

# FARM AND DAIRY & RURAL HOME



DEVOTE TO  
**BETTER FARMING**  
AND CANAL  
COUNTRY LIFE

Asst. Chairman Jan 1918  
Comm. of Conservation



Toronto, Ont., March 21, 1918



THE NOONDAY "SNACK."

**Cooperative Trading Operation: by Farmers**

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**The Best Forage Crop**

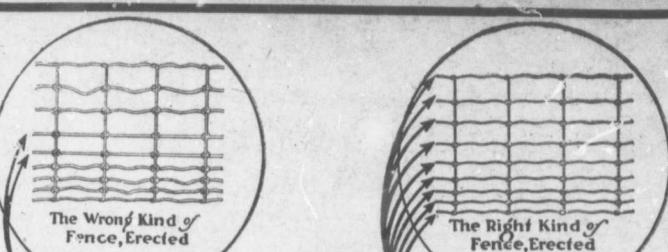
Is it Alfalfa? Page 5.

**The Farm Management Survey in Caledon**

A Comprehensive Survey of Results (Page 4).

**The Grain Ration of a Dry Cow**

R. M. Holtby Believes in Heavy Feeding (Page 5).



## SNAP! The SAFE- Always Uniform Fence

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30 cents for large hens  
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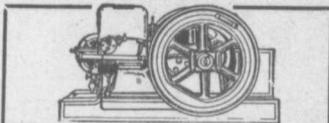
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All kinds of RAW  
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Canfield, Ontario

Three No. 1 Skunk



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a thrifty, paying investment. You can set it to any job and it never kicks. It is always ready to pump water for your stock, hoist grain to the mow, run the ensilage cutter, fill the silo, and many other chores that come in a day's work on a farm.

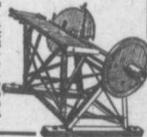
With a governor pulley on it and it will work your wife's washer, turn the churn, and run the separator. Page Engines are built in two types and five sizes. One type burns gasoline and another burns kerosene. The sizes range from 1 1/2 H.P. to 7 H.P. Every Page Engine furnishes the greatest power for the amount of fuel consumed.

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When Writing Mention Farm and Dairy

### Cooperative Wool Sale Notes

**G**REAT interest is being taken by the wool growers of Quebec in the new Canadian Cooperative Wool Growers, Ltd. At present there are 14 local associations which will collect wool, and it is hoped to form 10 more this spring. The wool will be centralized this year at Sherbrooke and Montreal and sold, if possible, from there. There exists in Quebec a General Produce Cooperative Society which has decided to assist the new organization in collecting and storing the wool clip this year. The local Associations are expecting to subscribe for about \$20,000 of the stock of the central organization at Toronto. Sheep raisers in the Maritime Provinces are lending all their support to the "Wool Growers, Ltd." New collecting points and associations are being instituted and a vigorous campaign for the cooperative selling of wool is being conducted by the Provincial Government officials. The amount of wool for cooperative sales will be increased about 50 per cent this year. The Ontario clip is to be again collected at the Winter Fair Building, Guelph, where free warehouse space is available, and by which means still greater returns may be made to the wool growers. Collecting dates will be from June 1st to July 15th, 1918. Parties desiring to market their wool either before or after these dates may do so by shipping same to the warehouse of the Canadian Cooperative Wool Growers, Ltd., at 128 Simcoe St., Toronto, Ont., where it will be graded and sold for the highest market price.

Wool shipped to Guelph, Ont., for cooperative sale will be acknowledged immediately by mail, and within three or four days' time a cheque will be mailed to the wool grower. This cheque will cover 75 per cent of the appraised value of the wool, the remainder to be mailed immediately after the sale of the wool, so by this means every farmer should receive the greater percentage of the true value of his clip immediately after consigning his wool. For all the Provincial Wool Growers' Associations in Canada the new Canadian Cooperative Wool Growers, Ltd., will act as the selling agency.

### Why Color Cheese?

**I**T seems quite probable that as a result of the experience of the past season the making of colored cheese may be discontinued entirely. With the uniform prices for both kinds there was certainly no inducement to make colored, although the Cheese Commission was glad to get what was offered. According to our records there were 264,624 boxes of colored cheese as against 1,511,713 of white. I am rather surprised that there were so many.

The war has interfered with the supply of caustic potash, which is used as the solvent in the best brands of cheese coloring. Caustic potash in pre-war times came from Germany. It is quite possible that some other source may be discovered, if not already, but lacking caustic potash it is necessary to use caustic soda, which is inferior. As I understand it, cheese coloring made with soda is only about half the strength of that which is made with potash.

While the authorities in England have been asking for a larger proportion of colored cheese, I have not heard any very serious complaint, and if the coloring of cheese were done away with entirely, I do not think there would be any permanent bad effect on the cheese industry. The present situation seems to afford an opportunity of discarding the coloring, been in reality a useless practice.—J. A. Ruddick, Dairy Commissioner.

If you are not doing well as a dairy farmer, find out if there is something wrong with the "man behind the cows."

Trade

VOL. XX

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We Welcome Practical Progressive Ideas.

# NATURAL HOME

The Recognized Exponent of Dairying in Canada

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

VOL. XXXVII

TORONTO, ONT., MARCH 21, 1918

No. 12

## Cooperative Trading Operations by Farmers

C. Rice-Jones, First Vice-President United Grain Growers Ltd.

THERE were many reasons why it became necessary for the farmers to develop their co-operative trading operations. Broadly speaking, the main reason was that the cost of their supplies, in comparison with what they received for their products, was so great that the business of farming was not profitable under normal conditions. Before the organization of the farmers' companies the farmer was in the unique and unenviable position of having to pay whatever price he was asked for what he purchased, and to sell his products at whatever price he was offered by the dealers.

Going more into detail, and speaking from the point of view of the farmer on the land, I would submit the following as some of the conditions which forced the farmers into cooperative trading:

- (1) The multiplicity of local stores in the small towns, the situation being that on the average there were two or three stores in many towns in the towns and villages as the tributary country was able to carry.
- (2) A large number of the country merchants were men who had gone into the business with no previous experience, and who had not the slightest conception of conducting their stores economically and efficiently, with the result that for the storekeepers in the country towns to make a profit on their comparatively small stores, they were forced to charge prices which were altogether out of line.
- (3) Even when the merchant would find himself without competition and a volume of business from the tributary country which was sufficiently large to enable the goods to be sold on a fair margin of profit, still in many instances he would not be satisfied with this, but would take advantage of the lack of competition to charge prices which were absolutely unreasonable and unjust.
- (4) The pernicious system, which in the past existed in practically every country town, whereby the man who was willing to pay cash was compelled to pay the same price for goods as the man who was buying on credit. In a large number of instances the customer buying on credit not even having to pay interest, the loss in bad debts owing to the foolish methods of giving credit resulting in still further increase in price to the cash purchaser. This method resulted in far more credit being asked for than would have been the case had the costliness of the credit system been made plain by a difference between cash and credit prices.
- (5) The credit system further necessitated the country merchant buying largely on credit, with the result that the wholesaler again had to increase his price to take care of bad debts and the extra risk incurred. This, in my opinion, resulted in some wholesalers again having to ask the manufacturer for credit. Again, in many instances, the manufacturer, owing to such unfavorable business conditions, was no doubt handicapped in purchasing his raw material to advantage, and as a result of the increase in price of the goods do we find an increase in price as a result of unsatisfactory business methods, which finally resulted upon the farmer.

Out of this system the argument has arisen that the country merchants are necessary in order to take the farmers through hard times. I do not agree with this; in my opinion, as a condition being largely the result of a faulty system of commercial trading. The country merchants are not in the banking business, and should not have to carry the farmers when crop failures occur. Credit is a national necessity in the development of a new country, but with a proper and efficient handling of local stores, and a reasonable inducement to pay cash for goods, a conceivable percentage of the credit would not have been necessary, and the necessary credits could then well be taken care of by the banks.

It has been a generally accepted maxim amongst a large number of business men that the farmer

should pay the price. No matter how expensive and wasteful the methods of handling were, their idea was that this expense could legitimately be added to the sale price to the farmer. As long as the farmer would pay, no organized attempt was made by the business interests to consider ways and means of improving the methods of merchandizing, and so decreasing the cost of handling.

Since the farmers' organizations have entered the field, we have numerous bodies of business men who are studying these economic questions. We are very pleased to note this, and feel satisfied that these investigations by the business organizations, provided they are conducted with a view to the benefit of the country at large and not an individual section, will result in great good.

