKERS! USE "VIKING" RENNIN AND ANNATTO

You will save 30 per cent and obtain the finest Cheese on the market. Many of our leading Canadian Cheesemakers. The beautiful English Cheddar in the Old Country is made with "Viking" Sample cooks sent freight paid to any station in Ontario. Write us today, letter costs you 5c, but will save dollars.

VIKING RENNIN CO., Ltd., 19 Clapton Sq., London, England



ALL who joy would win, must share it—Happiness was born a twin.—Byron.

## The Second Chance

(Copyrighted)

NELLIE L. MCCLUNG

Author of "Sowing Seeds in Danny"

(Continued from last week)

FOR a few seconds neither of them spoke. Mrs. Cavers held out her hand. "Mr. Braden," she said. Words failed her.

"I want to speak to you for a few minutes," he said. She opened the door and led him into the little parlour.

"Mrs. Cavers, I know that my presence is full of bitter memories for you," he began. "You have no reason to think kindly of me, I well know; but no one else could do this for me, or I would not force myself on you this way."

She interrupted him. "You were kind to me and my little girl once; you did for us what few would have done. I have never thanked you, but I have always been and always will be grateful; and when I think of you—that is what I remember."

There was a silence between them for a few seconds. Then he spoke.

"I don't know how to begin to say what I want to say. I did you a great wrong—you, and others, too; not willfully, but I did it just the same. I can never make amends. Oh, forgive me for talking about making amends—but you're not the only one who has suffered; it's with me night and day. I can see Bill's face that day—on the river-bank! I liked Bill, too. As you know, I closed the bank that day for ever, but it was too late—to help Bill."

Mrs. Cavers was holding the back of a chair, her face colourless and drawn.

"I heard a few days ago that you were coming back to Manitoba to work, to earn your living and the little girl's. I can't stand that—I had to come—Oh, don't scorn me like that—let me help you. It has not been for my bar you would have had plenty. I want you to take this: it's the deed of a half-section of land near Brandon—it will keep you in plenty. I'm a blundering fellow—I've put it roughly, but God knows I mean it all right."

He stopped and wiped the perspiration from his face.

"I can't take it," Mrs. Cavers said, without moving.

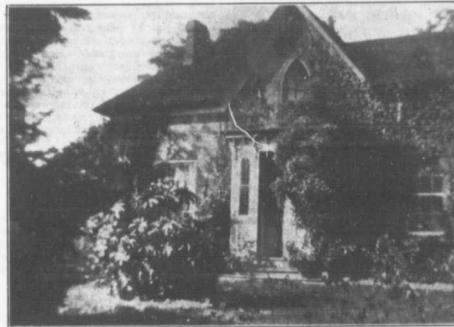
"You must!" he cried, moving nearer to her. "Don't refuse! Oh, Mrs. Cavers, you were merciful to me once—do you mind how you held out your hand to me that day? God bless you, it was like a drop of water to a man in hell. Have mercy now; take a little of the burden from a guilty man's heart."

"I do forgive you freely, and I wish you well—but—I can't take your money," she whispered hoarsely.

He walked up and down the room for a few moments, then turned to her again.

"Mrs. Cavers, I've been a guilty man, careless and hard, but that day

—on the river-bank—I saw things as I never saw them before, and I'm trying to be square. My mother"—his voice broke and his eyes glistened—"my mother has been in heaven twenty years. She always told me about God's mercy—to the very worst—that He turned no one down that came to Him. My mother was that kind herself, and knowing her—has made it easier for me to believe that—God is always merciful—and always willing—to give a fellow—a second chance. I can't look for it or ask it



An Attractive and Cozy Farm Home in Durham County

The farm home of Mr. Albert Tamblyn, Durham Co., Ont. Here illustrated, shows to a neat, low trees, shrubs, and vines may be used to make the home beautiful. Study the arrangement of plants in this illustration and notice their effect. How many countr. homes there are that are in need of similar planting!

until—you take this. Now, Mrs. Cavers, I know you don't like me—why should you?—but won't you take it?"

She hesitated, and was about to refuse again, when he suddenly seized her arm and compelled her to meet his gaze.

"For God's sake!" he cried. "Mrs. Cavers took the document in her trembling hand."

Sandy Braden turned to leave the room, but she detained him.

"Mr. Braden," she almost whispered, her voice was so low. "I have a mother like yours, one who makes it easy to believe that God is always loving and kind—I want her to thank you for me. Tell her all about it—she'll understand, just like your own mother would—these dear old mothers are all the same."

Mrs. Cavers went back to the verandah and brought her mother into the parlour; then she went out, leaving them alone.