The effect of the trading operations of the farmers' Companies has no doubt in some instances resulted in the forcing out of business of retail storekeepers. While this is regrettable from a personal standpoint, it is something which is the unavoidable result of correcting a false system. We have no wish to injure anyone, but as always national interest must be the first consideration. If we admit that agriculture is the basic industry of the country, then we have to admit that it is in the national interest that its most legitimate method of trading that will result in making the agricultural profession more profitable are in the interests of the country. The force all retail storekeepers out of business, and that there will be no retail stores in the country towns and villages, is not warranted. There will always be an absolute need for country storekeepers, provided they are prepared to do business on a legitimate basis, and that two or more do not try to make a living for themselves and their families where there is only room for one.

One of the main arguments used by the wholesaler and retailers against the small order business, that of keeping money at home, is an argument in support of our system. How better can this be followed out than by the farmer handling commodities required on his farm, and owning any profits that may accrue?

### The Why of this Article

ON Wednesday and Thursday of last week representatives of the organized farmers of Canada, including three from Ontario, members of the Canadian Council of Agriculture, met representatives of the business interests of Western Canada in joint conference. The rapid spread of trading operations by farmers is apparently leading some of the business interests to view the situation with apprehension. At their request this matter was brought up for special discussion.

The article on this page gives the opening statement of the case that was prepared in advance by Mr. Rice-Jones, of Calgary, for the farmers. A carefully worded and lengthy reply to it had been prepared and ready before the conference by Mr. H. H. Pigott, of Winnipeg, on behalf of the business interests. Through lack of space this is omitted from the issue, but will appear in full next week. These two statements formed the basis of the discussion. A report of its outcome will be published next week. As this is becoming a live issue in parts of Ontario or Eastern farmers may well follow it with interest. The honors in the discussion in regard rested distinctly on the side of the farmers.

We might here mention that we do not consider the bitter opposition evinced by certain business interests to the trading operations of our farmers' organizations is in the interests of the country, either directly or indirectly. As a matter of fact, these interests are in fact, the farmers' organizations are forbidden to freeze out of trade. This and the boycotting, in some instances, of those dealing with us will not stand publicly. The boycotting of farmers' trading organizations by certain manufacturers and wholesalers or refusing to sell them goods, if continued, will only result in the farmers manufacturing these goods themselves. Rather let us examine various methods of trading, and find out which method or methods are in the best interests of the country as a whole. In the final analysis it will be a case of the survival of the system which proves the most efficient and economical.

Nothing has justified the farmers' methods of trading more than the lessons taught by the war. We see where in Great Britain the Government itself must find it necessary to purchase the raw materials for practically all factories in order to eliminate the excessive cost, waste and duplication of individual buying by manufacturers. We have the Government supervising the manufacture and checking the price, allowing a reasonable profit on the manufacture of the goods; in fact, co-ordinating the war effort, and distribution of supplies of all kinds for the Allied armies right from the purchase of raw material to the delivery of the finished product to the armies in the field. Millions of dollars have been saved to the consumer and the nation in this way by eliminating the wastefulness of the competitive system. When the war started, it was believed that by appealing to the patriotism of the individual, unreasonable profits would be done away with. This did not prove to be the case, as illustrated in both Great Britain and Canada since the war started. If individuals cannot resist the temptation of making undue profits in war time, is it reasonable to expect that they will not make all the profits possible, regardless of whether they are fair or not, in times of peace? The reorganization of trade and commerce, which is taking place in the allied countries since the war started, is a triumph for the cooperative trading system. We must admit that the reorganization has taken place in order to secure greater efficiency and economy in the feeding, clothing and equipping of the Allied armies. If this economy is good in time of war, why not in time of peace?

As to the exact form which the future trading activities will take, this is something which no one can forecast, but we believe the wholesalers and retailers, and other business interests, will all agree with us that the farmers' trading organizations are here to stay. These developments will not injure any individual or firm whose business is conducted efficiently and goods sold on a legitimate trading basis, and we do not believe that any right-thinking man will object to the elimination of parties who have only been able to stay in business by reason of exorbitant profits, rather than by the efficiency with which they handle their business. Public ownership of public facilities is being looked upon more and more favorably by business men in the cities. Cooperative trading by the farmers' organizations is merely public ownership carried to the handling of their own requirements by the farmers themselves.

Corn growers in southwestern Ontario, who find themselves this year without a supply of seed corn, will now appreciate the merit of the advice to save enough seed corn every year for the next two years' planting. Had this been done in 1916 there would have been no seed corn problem in the spring of 1918. Even 1915 corn, when properly cared for, is germinating better than lots of 1917 seed.



## The Best Forage Crop

Is Alfalfa, Says the Experimental Farm

**T**HE pressing need for increased farm production, on the one side, and the scarcity of farm labor on the other, have created a situation in Canadian agriculture that is somewhat embarrassing to the two chief parties concerned, viz.: the farmer and the consuming public.

With a serious shortage of farm labor confronting the producer, it will be difficult to increase farm production by expanding the acreage under crop. However, the need for increased production remains, and, under the circumstances, there seems to be only one way to make the best of the situation, and that is to make every acre produce more, in quantity as well as in quality, than it has produced in the past. In our opinion there is no forage crop that better answers this purpose than alfalfa. It can be grown to advantage under a diversity of soil and climatic conditions, and has, generally speaking, a wider geographical range of usefulness in Canada than any other forage crop. Alfalfa is a choice food for all kinds of farm animals and produces more economical feed per acre than does any other hay or pasture crop. It, furthermore, requires comparatively little labor. Once well established, it continues to yield heavy returns. On account of its lasting character a good deal of money and labor is saved annually, as no re-seeding is necessary for years; and for this reason, if for no other, alfalfa should command special attention just now from any farmer handicapped by scarcity of labor.

### Time to Get Established.

It may be objected, though, that just now, when an immediate increase in farm production is so urgently needed, alfalfa may not be the most commendable forage crop, in spite of all its merits, because it takes a year to get it established as a paying crop.

It is true that there is an urgent need for the greatest possible production to meet the immediate demands of Canada and the Allies, and that, therefore, every ounce of energy should be mobilized to relieve the situation as quickly as possible. But Canada will be called upon to produce record crops, not only this year, but for many years to come, with peace or no peace. The mere ending of the war will not bring about a relaxation of the efforts in farm production. On the contrary, with the return of peace, the necessity of making the utmost out of the soil will likely be felt more keenly than ever before. In view of this it would seem to be a good policy to prepare for the future now, and, as far as forage crops are concerned, special attention should be paid to alfalfa because that, better than any other, is likely to fill the bill as the crop of the future.

## How About Threshing Gangs?

Some Neighbors' Opinions—By L. K. Shaw

**W**HEN I was in town last Saturday our District Representative asked me what I thought of threshing gangs to do the threshing in the Province of Ontario next fall. I replied that I needed more light on the subject, so he outlined the proposition. It seems that Dr. Creelman has suggested that threshers carry a gang of men with them who shall stay with the outfit all through the threshing season, and do the rest of the work.

This outfit may consist of four or five men to handle the work in the mow, or a full gang may be carried to do all the work with the farmer around to look after the grain. Sleeping accommodation for the men will be provided in a bunk house on wheels that goes along with the outfit. The farmer will be expected to feed the men. I asked about the cost of the outfit, and our representative said he thought it would be about five cents a bushel for oats and six cent a bushel for wheat where a mow gang only was carried. When he had

explained the whole system our representative asked me to talk it over with the neighbors and find out what they thought.

My chance came that very evening at the Farmers' Club. Four of us happened to be sitting in the corner behind the stove before the meeting started, and I outlined to them the scheme for threshing gangs. At first it was enthusiastically received. Immediately all three had visions of more time for fall plowing and other necessary fall work. One of them remarked that last fall he put in one and one-half weeks altogether returning threshing help, while another had put in almost two weeks, and the third over a week. "But what will be the price?" was the next question. I said that the District Representative had mentioned five and six cents where only a mow gang was carried.

"Well," figured one neighbor, "they should thresh at least 1,200 bushels of grain a day. At five cents a bushel that means \$60. Seems high to me. We pay \$20 a day now for the machine. The five extra men at three dollars a day would amount to \$15. That is only \$35 altogether. Where does the extra \$25 come in?"

"And even if we did not have to return all of our labor we would still have to go out three or four days in return for stack men," remarked another neighbor. "I don't see where we could help but lose, unless that \$25 can be accounted for."

We talked the subject over a good deal after that. We wondered just what some of our local threshers would think of the proposition. We wondered how one or two of them would manage to finance such a scheme. In general, however we were hopeful that the plan could be worked out. We would all like to hear the experience of farmers in Lambton county where our representative said there were four such gangs working last season.

## More and Better Wool

Care of the Flock Influences Clip

**F**EW farmers realize that the weight of wool from a poorly wintered flock is not as large as the weight of wool from the same flock would be if properly cared for. Experiments show that with proper feeding and management the weight of the fleeces may be increased by one pound and that with growing stock even better results may be obtained. Good care not only increases the weight of the fleece, but it improves the quality of the fibres, thus raising the market value of each pound of wool produced, and with dollar wool in sight flock owners cannot afford to overlook factors that increase weight and improve quality.

Feeding is one of the big factors affecting wool growth and quality. Sheep require a ration that will supply all body requirements and at the same time



A Fleece Properly Prepared for Rolling.

provide sufficient material for wool growth. Wool growth requires that considerable quantities of protein be supplied, and on this account rations for sheep should never be too low in protein. Timothy hay, on account of its high fibre and low protein content, is a poor feed for sheep. Clover and alfalfa hay supply almost a balanced ration for sheep, especially if a succulent feed in the form of roots or silage is added. When clover and alfalfa are not available the protein content should be made up by adding a feed that is rich in protein.

Exercise is important in that it ensures good health. It stimulates the appetite and improves circulation. Feeds are better utilized and improves digestible constituents are distributed to better advantage throughout the body. Sheep are naturally active animals and close confinement and lack of exercise at once affects their general health, and unless the flock is maintained in good health the growth of wool is less vigorous.

### Buildings for Sheep.

Buildings for sheep may be too warm, too damp or draughty, all of which should be avoided. Warm buildings cause the sheep to perspire unduly, a condition which affects wool properties. Damp or draughty buildings are likely to cause disease in the flock. Sheep should be housed in cool, dry, well-ventilated buildings, and where properly housed wool properties which are affected by physical conditions are retained.

Proper equipment has much to do with wool quality and weight of fleece. Any equipment which does not ensure a clean fleece is decidedly inferior. Carelessness in feeding may also result in depreciation of fleece. Seedy and chaffy wool is usually the result of poor equipment or carelessness in feeding. Seeds and chaff in the fleece absorb the wool grease and often obstruct the secretion towards the outside of the fibres.

Such wool can be considered nothing more or less than rejection wool, and is much less valuable than wool which retains its natural yoke together with the other handling qualities which ensure strength of fibre. The practice of throwing feed from a loft or of carrying forkfuls of hay through the yard with the sheep about is sure to result in the introduction of more or less chaff into the fleece. Sheep should always be penned off while feed is being thrown out or placed in the racks, or better still if chutes can be built direct from the loft to the racks, greater convenience is provided.

—A. A. McMillan, Macdonald College, in the Journal of Agriculture.



The Tractor's Strongest Competitor is a real, good Four-Horse Team—and a Double Disc Harrow will do good work with either Power.

Both in East and West the tractor is conceded as an excellent power in plowing, discing and on the belt. It is still a disputed point, however, as to its adaptability for handling the seeders and the binders.

## Farm Opinion of Crop Prospects

THE amount of plowing accomplished last fall will be an important factor in determining crop prospects for the next year. Following is the "evidence of several representative farmers as told to editors of Farm and Dairy in conversation recently:

"There is not as much fall wheat as usual in our county, but I believe more than in the previous year. More fall plowing was done than in 1912 and prospects are for a good acreage of spring grains. Things on the whole are better than they were a year ago."—A. S. Stevenson, Wentworth Co., Ont.

"I do not believe that farmers in our section of Oxford county got half of their fall plowing done and had it not been for the last fine 10 days lots of farmers would have had no plowing done. Even as it is, there are a few who have not a furrow plowed."—A. E. Hulet, Oxford Co., Ont.

"There is not as much fall wheat sown as usual. I myself expected to put in 24 acres, but seeded only 14.

When I tried to plow the other 10 acres it was so dry I couldn't get a plow into it. Fall plowing, however, was well done and a good area is ready for next year's crop. There was lots of time to plow, as we had little corn to handle owing to the failure of that crop."—Victor Begg, Elgin Co., Ont.

"The fall closed with the work pretty well done. An odd one didn't get their plowing finished but the most of us were through when the ground froze, the late, open weather helping us. Fall wheat, however, is down in acreage and went into the winter with little top."—Frank Webster, Victoria Co., Ont.

"Fall wheat, owing to dry weather, was seeded late and further dry weather prevented it coming up. The top is weak and unless we have an exceptionally good spring there won't be very much fall wheat. We got the government tractor to plow 30 acres and this helped us out greatly. Taking the district as a whole, fall work is not up to the average. Formerly we used to plow twice and disk to stop the weeds. None of this fall

cultivation was given this year. I do not know of a farm in the township of Brock or Mariposa that is as well cultivated as it was four years ago and yet farmers are working harder than they ever did before. Eight people, including my daughter, have gone overseas from my farm."—Henry Glendinning, Ontario Co., Ont.

## Cooperative Associations in P. E. I.

THE Co-operative Egg Circles Association of P. E. Island, held its annual meeting at Charlottetown recently. The president of this thriving Association is no less than a Catholic priest, Rev. Father Arsenault, of Mount Carmel, in Prince County. This association appears to be the "holiest Roman among them all," and to be in a high state of efficiency and upward in the forward movement. The price of eggs to patrons, last year, netted them 35c a dozen. This was considered a splendid price. This association is now incorporated, and its executive and members can transact a banking business. The

Bank of Montreal financed the institution last year to mutual advantage of all concerned. The membership fee was raised to 25c. The greatest good done by this association, not only this year, but since its beginning, was to raise the general price of eggs in the Province. Not only did it do great good to its own corporate members, but to everybody who had eggs to sell. People, therefore, who are not members reap the benefit of the good work of this association, and should speak a good word for it, though they be not members.

The Co-operative Wool Association is another association that works both directly and indirectly to the good of members and non-members. It is pleasing to note that this association had a prosperous year and is growing better as well as larger and stronger. Cooperation is the life. Farmers are hindmost in cooperation. Let us all encourage cooperation. Like mercy, it helps all around, except the middleman, that parasite who absorbs the 65c of the farmer's dollar, the farmer getting but 35c of the \$1 he produces.—J. A. M.



**T**HERE are four important things that should be considered by every person when buying fencing this season.

- 1st—The reputation of the manufacturer.
- 2nd—The quality of his product.
- 3rd—The value.
- 4th—The length of service.

The higher the manufacturer's reputation the more jealously he guards against anything that would tend to injure it. A manufacturer with a continent-wide reputation for integrity, square dealing and the honest quality of his products, such as has been attained by the Frost Steel and Wire Company, is always eager to maintain his position as the leader in his line. The Frost reputation and leadership insures a safe fence investment to the buyer.

No other fence-maker in Canada or any other country puts more downright quality into his fence than the Frost Steel and Wire Company. Frost Fence is not made of ordinary commercial wire. We buy the raw material and draw it

into Frost Full Gauge No. 9 Hard Steel Wire. We put that elastic "give-and-take" into it that has made Frost Woven Fence famous for the strains it will bear. We also put that coat of pure zinc spelter on the wire that makes Frost galvanizing stand the Canadian weather as no other fence has ever been able to do.

Frost Fence has always been sold at a price that is eminently fair considering its superior quality. Frost Fence could be sold for less money if we used ordinary commercial wire and ordinary fence locks, and rushed it through the factory instead of weaving it slowly on our special machines, so that every stay stands up straight and true and the spacing between wires is always absolutely accurate. Every dollar invested in Frost Fence is a dollar wisely invested—one that buys years of service.

Many thousands of Frost Woven Fences have been erected in Canada. If you could see a Frost Woven Fence that has been doing service for several years and note how little it has been affected by the stress of weather and the strains of leaning cattle, you would have conclusive proof of the enduring quality that the name "Frost" stands for. Write and ask us for dealer's name and a copy of our fence catalogue showing styles for every farm fencing purpose, including ornamental fence and gates.

A style for every purpose.

**Frost Steel and Wire Company, Limited, Hamilton, Canada**

## The Farm

(Continued)

means an additional income—or if we make a profit with both crop average with and the group with the stock increased, the \$460, or 33 crops the same increased, the \$539, or \$4.65 chusion is the area surplus opportunity for come less in the live stock.

To What Extent

Fees	
Average cost per	
Receipts per L.	
No. farms . . . . .	
Average size	
Labor income	
Labor income per	

This table and well-known law degree of production, a higher degree without low. The cost of the than the sale price feed which may be of course, depends the stock. Write don Township fifty dollars we feel probably the receipts per



When you buy RAV John



**The Farm Management Survey**  
(Continued from page 4.)

means an addition of \$533 to the labor income—or \$5.95 per acre. Otherwise, if we make a comparison of the group with both crops and stock below the average with the group underneath and the group to the right, we see that with the stock the same and crops increased, the raise in labor income is \$460, or \$3 per acre, whereas with crops the same and stock returns increased, the raise in labor income is \$539, or \$4.65 per acre. Thus, the conclusion is necessarily reached that in the area surveyed, the greatest opportunity for raising the labor income lies in increasing the quality of the live stock.