What passed between them no one

ever knew, but an hour later Sandy Braden went out from the little white cottage with a new light shining in his face, and the peace of God, which "posses all understanding" in his heart. He went back into the world that day destined to do a strong man's part in the years to come.

### CHAPTER XXXV.

#### THE LURE OF LOVE AND THE WEST.

If you've heard the wild goose honking, if you've seen the sunlit plain, if you've breathed the smell of ripe grain, dew, wet,

You may go away and leave it, say you will, you may not come again, But it's in your blood, you never can forget.

There is a belief, to which many sentimental people still hold, in spite of all contradictory evidence, that marriages are arranged in heaven, and that no amount of earthly wire-pulling can alter the decrees of the Supreme Court. Many beautiful sentiments have been expressed, bearing on this alluring theme, but none more comprehensive than Aunt Kate Stonestone's brief summary: "You'll get whoever is for ye, and that's all there is to it."

Theoretically, Mrs. Burrell was a believer in this doctrine of non-resistance, modified, however, by the fact that she also believed in the existence of earthly representatives of the heavenly matrimonial bureau, to

husband about it, she was almost in tears.

"If he goes to England, John, we'll never see him again; I'll marry an English girl—I know it. They're so thick over there he can't help it when he sees so many dancing girls! He'll just have to marry one of them!"

"To thin them out, I suppose you mean," her husband said, smiling. "Don't worry, anyway, and show and things, don't interfere. Leave something for Providence to do!"

After Mrs. Cavers and Libby Ann had gone, life in the Pease place settled down to its own pleasing monotony. The schoolmaster found Martha a willing and apt pupil, and came to look forward with pleasure to the evenings he spent helping her to understand the world in which she was living. Dr. Emory paid his bi-annual visits, seeking with the magnets of music to draw Arthur's thoughts down from the pinnacles of love. Pearl Watson, like a true general, kept a strict oversight of everything, but apparently took no active part herself; only on Saturday afternoons, when she had Martha tell her the stories she had read during the week. At first the telling was haltingly done, for Martha was not gifted with fluent speech, but under the spell of Pearl's sympathetic listening, her organizing powers developed amazingly.

When the summer days came, with their wealth of flowers and singing birds to Martha the whole face of Nature seemed changed; she heard new music in the meadow's rustling note, and the plaintive piping of the whippoorwill. The wild rose, fragrant beauty, the gorgeous coloring of the tiger-lilies and meadow flowers, the golden sunbeams in the grainfields at noonday as the drifting clouds threw racing shadows over them, were all possessed of a new charm, a new power to thrill her heart, for the old miracle of love and hope had come to Martha, the witchery that has made "blue sky silver and green things greener," is us all. There was the early rising on the dewy mornings when the meadow was filled with silver mist through which trees loomed greyly against; there was the quivering of noonday, that played strange tricks on the southern horizon, when the staid old Tiger Hills seemed to pulsate with the joy of summer; and then the evenings, when the dew was all aglow with crimson and gold, and quiet Sunday evening, the harvest time, Martha and Arthur stood beside the lilac hedge as watched the sun going down behind the Brandon Hills. Before the stretch of the long field of ripening grain. There was hardly a leaf stirring on the trees over their heads but the tall grain rustled and whispered of the abundance of harvest.

As they listened to the rustle of the wheat Martha said: "I have been trying to think what it sounds like but can think of nothing better than the bursting of soap bubbles on the water; that must have made the angel's tremble."

She planned an evening party, and wrote to Arthur asking him to bring Martha, but forgot to send Martha an invitation, which rather upset her plans, for Martha declined to go. Mrs. Burrell, however, not to be outdone, took Arthur aside and talked to him very seriously about his matrimonial prospects; but Arthur brought the conversation to an abrupt close by telling her he had not the slightest intention of marrying, and that quite made up his mind to go back to England as soon as the harvest was over.

When Mrs. Burrell was telling her

"I think it's a very good one though," Arthur said, absently. "And it seems to whisper, 'Plenty, Plenty,' as if it would tell us we need not rust and worry to go on."

"What is it, Arthur?" she said, drawing nearer in quick sympathy. "I'm all right," he answered quietly, but with an effort; "just a little bit blue, perhaps."

(Continued next week)

The Up  
In the Church

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# The Upward Look

### Is the Church Following Christ?

And the common people heard Him gladly.—St. Mark 12:37.

The world is in the midst of one of the greatest evolutions, social, economic and spiritual, in its history. It is a movement that is not confined to one or two nations. Instead, it is manifest in all nations. China is throwing off the yoke of ages and is struggling in the pangs of a new birth, both political and religious. Japan, having discovered that she is a world power, is looking forward with eager confidence to what she is sure will have in store for her. Germany is slipping out of the control of the titled and landed interests and that of the Socialists, who now form the strongest single party in the Reichstag. England has recently enacted legislation in the interests of the poorer classes at which the rest of the world is still marvelling, and has not only recently enacted laws that give strikers that have made apparent how wide is the space that separates different classes of her people.

In this continuing drama of manifest destiny the same great movement are apparent. The great labor unions have been accused of engaging men like Harry Orchard and the McManis to blow up buildings, like the Times building in Los Angeles. The great political parties in the United States are being rent and torn by new issues that represent the cry of the oppressed against the greed and extortion of the powerful. In Canada the same influences are at work. One party is openly accusing the other of being closely allied with and legislating in the interests of the wealthy corporations.

And our churches are not escaping in this widespread upheaval. In the United States it has been stated that two-thirds of the people are not connected with any form of church whatever. The spirit of materialism affords to its devotees a whole with a God which should rule in the hearts of the people. Our General Assemblies, Conferences, and Synods of the different churches regretfully report that in spite of increased missionary and church givings, the membership of the church is not increasing as it should, and that it is becoming more and more difficult to enlist and retain the interests of men in the schemes and work of the church. In consequence, Christian men and women are enquiring with unconcealed eagerness as to the whole with a faith that is inspiring, in regard to the duties and responsibilities of the church and of Christians in this hour of testing. And well they may, for outside the church great bodies of men like the Socialists, now numbering their hundreds of thousands, if not millions, have openly turned their backs on the church, have denounced it as a sham, its followers as hypocrites, and have addressed themselves to a struggle on behalf of the toiling masses that they say that the church, if it were honest and practised the rights of brotherly love that underlies and is a feature of all Christ's teachings, would have grappled with long ago.

As Christians we must, if we are to be true to our Master, strive to study and understand the great issues that are now being raised. It may be that our own sakes we will have to shake off many of the commonly accepted views that have dominated us in the past, and prepare to advance into new and greater fields of Christian thought and living and activities than our narrow conceptions of height and breadth and depth of Christ's teach-

ings in regard to the love of God and the love we should feel for our fellow men have allowed us to entertain in the past.

During the next few weeks we trust to be permitted to examine more closely the glorious opportunities that appear to be opening before the Christian church everywhere. May we all pray for the strength and faith and love that alone can prepare us to enter in and take possession of our enlarging opportunities.—I. H. N.

### Importance of Contentment

If the woman is not satisfied, says a writer in the "Indiana Farmer," and if no effort is made for her comfort, the farmer might as well give up his aspirations to become successful; for the family cannot remain on the farm if the wife and mother rebels.

On thousands of farms in this country there is every reason for rebellion for absolutely nothing is done to give the woman the aid she needs in housekeeping, in the bringing up of her children, and the performance of her share of the farm duties. How many men who have reapers and binders think of the washing machine and the ironing machine for their wives?

**COMBINE PLEASURE WITH DUTY**  
In how many cases would the woman think this as needless expense, simply because she has been trained to believe that her health and happiness and conservation are inferior to those of our public men and to the needs of the live stock and the farm? The farmer's wife should be taught how to conserve her time and energy, how to get the latest labour-saving devices, how to do her work scientifically and intelligently and how to combine pleasure with duty.

She should have some idea of art, so that her home may be beautiful, and she should not be given to believe that there is nothing in life beyond the dreary routine of daily toil.

### An Old Clock

One of the treasures in the house of Mr. M. L. Haley, Springfield, Oxford Co., is a grandfather's clock, that is believed to be about three hundred years old. It keeps good time. Mr. Haley remembers distinctly when he was a boy seeing his grandfather wind this clock.

An editor of Farm and Dairy, while visiting recently at Mr. Haley's was shown this interesting heirloom. It is made of wood throughout, even the wheels inside being composed of that material. The weights are suspended on strong cords. This cord has been renewed from time to time but is practically the same as that used when the clock was first made.

Mr. Haley does not know how long the clock has been in the possession of his family. It was brought to Ontario from Nova Scotia, when his grandfather moved and settled on the same farm that is now occupied by Mr. Haley. On the dial of the clock appears the name "R. Whiting, Winchester," who evidently was the maker of the clock in England. Have any of our readers got a clock as old as this?

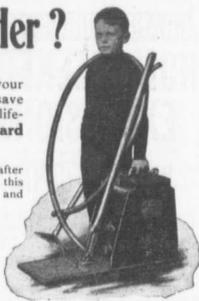
### Only Mother Knows

Nobody knows of the work it takes To keep the home together; Nobody knows of the steps it takes, Nobody knows but mother.