**To What Extent Does Good Feeding Pay?**  
Table 3.

Feed fed, per L.S.U.	Under \$70				
	Under \$43	\$43-50	\$50-60	\$60-70	Over \$70
Average cost per L.S.U.	\$36.46	\$45.90	\$54.21	\$63.74	\$82.62
Receipts per L.S.U.	\$7.31	70.54	78.74	77.09	78.41
No. farms	16	14	19	77.09	78.41
Average size	108	129	129	116	96
Labor income per acre	9.1	13.4	11.6	9.7	7.5

This table adds further proof to the well-known law that after a certain degree of production has been reached, a higher degree cannot be attained without lowering the net profits. The cost of the final returns is more than the sale price. The amount of feed which may be fed profitably will, of course, depend upon the quality of the stock. With the average of Caledon Township stock, approximately fifty dollars' worth of feed may be fed profitably. It will be seen that the receipts per live stock unit in the

last three groups are practically the same. The increase in feed did not increase the returns. Hence, the profit was lowered, with the direct effect of lowering the labor income. In the group which was fed most heavily, each live stock unit yielded a loss of \$4.21 on feed alone. The labor expended on this stock was also lost. As the average size of farm varies somewhat in the different groups here also, the "Labor Income per Acre" has been calculated. It is highest in the second group, where the average feed consumed amounted to \$45.90 per live stock unit.

**Summary.**  
Briefly then, the findings of the survey thus far may be summed up as:—

1. The size of the business on the small farm engaged in general mixed farming, is too small to pay all ex-

penses and leave more than a very small labor income for the operator.  
2. High profit from live stock have a greater influence on the labor income than have high crop yields.  
3. The quality of the live stock determines the amount of feed which may be fed profitably. Heavy feedings to stock of low quality means a loss rather than a gain. In order that the crops grown may be fed upon the farm to keep up the soil fertility, and at the same time yield a profit, the quality of the stock on a great many farms must be increased.



**"METALLIC" stops Fire Losses**

and sound business sense demands fullest fire protection for high value crops, stock and implements

There is no economy in saving a few dollars and losing thousands. Fires cost Ontario Farmers \$943,000.00 last year. "Metallic" would have saved three quarters of this. Do your bit—help cut down the loss—ROOF RIGHT!

"Metallic" is not as expensive as you may think. Do not simply compare prices per square. Compare costs laid on the roof. "Metallic" saves lumber and labor, and it will last the big difference in life-time—"Metallic" outlasts three ordinary roofs. It costs very little more at first, and is far cheaper in the end. Give us your real measurements, and the farmer who has just been burnt out is always our readiest customer for "Metallic".

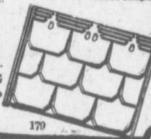
"Empire" Corrugated Iron

Do not wait till you get burnt out. If you have any building or repairing to do get our folders and prices to-day on

"Eastlake" Metallic Shingles

"Eastlake" Metallic Shingles.  
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Prompt shipment. Quality first goods.  
**THE METALLIC ROOFING**  
Co. Limited, Manufacturers, Toronto  
Ventilators, Eavesdroppers, Hop and Stock Troughs, etc., etc.



Farm and Dairy stands foursquare against everything that is detrimental to the farmers' interests, and whatever appears in its columns, either advertising or editorial, is guaranteed reliable.

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skins will bring much higher prices than ever known—get busy and trap all you can.  
You will receive the highest prices if you ship direct to us. Money talks that is why we do the largest cash Raw Fur business in Canada.  
**FREE**—Hallam's Trappers' Guide—50 pages tells how, when and where to trap. Hallam's Trappers' Supply Catalog, 24 pages, also Hallam's Raw Fur News, giving latest fur prices and reports. All free to Write to us.

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Pulling a "load weight" load means that a hame will move a load several times over its rated strength. Dreadnaught two-piece double strength steel hames have a pulling capacity 35% greater than any other hames.

**Strongest Construction—Will Not Break**

Overlapping parts reinforce points of greatest strain. Draft studs forged steel, rings electrically fused. Rigidity inspected and mechanically perfect in every detail.

Write for descriptive folder. Dealers write for our proposition and selling helps.

No. 3300  
Dreadnaught, double strength steel hame. Tested strength 10,000 lbs. is equivalent to pulling a load of over 30,000 lbs.

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Insist on "Bob Long" brand. Ask your dealer for Big 11—the big grey overalls—the cloth with the test.

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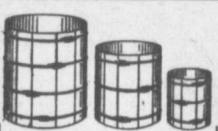
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## The 225 Pound Hog is Popular

Why Packers Discriminate Against Heavies

SINCE farmers have been informed of the world's scarcity of fats and have been asked to help relieve the shortage through the production of more pork, there has been considerable questioning in regard to the packers' standard for weights of hogs. The weight limit for select hogs throughout Canada is pretty generally 250 lbs. and in the minds of many swine producers the supply of fats would be increased were this standard raised.

At a recent meeting held by the Dominion Live Stock Commissioner in connection with the new Live Stock Act, at which meeting were gathered certain producers, commission men and packers, this subject came up for discussion. While the packers' standards do not come within the jurisdiction of the act, it was felt that such an opportunity for the discussion of this problem might not often present itself.

One of the delegates gave his opinion as to why the 200-lb. limit be raised from 250 to a 300-lb. limit before hogs were docked in price. He stated that after a hog reaches 250 lbs. it takes comparatively little feed to bring it up to 300 lbs. He thought that if any type of hogs was to be docked in price, it should be the very light hogs, and he pointed out the loss from marketing hogs under 150 lbs.

E. C. Fox, general manager of the Wm. Davies Company, upheld the position of Canadian packers in discriminating against heavy hogs. "Heavy hogs," said Mr. Fox, "were all right when Canada was largely engaged in lumbering and railway construction, when we had a demand for fat pork. The hog market of to-day, however, does not cater to such a trade, but rather to the British market for Wilshire sides, and for this purpose fat hogs cannot be used. The British Commission which purchases bacon through its New York house, pays a select price for Wilshire sides, weighing 60 to 75 lbs. A 250-lb. hog makes an 80-lb. side, and packers are heavily penalized by the buying commission for fat sides running over 75 lbs.

"I see no early hope of a lowering of standards for select hogs," continued Mr. Fox. "We must take the long view in this matter. Just now we might be able to market a few heavy hogs because other countries are buying besides Britain. Canada has, however, built up a bacon type, and our export prices have gradually been built up correspondingly higher than that paid to United States shippers, because of our bacon reputation. Shall we allow a temporary market condition to break up the reputation we have already achieved for Wilshire sides? In my opinion 250 lbs. is the limit for select hogs."

Dr. J. G. Rutherford, of Calgary, stated that Alberta is probably the hardest hit by the market maximum. Many of the swine breeders of Alberta are Americans, and have brought with them Duro-Jerseys and other breeds of hogs of the fat type. On all the C. F. R. farms, however, Berkshires are bred. Dr. Rutherford believed that it would be a good move if Western packers would offer a bonus for hogs of the bacon type over the heavy American breeds.

Mr. O. W. Waller, general manager of the Swift Canadian Packing Company, stated that the number of hogs marketed in Canada, over 250 lbs. is very small. He pointed out that customs change in the market for meat animals. "The 250-lb. hog," said Mr. Waller, "is out of style to-day. Even the American market is demanding a light hog now. Chicago is now paying select prices for hogs that come within the limits of 180 and 225 lbs. A big evolution is taking place in this regard throughout the United States. It is from such light hogs that the breakfast bacon which we get on our markets is made, not from the

250-lb. hog, I believe," concluded Mr. Waller. "If Canadian farmers should market no hogs weighing less than 170 lbs. and none weighing more than 225 lbs., except stags, old brood sows, etc."

## Farm Management

Arthur Peas

THIS variety stands to-day among field peas as the earliest in commerce that will give profitable yields. There are earlier field varieties and very early varieties among the garden sorts, but they will not return, when grown for general purposes, a commensurate profit on the labor expended. It has held true, as it does in practically all classes of grain, that the advance has been made at a slight sacrifice in yield, but as the Arthur matures some three to ten days in advance of the Golden Vine and Prussian Blue varieties, depending entirely on the district, this slight loss is a negligible factor in the parts of Canada where, if the Arthur variety were not grown, it would be practically impossible to grow peas with either satisfaction or profit.

This variety serves its best purpose in the northern districts, within the fifty-first and fifty-fourth parallels in Western Canada and all the northern districts of the prairie provinces extending up to the fifty-first parallel. Small districts lying within the defined territories, subject to both late spring and early fall frosts, may find the Arthur variety too late for their peculiar conditions. It must not be assumed that this variety is only suitable where its early maturity offsets its slightly lower yield. In the eastern provinces, in many cases, it yields equally well with the Golden Vine and Prussian Blue varieties and, on account of its superior color and quality, frequently commands a higher price on the markets. The Golden Vine and Prussian Blue varieties are, however, old standard sorts which give high yields, and wherever the grower has had success with either of these, undisturbed by the problem of maturity, we would not recommend him to change for the Arthur. In the extreme southern parts of Alberta and Saskatchewan, we would recommend these varieties in preference to the earlier sort—Experimental Farms Note.