Nobody knows of the anxious fears, Lest darlings may not weather The storm of life in after years, Nobody knows but mother.

Nobody kneels at the throne above To thank the Heavenly Father, For that sweetest gift—a mother's love; Nobody can, but mother.

# Why Deny Her?



A Boy Can Operate It

**YOU** can lighten the burden of your wife, you can make her happy, save her strength, and add years to her life-time by getting her a **King Edward Vacuum Cleaner**.

No more sweeping, no more dusting after sweeping, no more carpets to beat—this labor saving machine gets all the dust and saves endless work.

You can keep your carpets clean sanitary, and safe for your children to play upon by using the King Edward Vacuum Cleaner once a week or every 10 days. It adds greatly to the health of your children.

### A Popular Offer

**FREE TRIAL FOR 10 DAYS**—Since Farm and Dairy last special number was issued, June 6th, we have been sending out on free trial a King Edward Cleaner to any home where Farm and Dairy goes that have asked for one of these Vacuum Cleaners. We will let you try one, too, and if it does not suit you then you can send it back at our expense. If you like and keep it, then we will ask you to pay us for it. The price is \$30.00.

The King Edward Vacuum Cleaner is the lightest of all vacuum cleaners to operate; it has the strongest suction; it costs less money; one person can operate it easily; it is the simplest in construction; it is the strongest—has nothing about it to get out of order, and all parts used will last a life-time. All of these points we will let you prove.

Write us now for free catalogue and opinions of satisfied users. Names and addresses given so that you may try them personally. Special inducement to agents.

Have us shift your machine now so you can try it and know what it will save your women folk in time but neither, when they must need it to keep the house clean and save their strength.

Get your women folk one of these great labor-saving, health-preserving machines and they will praise your name for years to come. Get us first and prove all our claims.

**Geo. H. King Co., Ltd. - Woodstock, Ont.**

Reference—The Traders Bank of Canada, Woodstock, Ont.

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Scott, English and Irish. Party arrives about Aug. 5th, Sept. 2nd and weekly after.

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## Extra Pay for Workers!

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A person who can during the next month or six weeks devote some time to seeing friends and neighbors about taking FARM AND DAIRY.

If you are the person and want to grasp this opportunity, and make good pay for your time and effort, write FARM AND DAIRY to-night for full particulars.



## MAXWELL'S HIGH SPEED CHAMPION

The Whipper Blade extends from the shaft, out of the way of the cover. This allows practicality in the whole top of the tub to open up—makes it easy to put in and take out the blades.

At other outdoor fairs we have an opening. To other users we offer our blades with work handles of side use as well as top lever.

Do you see Maxwell's "Pawlover"—the chopper that has been known to break down? Write us for catalogue if your dealer does not handle them. 89

DAVID MAXWELL & SONS, ST. MARY, Ont.

Farm and Dairy, Peterboro, Ont.

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\*Tickets good for 30 days.  
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### NO CHANGE OF CARS

The Most Popular Route to  
MUSKOGA LAKES, LAKE OF ST. JAMES,  
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LAKE SUPERIOR, and GEORGIAN BAY,  
TEMAGAMI AND MAGNETAWAN RIVER  
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AGENTS We will pay you well to take in your district for new subscriptions to this practical journal.

FARM AND DAIRY, Peterboro, Ont.

### As sure as you Live

By Hilda Richmond  
Not long ago a wise old lady was listening patiently to a lengthy recital of economies by a young relative, which involved going without many necessities in life in order to save money to pay for the farm, and she said it all so complacently and seriously that the elderly lady was moved to give her a little good advice.

"Mary Frances," she said solemnly, "You are making a great mistake. As sure as you live John would rather have a neat, tidy wife, a comfortable home and the privilege of taking his family out with him occasionally, than the little bit of money you save. By your own account you could not go to his family reunion for lack of proper clothes, you can not have company because you do without table linen, and are ashamed for strangers to see you eating off oilcloth, and your little children are often out of Sunday school and the little neighborhood gathering because you are saving clothes."

### BOONAMY THAT IS FOOLISH

"My dear child, believe me you are not economical but foolish. Your husband may endure these things, in fact he may grow so careless that he will always expect you to do without, but he would rather have you keep yourself up and your home comfortable than to add another eighty to his farm."

And this is one of the most important lessons for the young country bride to learn. The tendency to want to save money, to get ahead in the world, to show the young husband that he has married an economical wife—all of them praiseworthy if not

carried to the extreme—should be watched by the young wife, for she is not only at the head of the home to save money, but to make her little abode the best place in the world.—Indiana Farmer.

### Dress in the Home

By Pearl White McCowan

It is amazing how many women will neglect their personal appearance in their own homes. They seem to think that the mere fact of their being at home gives them a licence for all sorts of careless and slovenly habits.

Even women who keep their houses in spotless order are not exempt from



### As Good Friend and True

this detestable habit of personal slovenliness. I have in mind one such, a remarkably brilliant woman in many ways, an old school teacher of more than ordinary ability. This woman always looks neat and even stylish when she goes out. Her home is well furnished with many of the modern conveniences. It is always in "apple pie" order, as the old-fashioned saying goes.

### IN STRIKING CONTRAST

But the contrast between her own appearance and that of her house is incongruous, to say the least. Her heavy black hair is usually coiled unbecomingly into a huge "wad" at the back of her head, while an insufficient amount of pins often allows one or two strands to escape from the original "wad" and hang down in rough, uneven lengths. Her skirt and waist seldom live peaceably together. In warm weather her waist is usually unfastened at the throat, and her apron with a little square "bib," usually with one corner unfastened, only serves to increase her general untidiness.

I have chosen to describe this woman because she is only one of hundreds of others in this same class: Women who know well how to make themselves neat and attractive when they choose, but who either do not have time, or do not think it worth their while to do so, when they are about their work in their own home.

### COMMON SENSE IN DRESS

A sensible woman will dress according to her work, of course. She will not don white cuffs and collar when doing dirty work about the kitchen or laundry. But she will also remember that "her best" (in her personal appearance, as in everything else) is due to the ones who love her best—to her own home folk.

Have you not often heard someone remark, when a certain woman was admired for her clothes and general neatness of appearance, "Yes, but who had ought to see her at home?"

One very lovely woman, who is a most competent housekeeper and mother, said, "I have kept house for over 20 years, and, except in a very few cases, where the severe illness of some member of our family made my immediate presence imperative, my

husband and children have never seen me outside my bedroom door with my hair uncombed. No wonder the exposed pride of this whole family is in their "mother."

### A HELP TO NEATNESS

And, sisters, let me whisper a secret to you! You may laugh and call it vanity, if you choose, but it is true nevertheless. An abundance of mirrors, one for every room in the home, will help to correct this habit of untidiness sooner than anything else. Habitually slovenly and careless about a mirror in your kitchen, a woman cannot bear to look at herself in a mirror and see reflected there a vision of untidiness and disarray. A mirror, placed where she must pass it often in her work, will call to her notice all those little stray bunches of hair and those generous scolding locks, and she will unconsciously fasten them into place, thus keeping herself presentable at all times.

Remember this, tidiness of appearance is not only what you owe to your family, but what you owe to yourself. Show me a man or a woman who is habitually slovenly and careless about their home dress, and I will tell you a man or woman who is deteriorating.—Farm and Fireside.

### Summer Bedpreads

The sleeping apartments during the summer should be made to appear as dainty and cool as possible.

This is an easy matter and little expense is attached to it. After all the draperies used during the winter have been tried away and the unnecessary articles of artifice dispensed with, clothe your room in its summer gear. Purchase plain, barred or figured dimity, any color your taste may dictate. From this fashion a cover for your bed, bureau, dressing table, and the window draperies. Measure the length of the bed and allow three or four widths of material, according to the size of the bed. This may be finished by a ruffled flounce, pleated or by a deep hem. Fourteen inches from the hem, or bordering the ruffle, attach bands of figured dimity. Cut these bands from a wide-striped dimity, which may be had in a great number of varieties. These spreads are easily laundered and may be kept fresh and clean through the hot, dusty summer.

### Hints on Keeping Cool

By Mrs. Gertrude K. Lombert

There are several things to consider in the keeping-cool problem. One of the most important is to keep yourself cool. Do not hurry and excite yourself needlessly. To become hurried and anxious only intensifies the heat.

Another matter that has to do with bodily comfort in hot weather is diet. All heat producing food should be relegated to that season when it is really needed. Baked pork and beans, hot corn, or other hot breads, rich stews, puddings, and cakes, highly spiced and seasoned dishes, should not be indulged in too frequently during the summer months. Instead use fresh eggs and vegetables; chickens and other light meat; plain cakes and fruit puddings; drink milk and use sugar, if it is used, ice. Serve cottage cheese, salads and fresh fruit and berries with sugar and cream for greater variety.

If the sleeping rooms are hot, sleep on the porches or out under the trees, using hammocks or improvised couches. A sponge bath of tepid or cooler water, just before retiring, with a cool plunge bath for the feet, will bring refreshing rest and sleep.

A teaspoonful of glycerine added to a gill of glue makes a cement that is a great convenience in the kitchen especially good for fastening leather, paper or wood to metal.