## Have the Seed Tested

It has been estimated that if first class seed were sown on all farms the crop of the country would be increased by fifty per cent. This cannot be verified definitely, but the annual loss caused by the use of seed other than the best is beyond all doubt surprisingly great.

The present situation, with the world scarcity of cereals and the shortage of farm labor, urgently demands that the best possible selection be made from our 1917 grain crop for seed. This will bring about a great increase in production with a minimum increase in labor requirements. The proper procedure is for each individual farmer to make sure now, that he has pure seed of strong vitality for his spring sowing.

The energy and vitality of seed can be ascertained only by germination test. Mere inspection is untrustworthy. Grain of very good weight and excellent appearance is frequently found to have a considerable part killed outright. The rest so weakened that the young plants are started with too little energy to withstand bad weather, or give a high yield. A poor crop is often said to have been the result of adverse conditions when if strong seed had been

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## Perfect Maple Evaporator

Simple to operate, made of first quality material. Price so moderate that anyone can buy.

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Our Big new Catalogue For 40 years we have produced seeds of highest quality. Thousands of testimonials attest this fact. Come see our seed packages. High yielding varieties, tested seed pure for the reliable seed.

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TESTED SEEDS

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Stationary, Mounted, Traction

These engines are the perfected product of years of study and experimentation with Internal Combustion Engines, and are a demonstrated success on thousands of farms throughout Canada. Get one this season and let it replace your hired man. It's a glutton for work and its running cost is little, as it runs on coal oil or naphtha.

We also manufacture a full line of WINDMILLS, Grain Drills, Saw Frames, Pumps, Tanks, Water Boxes, Concrete Mixers, etc. Catalogue of any line mailed on request.

**GOLD, SHAPLEY & MUIR CO., LTD.**  
Brantford, Winnipeg, Regina, Calgary.

Tests may be done free number for of Laboratory, in seeds are sown or cans of soil place. For all taken to be/representative of sent to the should be enclosed envelopes or more than one sent, each in distinct shing four ounces of the germination should be addressed to the Commissioner, Department of Agriculture, Ottawa. They mail is not of weight.

## Cooperative Era

THIS experim conducted years. The obj have carried on farm experime of weeds, be furnish data information may the best method various troubles Province. Better experiments be there was very knowledge conce of weeds.

The weeds ex Personal Sow T Bladder Champion Mustard, Ox-eye weed or Wild Oats and Chess.

Each spring leg numerous farmer vittals will who troublesome weed cooperate with the experime particular weed rans, and experime acco To those who fill out, then detailed dir ing out of the exper sent, a re with blank forms the results of the

In the past six sixty farmers have work and success has been obtained as fol

1. That good by rape sowing means eradication sow thistle and tw
2. That rape crows to use in twice as fast
3. That thorough in the fall and well cared for hoe bladder campion.
4. That mustard from seeding in oas ley by spraying w solution of iron sul

The following a outlined for this y

1. The use of rat for eradicating so
2. A system of and cultivation, usi lowed by turnips, re for eradicating per
3. The use of rape of twi grass.
4. A method of destruction of twite
5. Method of cul eradication of bladd
6. Spraying with destroy mustard in
7. A method of destruction of ox-eye

sown a satisfactory yield would have been secured.

Tests may be made at home, or will be done free of charge, up to 25 in number for one person, at the Seed Laboratory, Ottawa. For home tests seeds are counted and sown in boxes or cans of soil, and kept in a "warm place. For all tests, care should be taken to have them thoroughly representative of the bulk lot. When sent to the Seed Laboratory samples should be enclosed in strong manilla envelopes or cotton bags, and where more than one of a certain kind is sent, each should be marked with a distinguishing number. From two to four ounces of grain is sufficient for the germination test. Samples should be addressed to the Seed Commissioner, Department of Agriculture, Ottawa. They are charged free in the mails if not exceeding 12 ounces in weight.

**Cooperative Experiments in Weed Eradication**

**T**HIS experimental work was commenced in 1912 and has been conducted now for six successive years. The object of this work is to have carried on by men on their own farms experiments in the eradication of weeds, the results of which will furnish data from which detailed information may be obtained regarding the best methods of controlling the various troublesome weeds of the Province. Before the results of these experiments began to accumulate there was very little or no definite knowledge concerning the eradication of weeds.

The weeds experimented with are Perennial Sow Thistle, Twitch Grass, Bladder Campion or Cow Bell, Wild Mustard, Ox-eye Daisy, Field Bindweed or Wild Morning Glory, Wild Oats and Chess.

Each spring leaflets are sent out to numerous farmers of the Province inviting all who have any of these troublesome weeds on their farms to cooperate with us in this work and try the experiment outlined for the particular weed which is giving them trouble. Application forms for the experiments accompany the leaflets. To those who fill in these and return them detailed directions for the carrying out of the experiment selected are sent, and in the fall they are supplied with blank forms on which to report the results of their work.

In the past six years (1912-17) over sixty farmers have cooperated in this work and some valuable information has been obtained. It may be briefly summarized as follows:

1. That good cultivation followed by rape sown in drills provides a means of eradicating both perennial sow thistle and twitch grass.
2. That rape is a more satisfactory crop to use in the destruction of twitch grass than buckwheat.
3. That thorough, deep cultivation in the fall and spring followed by a well cared for hoed crop will destroy bladder campion.
4. That mustard may be prevented from seeding in oats, wheat and barley by spraying with a 20 per cent. solution of iron sulphate without serious injury to the standing crop or to fresh seedlings of clover.

The following are the experiments outlined for this year:

1. The use of rape in the destruction of perennial sow thistle.
2. A system of intensive cropping and cultivation, using winter rye followed by turnips, rape or buckwheat for eradicating perennial sow thistle.
3. The use of rape in the destruction of twitch grass.
4. A method of cultivation for the destruction of twitch grass.
5. Method of cultivation for the eradication of bladder campion or cow bell.
6. Spraying with iron sulphate to destroy mustard in cereal crops.
7. A method of cultivation for the destruction of ox-eye daisy.

8. A method of cultivation and cropping for the suppression of field bindweed or wild morning glory (requires two years to complete).

9. A method of cultivation and cropping for the eradication of wild oats (requires two years to complete).

10. A method of cultivation for the destruction of chess.

All who have any of these weeds on their farm are invited to join with us in this work. By so doing they should be able to clean the field of the weed experimented with and demonstrate to their own satisfaction the effectiveness of the method tried and at the same time their results will be of great value to others. Full information can be obtained concerning these experiments by writing to

the Director of Cooperative Weed Experiments, Ontario Agricultural College, G. elph.

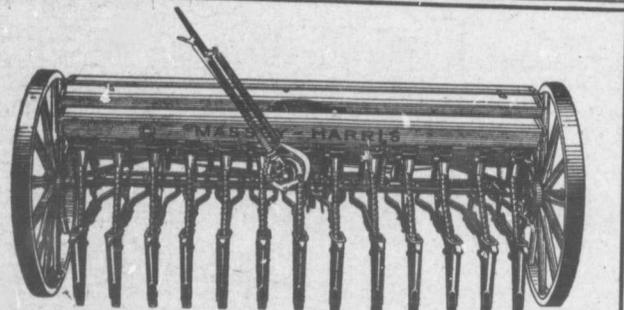
**After Effects of Sweet Clover**

**O**NE of my neighbors has been experimenting considerably with sweet clover," says Mr. Henry Glendinning of Ontario Co., Ont. "I remember particularly well one gravel hillside where he sowed down with sweet clover and got a good crop of hay. Last spring he had oats on that hillside following the sweet clover. I should have mentioned that a portion of the hillside had not been in sweet clover. You could see almost to a drill just where the sweet clover had eroded. Its after effects

were a deep green color and a luxuriant growth in the oats that was lacking on the rest of the hillside."

Mr. Glendinning is well known as a strong advocate of alfalfa, of which he had 90 acres on his 300 acre farm in 1917. "I asked my neighbor," said he, "how sweet clover and alfalfa compared as farm crops. He told me that anybody who could grow alfalfa need not bother his head about sweet clover."

Most kicking cows are made so during their first lactation period. Be gentle and patient with the heifers, remembering that they are going through a brand new experience which is well calculated to try their patience.



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**A** GOOD START is half the Battle—sowing your grain with a MASSEY-HARRIS DRILL is a big factor in securing a good start of grain and a bountiful harvest.

uniformly in any desired quantity and without injury to the seed. Strong Steel Frame holds all parts in proper relation to ensure free action of all.



Reliable Force-Feed Run.

Seed Time is approaching—Are YOU ready? Every day counts—delays are dangerous. Don't take chances with an inferior Drill, but get one which can be depended on to sow your grain right. Get a Drill with a reputation for Reliability under all Conditions—It's better to be Safe than Sorry.

Positive Gear Drive. Simple and easy control—one motion of a Lever lowers the Furrow Openers, applies pressure and starts the feed—the opposite motion raises the Furrow Openers and stops the feed.

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**Livingston Early Sugar**—An early white variety of large size, and grand quality; sweet as sugar.

**Stowell's Evergreen**—The standard main crop, white variety, very large and of splendid quality and flavor. Prices: each of the above,  $\frac{1}{2}$  lb. 20c;  $\frac{3}{4}$  lb. 35c; 1 lb. 65c; postpaid. By express at purchaser's expense, 1 lb. 55c; 5 lbs. \$2.40; 10 lbs. \$3.75.

FIELD: Our specialties are: Golden Bantam, Livingston, Stowell's Evergreen, Field's Sweet Corn, and the new variety, Field's Sweet Corn, and the new variety, Field's Sweet Corn.

**John A. Bruce & Co. Ltd.** HAMILTON ONTARIO  
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Timothy, Clover, Alfalfa and Other Field Seeds

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## HARDY ALFALFA SEED

### GRIMM ALFALFA SEED GROWN IN ALBERTA

The hardiest known Alfalfa. Practically no danger of winter killing with this seed. Guaranteed pure Grimm. Write for prices and samples

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If you intend planting Apple Trees or any Nursery Stock this spring, be particular as to the kind you get, and be sure they are grown right, are healthy and clean, and backed by a reliable, dependable company.

### Plant E. D. Smith's Trees

They cost no more than inferior, poorly-grown trees, and they are all inspected by Government Inspectors.

If you are unfamiliar with the best varieties for your section, we will be glad to assist you in your selection, and such assistance places no one under any obligation to purchase. We have nearly 800 acres devoted to Nursery Stock and Orchardland, and can supply first class stock of the following selected and inspected trees:

APPLE, PLUM, PEAR, CHERRY, QUINCE, PEACH, APRICOT, SMALL FRUITS, GRAPE, ORNAMENTAL TREES, SHRUBS, CLIMBERS, BACCEOUS PERENNIAL ROOTS, ETC.

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O.A.C. No. 72 oats, registered seed, germ. test 99 per cent., \$2 per bushel. Improved O.A.C. No. 72 oats, germ. test, 100 per cent., \$1.60 per bushel. Registered O.A.C. No. 21 barley, germ. test, 97 per cent., \$2.50 per bushel. Improved O.A.C. No. 21 barley, germ. test, 98 per cent., \$2.00 per bushel. All true to variety and free from smut and noxious weed seeds. Small white field beans, extra quality, \$10 per bushel. Samples on request. Sacks free. Prices f.o.b. Alliston, C. P. R. or G. T. R.

**RUTHVEN BROTHERS**  
R. R. No. 2 - Alliston, Ont.

## MAKE YOUR BIKE A MOTORCYCLE

as a small cost, by using our attachable outfit, fits any bicycle. Easily attached. No special tools required.

**"Compared With Others"**

1. It is the only outfit that can be used on any bicycle.

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**FREE BOOK** "How to Build a Motorcycle" sent free on request. Write to: SHAW MANUFACTURING CO., Dept. 108, Galesburg, Kan., U.S.A.

PLEASE MENTION FARM AND DAIRY

## CITY MILK SUPPLY

How the New York Dairymen's League Aids the Producers.

In these days when milk producers are endeavoring to obtain more equitable returns for their labor and investments, a description of the New York Dairymen's League form of organization will be interesting.

This League is now in its eighth year of operation, having been formed in 1910. It is a joint stock corporation, composed entirely of persons or firms producing milk. In all, there are some 40,000 members, these being dairy farmers located in the States of New York, New Jersey, Pennsylvania, Vermont, Connecticut, and Massachusetts, most of whom are shipping milk sets, most of whom are shipping milk to New York City, representing about 500,000 cows. The control is vested in a Board of Directors, 24 in number, who are elected annually by the stockholders, and serve for one year. Every stockholder is entitled to one vote, in person or by proxy, for each share of stock registered in his name. The Board of Directors, in turn, chooses annually a President, Vice-president, Secretary and Treasurer.

Sources of Revenue.

The Dairymen's League obtains its revenues in three ways, the first being subscription for stock. Any milk producer desiring to become a stockholder is required to pay the sum of 25c per cow, for which stock is issued to him at the rate of \$2.50 per share; that is, one share for ten cows, and for each additional cow one-tenth share. No stockholder is allowed to sell or transfer his stock to any person without giving the secretary sufficient notice, and the League reserves the right to purchase the stock at par value.

The second source of revenue is obtained from the milk producers, by which the League receives a commission of one cent for each one hundred pounds of milk sold for the milk producers. The contract with the dealers requires them to deduct this commission on all milk purchased from league members and paid to the treasury of the league, the balance of the purchase price going direct to the milk producer.

An emergency source of revenue is obtained by an agreement to the effect that "should the funds in the treasury of the company be insufficient to meet their obligations, the Board of Directors may charge to each member of the company a fee not to exceed 25c. per cow in any one year."

Objects of the League.

Local branches of the Dairymen's League are organized at various points throughout the rural districts where there is a considerable creamery or shipping station. Members of these branches meet at various times for the purpose of assisting the directors of the League and in furthering its business. These local branches have the privilege to levy local dues for any local purpose as the branch may decide. The objects of the company are stated in the preamble of the organization, which is as follows:

"The purposes of this company shall be to oppose and prevent monopoly in the production or sale of milk, and to encourage competition therein, and to protect its stockholders and the consumers of milk against monopoly or an unlawful combination of any kind or nature whereby the producers or consumers of milk are injuriously affected, to promote legislation and board of health ordinance beneficially affecting the interests of the stockholders who are producers of milk for the Metropolitan district, and other markets, to act as their agents in marketing their products and to carry on all such business as its articles of incorporation authorize it to do."

The substance of the agreement between the League and the milk producers is as follows: The milk pro-

"Canada's Greatest Seed House"

## PLANT

# Steele, Briggs' Seeds

For Sale Everywhere  
Send for Catalog  
**Steele, Briggs Seed Co.**

TORONTO  
HAMILTON - WINNIPEG

## SEED GRAINS

We can supply on short notice limited quantities of choice high quality field grains from the following varieties:

Marquis Wheat, Goose Wheat, O.A.C. No. 31 Barley, Banner King Buckwheat, Centennial Peas, also highest grades of Clovers and Timothy.

Ask for our prices on Marquis, Turpin, Ontario, Potatoes, Beans, Corn and Garden Seeds of all kinds. If in need of Feeds write us. We can supply Cotton Seed Meal, Linseed Oil Cake Meal, Corn Oil Cake Meal, Gluten Feed (21% protein), Bran, Shorts, Corn, Cracked Corn, Corn Meal, Red-headed Standard Screenings, Ground Screenings, Beef and Bone Scrap, Poultry Grit, Oyster Shell, Alfalfa Meal, etc.

We manufacture the well known "Good Luck" Brands of Poultry Feeds and can supply any quantity. Try our Good Luck Baby Chick Feeder Shell, Alfalfa Meal, etc. Long Distance "Phone—Day, Junction 314; Night, Junction 4834. Write or phone for prices.

**CRAMPSEY & KELLY**  
775 DOVERCOURT RD., Toronto, Ont.



A complete, durable outfit for spraying and dusting. It is easy to use—easily adjusted to suit the width of your rows and the height of the vines.

## Spramotor

THE ONLY SPRAYING MACHINE MADE IN CANADA

is the recognized standard of excellence—simple in design, powerful, durable. Made in many styles and sizes. Operated by hand, horse and gasoline power.

Made in Canada. No duty to pay.

Write to-day for FREE illustrated treatise on "Crop Diseases."

**HEARD SPRAMOTOR CO.**  
4043 King St., LONDON, CAN.

WHITE AND COLUMBIA WYANDOTTES, LIGHT BRAHMAS, & WHITE LEGHORNS.