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which you want. The Imperial  
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Street, Montreal.

## OUR HOME CLUB

### More About Vacuum Cleaners

If there is one thing more than an-  
other that a wonderful invention, the  
vacuum cleaner, stands for, it is the  
regular and systematic cleaning of  
the home, in place of the old-fashion-  
ed general upheaval in the spring,  
and the ordinary use of the disease-  
spreading broom.

I have been deeply interested in the  
articles about vacuum cleaning that  
I have been appearing in Farm and  
Dairy of late. I wish to add another  
word or two to what has already been  
said in favor of the vacuum cleaner  
in the farm home.

I believe the mission of the vacuum  
cleaner to be not only to make clean  
but to keep clean the home in which  
it is employed. It is for daily use  
throughout the year, and its value as  
an agent of sanitation would be vastly  
impaired if its use were confined to  
one big house cleaning campaign a  
year.

I have found the vacuum cleaner to  
be a great destroyer of moths. I be-  
lieve it to be the greatest labor and  
money saver ever installed in our  
homes.

I for one would not care to have  
the health of my family unnecessarily  
in danger by breathing germ-laden  
dust circulated through the home by  
the use of brooms. For this reason,  
as well as the cause of its great utility  
as a labor saver, I have seen to it  
that our women folks have the advan-  
tage of a vacuum cleaner in our farm  
home.—"Another Son"

### School and Church

By Rev. Warren H. Wilson.

The great task for the country  
school is to instruct the country boy  
and girl in the life that is about them,  
to open the book of the fields and to  
teach the processes of life that go on  
in the grasses, among the herds and  
among the winged creatures, which  
are the farmer's friends of the air.  
The teacher who does this will do the  
greatest religious work open to him,  
because the interests of religion are  
to-day imperilled by the disintegration  
of the farming population. When  
men become dissatisfied with the  
sober and honest life of the farmer in  
such numbers that rural population  
diminishes and rural institutions dis-  
integrate, there is cause for religious  
people to be afraid, and to-day they  
are afraid.

The interests of the city are im-  
perilled by the weakness of the coun-  
try. The country school teacher and  
the trustee or director of the rural  
school should teach the country boy  
to get an income from the country ad-  
equately to satisfactory life there. They  
should idealize the life of the coun-  
try, and show its lasting rewards.  
When this is done the churches in the  
country will do the rest. Without  
this service neither priest nor preach-  
er can maintain institutions among a  
population dissatisfied, unenrolled,  
and untrained.

### That Dull Child

By Amelia Reincher

I have noticed so often that in a  
family of several children there is one  
who is not so quick to learn as his  
brothers and sisters. As a rule he is  
very nervous and sensitive child and  
his feelings are cruelly hurt by being  
continually reminded of his dullness.

Now, dear parents, if you have such  
a child in your family, be patient, or  
allow others to taunt him on his  
weakness. Use infinite patience with  
him, praising him when he merits it  
and never berate him for poor grades  
in school when he tries, he is try-  
ing his best. Oftentimes those child-  
ren who are slow to learn in school  
are singularly gifted in other ways.  
Instead of continually finding fault  
with them try to find out their other  
talents and develop them.

### A GENIUS UNWARE

A certain boy who seemed dull to  
parents and teachers was continually  
drawing pictures on his slate and  
thereby brought down upon his head  
the severest rebukes, is now a famous  
cartoonist, drawing a substantial sal-  
ary far in advance of his brothers and  
sisters. Another child, a girl, who  
positively could not learn book lore,  
is now a chef in a hotel.

And so on; many men and women  
of to-day who as children seemed slow  
to learn are drawing salaries for cer-  
tain things which seemed quite fool-  
ish to their elders years ago. Even  
if the dull child possesses no especial  
gifts, continually reminding him of  
his dullness only helps to increase  
it.

**A SORPRESSE FIGHT**  
The second child of a family of  
seven was not quick to learn. His  
younger brothers and sisters left him  
far behind in school. The poor child  
really tried at first to learn and might  
have succeeded with a little kindness,  
but at home he was taunted and be-  
trayed so much by the thoughtless one  
that finally, goaded to desperation, he  
in sheer stubbornness ceased to try,  
and is now a common labourer with  
no hope of advancement.

So help the dull one for his more  
clever brothers and sisters do not need  
you so much. Help him with cheer-  
ing words and thereby make his lot  
easier.—Successful Farming.