Michael K. Boyer, Box 24, Hammonds, N.J.

duce ag... years to... sale all... farms... except su... home, far... and durin... after for... days' not... either par... any contra... milk prod... milk, pure... dition for... or adjoin... station, con... manufac... by the Da... Dairymen's... to dispose... tion of said... shall be so... emergency... the milk p... manufac... a place pro... local bran... The Dair... sell and dis... best advan... seeds thro... less the com... It is furth... mon's Lega... sion from th... one cent for... of milk sold... contract, this... proceeds of... It is mutu... either party... of the contra... ing shall and... sum of five de... the number... producer has... is fixed and... ated damage... the same sha... considered a pen... Agreement... A contract i... Dairymen's L... agent of wh... the effect... agree to sell... agreed upon, a... take and pay... day during the... contract, all... those member... League from... been in the ha... not previously... ficial quantity... by the dealer... all milk sold... shall be of goo... inspection and... ties of the Stat... municipality co... A S... T HIR... situated a... a position... contaminated f... oushouse on th... Where there is... "stimulate" the... use of a cesspo... and apparentl... thereby incurre... well water, it w... an earth closet... satisfactory, but... ther than the p... on farms and i... containing it sh... substantial, wel...

tilled, with a g... ably plastered on... less exposure i...

dealer agrees to consign for a term of years to the Dairymen's League for sale all the milk produced upon the farms controlled by the milk producer, except such milk as required for home, farm or local consumption, for and during the term aforesaid, and thereafter for six-month periods, unless 30 days' notice is given in writing by either party before the expiration of any contract period. Furthermore, the milk producer agrees to deliver the milk, pure and unadulterated, in condition for sale suitable in New York or adjacent markets, to the shipping station, condensary or such other manufacturing plants as is designated by the Dairymen's League, or if the Dairymen's League should be unable to dispose of the milk during any portion of said period, the milk producer shall be so notified, and in such an emergency it shall be optional with the milk producer, whether they manufacture their milk at home or at the local branch.

The Dairymen's League agrees to sell and dispose of said milk to the best advantage and to remit the proceeds thereof to the milk producers, less the commission.

It is further agreed that the Dairymen's League shall receive a commission from the proceeds of the sale, of one cent for each one hundred pounds of milk sold during the time of the contract, this to be deducted from the proceeds of sale.

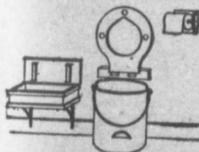
It is mutually agreed that in case either party fails in the performance of the contract, that the party so failing shall and will pay to the other the sum of five dollars (\$5.00) per cow for the number of cows which the milk producer has taken stock, which sum is fixed and agreed upon as the liquidated damage for such failure, and that the same shall in no event be considered a penalty.

**Agreement With Dealers.**

A contract is also made between the Dairymen's League, Incorporated, an agent of the milk producers, and the dealer. This is to the effect that the League agrees to sell and deliver at the place agreed upon, and the dealer agrees to take and pay for as provided, each day during the period covered by the contract, all the milk produced by those members of the Dairymen's League from whom the dealer has been in the habit of receiving milk, if not previously sold, and such additional quantity of milk as is required by the dealer. It is understood that all milk sold under this agreement shall be of good quality and must pass inspection and approval of the authorities of the State of New York and the municipality covered by the dealer.

**A Sanitary Privy**

THE cesspool is an abomination if situated near the well or in such a position that the well may be contaminated from it. The average outhouse on the farm is still worse. Where there is difficulty in the matter of ultimate disposal without the use of a cesspool, and the consequent and apparently unavoidable risk thereby incurred of contaminating the well water, it would be better to use an earth closet. This is not wholly satisfactory, but is safer and far better than the provision so often found on farms and in villages. The house containing it should be well built and substantial, well lighted and ven-



tilated, with a good roof, and preferably plastered on the inside to insure less exposure in cold weather. A

carefully-made and dry walk, screened by lattice for protection from the wind and for privacy, should be built to it. The excreta should be received in a galvanized-iron pail, not too large, and made to fit close under the seat. This seat can be like that of an ordinary water-closet. Each time of an ordinary use, dry earth is added. The pail should be emptied very frequently. With proper attention, this closet need not be, and should not be, built far from the house. It would even be possible to place it in a room built against the house, the room having another opening out of doors. This would make it possible to enter from the house in inclement weather, and also to carry out the pail without pass-

ing through the house. The room should be well ventilated by a window close to the ceiling, and only tissue paper should be used. (See fig. for arrangement of pail, seat, and dry-earth box.)

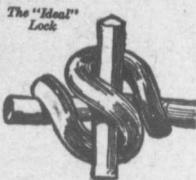
The earth for use in these places is to be found in nearly every field and garden, and should be of rather a loamy nature if possible, and porous. A very sandy soil is next to useless. Large heaps of earth should be collected for the year's use and dried in the summer sun. It is not necessary to use perfectly dry earth, but it is always the best.

Don't worry about what the other fellow says of your farming methods. It is results in the fall that count.

**Pleased With Farm and Dairy**

PLEASE find enclosed \$2 for rental to Farm and Dairy for three years. I could not afford to be without it. Go on with your good work. I enjoy the good common sense of Farm and Dairy and particularly appreciate Mr. Halbert's address unpublished recently.—Walter McLennan.

One of the great weaknesses of the small farm is that too large a proportion of the capital is buried unproductively in buildings and machinery. —A. Leitch, O. A. C. Guelph, Ont.



**"Ideal" Fence Prices**

**Freight Paid to Your Station**

Below we give the freight-paid prices to any station in Old Ontario (except electric) on only a few of the many styles of "Ideal" Fence. The "Ideal" Catalogue and Freight Paid Price List—sent free on request, a postal bill bring it to you—shows and describes fully, and gives prices, freight paid to your station on—

**25 Styles Heavy "Ideal" Fence**

Made throughout of full gauge No. 9, evenly galvanized Hard Steel Wire, from a 4-wire fence 33 inches high to a 15-wire, 67-inch fence. A style for every purpose.

**12 Styles Medium Heavy "Ideal" Fence**

Made with No. 9 gauge wire for top and bottom, all other wires No. 12 gauge.

**2 Styles "Ideal" Poultry Fence**—Made with No. 9 gauge wire for top and bottom, all other wires No. 13 gauge. All Size Farm and Stock Gates—with improved features found on "Ideal" gates only. **6 Styles "Ideal" Lawn Fence and Gates.** Brace Wire, Barb Wire Coiled Wire, Stretchers, Steel Posts, Diggers, etc.

**Send today for "Ideal" catalog with Freight-Paid Prices**

**No. 7400 HORSE AND CATTLE FENCE**  
7-line wires, 40 inches high, stays 22 inches apart. Spacing 5, 6, 6, 7, 7, 8.  
Made throughout of full gauge No. 9, evenly galvanized hard steel wire. **50c**

**No. 7480 HORSE AND CATTLE FENCE**  
7-line wires, 40 inches high, stays 22 inches apart. Spacing 5, 6, 7, 8, 9, 10, 10.  
Made throughout of full gauge No. 9, evenly galvanized hard steel wire. **51c**

**No. 831 HOG FENCE**  
8-line wires, 31 inches high, stays 16 1/2 inches apart. Spacing 3, 3, 4, 5, 6, 7.  
Made throughout of full gauge No. 9, evenly galvanized hard steel wire. **60c**

**No. 1048 GENERAL STOCK FENCE**  
10-line wires, 48 inches high, stays 16 1/2 inches apart. Spacing 3, 3, 3, 4, 5, 6, 7, 8, 8.  
Made throughout of full gauge No. 9, evenly galvanized hard steel wire. Price, per rod. **75c**

**No. 1150 GENERAL STOCK FENCE**  
11-line wires, 50 inches high, stays 18 inches apart. Made with top and bottom wires No. 9 gauge, all other wires No. 12. Price per rod. **55c**

25-lb. bundle No. 9 galvanized brace wire **\$1.80**  
25-lb. box (any size) galvanized fence staples **1.85**  
4-point galvanized barb wire per 80-rod spool **5.50**  
"Ideal" stock gate, 14 feet long x 61 inches high. Each **6.50**  
"Ideal" farm gate, (close mesh) 12 feet x 48 inches. Each **7.00**

Send today for complete prices on "Ideal" fence, gates, lawn fence and all fence supplies freight paid to any station in either Old or New Ontario.

Quebec and Maritime Provinces  
We have opened a warehouse and office in Montreal to handle Eastern shipments and correspondence. Ask our Branch, 14 Place Royale, Montreal, Quebec, for "Ideal" prices, freight paid to any station in Canada east of Montreal.

**OUR GUARANTEE**

"Ideal" fence is guaranteed to be made exactly as represented, to be made as the best fence you expected to receive when ordering.

We have a large stock of all styles of "Ideal" fence on hand and will ship all orders the same day as received, while stock lasts.

**The McGregor Banwell Fence Co., Limited Walkerville, Ont.**

**POULTRY**

**A FORTUNE IN POULTRY**

Increase your egg yield by purchasing a **Choice Cock or Cocker** of our high record Bred-in-Wyandottas, Leghorns or R. O. D. A. 1915 Mating List containing 15 photos of stock, buildings, feed and tonic formulas.

Our 264 Egg Kit

**L. R. Guild, Box 76, Rockwood, Ont.**

**Bred-to-Lay Leghorns**

My breeding pen, as pullets, averaged 174 eggs, and this under general farm conditions. Cock birds are from trap-nested stock specially selected for winter egg production. List your orders now. Eggs for hatching, \$8 per 100; \$1.50 per setting of 15, at our station. Cash with order or C.O.D.