### Keep Your Grit

Hang on! Cling on! No matter what  
they say.  
Push on! Sing on! Things will  
come your way.  
Sitting down and whining never helps  
a bit;  
Best way to get there is by keeping  
up your grit.  
Don't give up hoping when the ship  
goes down;  
Grab a spar or something—just refuse  
to drown.  
Don't think you're dying just because  
you're hit  
Smile in face of danger and hang to  
your grit.  
Folks die too easy—they sort of fade  
away.  
Make a little error and give up in  
dismay.  
Kind of man that's needed is the man  
of ready will,  
To laugh at pain and trouble and  
keep his grit.

—Selected.

## The Sewing Room

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

### BLOUSE OR SHIRT WAIST FOR MISSES AND SMALL WOMEN, 7459

Interested in new  
blouses. Here is a  
most desirable one  
for it can be  
finished with a  
high collar and a  
1 1/2 inch sleeve, in  
true mannish style,  
or with a round  
neck, sailor collar  
and elbow sleeves,  
which fact renders  
it suited to quite  
diverse uses and  
materials.

For the 16 year  
size will require  
cut 3 3/4 yards of  
material 27 inches  
wide, 2 1/4 yards 36  
inches wide, 1 7/8  
yards 44 inches wide.

This pattern is cut in size for misses  
of 14, 16 and 18 years of age.

### MORNING JACKET, 7458

Big collars make  
important features  
of present fashions  
and this morning  
jacket shows one  
of the prettiest  
possibilities.

This notched effect is  
novel and distinc-  
tive in the extreme.  
The whole jacket is at-  
tractive in the ex-  
treme. The sleeves  
can be gathered at  
the elbows and  
gathered into  
loose, shorter  
and left loose.

For the medium  
size will be requir-  
ed 2 1/2 yards 36  
material 27, 2 3/8 yards 36, 2 yards 44  
inches wide with 2 3/4 yards of banding.  
This pattern is cut in sizes for 14, 36,  
38, 40, 42 and 44 inch bust measure.

### GIRL'S TUNIC DRESS, 7460

Tunic dresses are  
among the latest  
and prettiest for  
little girls. This  
one is made with a  
simple blouse and  
skirt joined by  
means of a belt,  
and the tunic is en-  
tirely separate.  
consequently, it can  
be omitted if a  
plainer dress is  
wanted.

For the ten year  
size will be needed  
4 1/4 yards 36  
inches wide, 4 1/4 yards 36  
inches wide or 3  
yards 44 inches  
wide, with 7 yards  
of banding, to make  
as shown in the  
front view; and the  
tunic of con-  
trasting material 1 yard 27 inches wide.

This pattern is cut in size for girls of  
8, 10 and 12 years of age.

### CHILD'S SUN BONNET, 7460

Sun bonnets have  
the double advan-  
tage of being pro-  
tective and prac-  
tical. This one is  
just as dainty and  
pretty as it can be.  
It frames the  
child's face after a  
most fascinating  
manner and at the  
same time protects  
it from sunburn  
and tan.

To make the bonnet for a child of two  
years of age will be needed 3 1/2 yard of  
material 27, 36 or 44 inches wide.  
This pattern is cut in size for children  
of 6 months, 1 and 2 years of age.



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Take "St. Lawrence"  
Granulated in one  
scoop—and any other  
sugar in the other.

Look at "St. Law-  
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perfect crystals—its  
pure, white sparkle—  
its even grain. Test it point by point, and you will see that

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R. OF M. TESTS FOR APRIL

(Continued from last week)
Dairy DeKol Queen 22 (15,290), at 2y. 2m. 14.4 lbs. fat, equivalent to 15.2 lbs. milk. Owned by M. A. Stevens, Stratford, Ont.

R. OF M. TESTS FOR MAY

(Continued from page 20)

equal to 15.98 lbs. butter. Owned by The Wood, Mitchell, Ont.
Posch Bonheur (21,730), at 2y. 2m. 14.4 lbs. fat, equivalent to 15.2 lbs. milk. Owned by J. M. Schell, Woodstock, Ont.

Senior Two-Year-Old Class

Madeline Canine (14,441), at 2y. 6m. 7y. 10.4 lbs. fat, equivalent to 11.2 lbs. milk. Owned by J. M. Stevens, B. C.
Lulu Summerhill DeKol (15,850), at 2y. 10m. 14.4 lbs. fat, equivalent to 15.98 lbs. butter. Owned by J. M. Stevens, B. C.

Junior Two-Year-Old Class

Bele Bullina (14,811), at 2y. 5m. 5d. of age; milk 29.5 lbs.; fat 16.81 lbs.; equal to 13.13 lbs. butter. Owned by Benj. Thomas, Richmond, Ont.
Thirty-day record; milk 129.76 lbs.; milk 6.45 lbs.; equal to 8.56 lbs. butter. Owned by Mary A. Stevens, Stratford, Ont.

Gladye Daline Mercedes (15,323), at 2y. 2m. 14.4 lbs. fat; milk 33.5 lbs.; fat 11.11 lbs.; equal to 13.89 lbs. butter. Owned by J. H. Lipsett, Stratford, Ont.
Burkeley Hengerveld Dekol (24,458), at 2y. 2d. of age; milk 27.15 lbs.; fat 10.25 lbs.; equal to 11.32 lbs. butter. Owned by A. D. Foster, Bloomfield, Ont.

Inka Bell Madine DeKol (15,250), at 2y. 5m. 23d. of age; milk 28.9 lbs.; fat 10.85 lbs.; equal to 12.47 lbs. butter. Owned by L. H. Lipsett, Stratford, Ont.
Alberta Betts Seris (14,173), at 2d. 5m. 5d. of age; milk 35.6 lbs.; fat 10.69 lbs.; equal to 13.21 lbs. butter. Owned by M. & W. Schell, Woodstock, Ont.

Burkeley Hengerveld 2nd (14,583), at 2y. 2d. of age; milk 29.5 lbs.; fat 10.57 lbs.; equal to 13.12 lbs. butter. Owned by A. D. Foster, Bloomfield, Ont.
Hilvieve Netherland Cornelia (15,400), at 2y. 2m. 22d. of age; milk 25.6 lbs.; fat 10.46 lbs.; equal to 13.08 lbs. butter. Owned by Walter S. Schell, Woodstock, Ont.

DR. FAREWELL'S RICH BLOOD HOLSTEINS

Some mention has been made in a previous issue of the fact that Dr. A. Farewell's rich blooded Holsteins was made in connection with a descriptive illustrated article of his place published in Farm and Dairy, May '09. As a result of the fact that his cattle of special interest mainly to Holstein breeders are here given.

The photo of Fairview Queen Korndyke, Dr. Farewell's best cow, is also reproduced in Farm and Dairy, May 30, along with some facts as to her breeding and record. She made 22,125 lbs. of milk in 7 days and 26.5 lbs. butter, her best day's milking being 100 lbs. milk.

Another heifer in the herd is Urmagelische Segis, a grand-daughter of King Segis and Cleopatra Guelach, a daughter of the noted cow "Prilly." The dam of Urmagelische Segis is Urmagelische 2nd and her record is 33.24 lbs. milk, her milk averaging in butter fat 5.94. "This record," said the Doctor, "is the only one I ever heard of over 5 per cent butter fat for a Lullian heifer." The dam of the richest blooded Holstein bull they have ever had in the United States. Nearly all her daughters are rich blooded and very high testers."

Spice forbids that we go into detail at this writing with other individuals in the herd. The herd comprised 125 pure cows and heifers and a number of youngsters. The Doctor has come after the high testers, as it were, in connection with a herd he will not look at anything not over four per cent in butter fat, and he has set himself the task of building up a herd of Holstein cattle, giving milk 16 per cent and over in butter fat.

MISCELLANEOUS

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RAVENSDALE AYRSHIRES
Special offering of 10 splendid 1st Yearling Bulls, from two to 12 months old. Write for prices or send us 12 cents for price list. W. F. KAY, Ravensdale Stock Farm, G.T.R. STAMMAD, PHILLIPSBURG, QUEBEC

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Winners in the show ring and dairy tests. Animals of both sexes, imported or Canadian bred, for sale.
Long distance 'phone in house.
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For sale—High-Class Ayrshires, all ages, including Calves and Bulls fit for service. First prize Yorkshire Pigs, all ages, send in your order now for pigs to be shipped in March, April and May; prices, 85c each. Reduced in name of purchaser. Apply to
HON. W. OWENS, or ROBERT SWINTON, Proprietor, Manager, River Side Farm, Montebello, Que.

Ayrshires
World's Champion herd for milk and production. Some young bulls and bull calves, all from R.O.P. cows, for sale. A grand old sire of Tangleyville in the lot. Address
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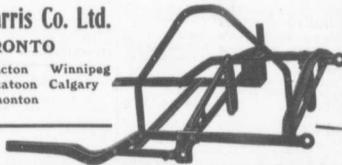
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My chickens had Cholera until some of their combs were turning black.

After using a few feeds of "International Poultry Food," I never lost another fowl, and Cholera has left my premises.—J. F. HARRIS.

Give all your chickens a daily feed of "International." It keeps them well—fattens up the broilers—makes hens lay all the year round—keeps the cocks vigorous—and insures raising the little chicks. If you want to make money out of your fowls, feed "International Poultry Food."

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SOILS, Etc., Etc.

Figure yourself what Clearing your  
Farm is costing now or what you are  
losing in crops through not clearing

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