**F. E. Ellis, Campbellville, Ont.**

**Egg Producing Hen Feed**

**Green Ground Bones**

**\$5.00** Per 100 Eggs order or Post lbs. Office Order

**GEORGE STEVENS**

364 Mark Street, Peterborough, Ont.



### Keeping Eggs for Hatching

**E**GGs for hatching keep best in a temperature of about 50 degrees F. and they should be turned every day. Eggs that are to be shipped should be well packed and should be left entirely quiet at least 24 hours before being placed under hens or in the incubator. It is not desirable to keep eggs for hatching more than 10 days, but good hatches may be secured from three week old eggs if kept at 50 degrees and turned every day. Experiments show that the longer the eggs are kept the less the percentage of chicks secured. In cold weather gather the eggs before becoming chilled.—E. J. Peterson.

### How to Set a Hen

**T**HE first sign of a hen being broody (wanting to set) is that she stays longer on the nest when laying, and on being approached will quill likely to rattle and make a clucking noise, ruffle her feathers, and peck at the intruder. When it is noted that a hen sets on a nest from two to three nights in succession and that the feathers are disappearing from her breast, which should feel

hot to the hand, she is ready to be transferred for setting to a nest which has previously been prepared. The nest should be in some quiet, out-of-the-way place, where the setting hen will not be disturbed. Move her from the regular laying nest at night and handle her carefully in doing so. Put a china egg or two in the nest where she is to set and place a board over the opening so that she can not get off.

Toward the evening of the second day quietly go in where she is sitting, leave some feed and water, remove the board from the front or top of the nest, and let the hen come off when she is ready. Should she return to the nest after feeding, remove the china egg or eggs and put under those that are to be incubated. If the nests are slightly darkened the hens are less likely to become restless.

At hatching time they should be confined and not be disturbed until the hatch is completed, unless they become restless, when it may be best to remove the chicks that are hatched first. In cool weather it is best not to put more than 10 eggs under a hen, while later in the spring one can put 12 or 15, according to the size of the hen.

Dust the hen thoroughly with insect powder, and tie up the powder hold the hen by the feet, the head down, working the powder well into the feathers, giving special attention to regions around the vent and under the wings. The powder should also be sprinkled in the nest.—U.S.D.A.

## Saving Money by Spending.

"SAVING" money by continuing to use an inferior machine is like "saving at the spitot and wasting at the bung." For instance, if your machine skims down to .1 per cent. for every thousand pounds of milk skimmed, compare that result with the splendid, proven record of the Renfrew. You find by having the

# Renfrew

that you will save about  $\frac{1}{2}$  pound of butter-fat per week for every cow. The Renfrew skims down to .01 per cent. That loss of  $\frac{1}{2}$  pound means money! With eight cows, and butter-fat at say 30 cents per pound, you would be losing every year (40 weeks' milking) the tidy sum of \$48.

This sum saved is accepted by us as a first payment on a Renfrew. The saving soon pays for the machine—and then the \$48 per year for eight cows becomes extra profit.

Will it not pay you to discard the old machine for the Renfrew? It gets all but the last three ounces of butter-fat in a whole ton of milk skimmed. If you could reckon the losses the old machine made the last few years,

wouldn't it decide you right away to get the close-skimming Renfrew?

Our illustrated booklet gives interesting proofs of the Renfrew's close-skimming, including tests by Government Dairy Schools. It also explains the Renfrew's self-oiling system, the interchangeable capacity feature, easy-to-clean advantages, etc. Send for booklet to-day.

Other Lines: Renfrew Kerosene Engine, Happy Farmer Tractors, Farmers' 2000 lb. Truck Scale.

## The Renfrew Machinery Co., Limited

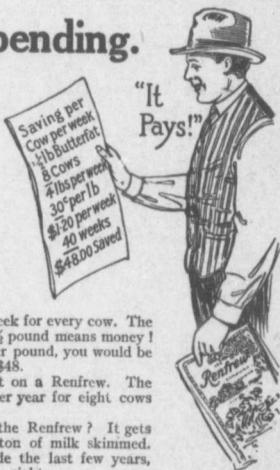
Head Office and Works: Renfrew, Ontario

Eastern Branch: Sudsex, N.B. U.S.A. Branch: Milwaukee, Wis.

Agencies almost everywhere in Canada 13



MADE IN CANADA



**NOTICE**—The Renfrew Separator illustrated here was formerly sold under the name "Standard" which identified it as a high efficiency cream separator. The name "Renfrew" has been used on the same machine for several years in our United States and foreign trade and under that name has become as popular in those markets as under the name "Standard" in Canada. Now the name "Renfrew" has been adopted for Canada so as to link the name more closely with that of our company and so that we can sell the machine under a uniform name throughout the world.

## Nitrate of Soda

Data as to increased crop yields due to the use of Nitrate are available. Why not make your business of crop fertilizing profitable by the use of Nitrate of Soda whose efficiency is known?

A bushel of corn or wheat or a bale of cotton today will buy more Nitrate and more Acid Phosphate than ever before.

Send for "Increased Crop Yields from the use of Nitrate of Soda"

**Dr. Wm. S. MYERS, Director**  
**Chilean Nitrate Committee**  
25 Madison Avenue, New York

**ALL YOU**

**BUILDING OR REPAIRING**

OUR CATALOGUE OF BUILDING MATERIALS LISTED HERE WILL SAVE YOU THE HULLAY COMPANY, LONDON, ENGLAND, THE HULLAY FACTORY DISTRIBUTORS CANADA

**GILSON TRACTOR**

**THE STANDARDIZED TRACTOR**

—is a business machine designed along sound mechanical lines of proven worth with no frills features. 15-30 h.p.

Write for free catalogue and rock bottom prices

**GILSON MFG. CO. LTD.**  
27 YORK ST. GUELPH, CAN. 27

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**SILOS**

**EXTRA CAPACITY**

**THE Toronto Hip Roof** adds several tons capacity to this silo, because you can tramp the ensilage right up to the top of the walls.

This is one of the many money making advantages of Toronto Silos. Write for the book to-day.—Address.

**ONTARIO WIND ENGINE & PUMP CO., LIMITED** 181

Athletic Ave., Toronto,  
12 St. Antonio, Montreal,  
Winipeg Calgary Regina



# ALL CLASSES ARE LIABLE UNDER THE DOMINION WAR TAX ACT

Returns covering 1917 details must be filed on or before 31st March next.

**THE** Income War Tax Act applies to every class of person residing or ordinarily resident in Canada.

Every unmarried person, or widow or widower without dependent children, whose income exceeded \$1500 for the calendar year, 1917, and all other persons whose income exceeded \$3000 for the same period, must fill in and file the necessary forms.

All persons engaged in farming of any kind, who are liable under the provisions of the Act, must get three copies of Form T-1 and answer in detail all questions asked. Special attention is called to the following points as well as to those specifically mentioned in the Form.

**Gross Income Must Include** all income from the sale of produce, stock, or other products whatsoever, as well as monies received from other sources, such as Dividends, Interest, etc., as provided in the Forms.

Personal and Living Expenses must not be deducted in determining gross income—the figures must include the value of all food and other necessities of his own production, consumed by the taxpayer or his family.

**Depreciation.**—In giving figures under Depreciation, particulars of the value of implements, machinery, and outbuildings on hand January 1st, 1917, upon which depreciation is claimed should be shown, but must not include any amount for dwelling occupied by the taxpayer.

The amount expended for labor in the preparation of land for crops and in the cultivation, harvesting, and marketing of the crop should be stated, as well as the cost of seed and fertilizer and the amount expended for labor in caring for live stock, cost of feed, repairs to farm buildings, but not the cost of repairs to dwelling. The cost of small tools and material which is used up in the course of a year or two, such as binder twine, pitch forks, spades, etc., should be shown as these are deductible.

The cost of labor may include board of hired men, but no amount as wages for the taxpayer himself will be allowed.

**Penalties.**—Default in filing returns renders the person or persons liable on summary conviction to a penalty of one hundred dollars for each day during which the default continues. Any person making a false statement in any return or in any information required by the Minister of Finance shall be liable on summary conviction to a penalty not exceeding ten thousand dollars or to six months imprisonment, or to both fine and imprisonment.

Don't forget to fill in three copies of the Form. Keep one copy and file the other two with the Inspector of Taxation for your District.

**Forms may be obtained from the District Inspectors of Taxation and from the Postmasters at all leading centres.**

*Postage must be paid on all letters and documents forwarded by mail to Inspector of Taxation.*

*Department of Finance,  
Ottawa, Canada.*

## INSPECTORS OF TAXATION

For Ottawa and District, K. Fellows, Cor. Bank St. and Laurier Ave., Ottawa, Ont.; For Kingston and District, G. A. MacDonald, Kingston, Ont.; For Toronto and District, Hugh D. Pater-son, 59 Victoria St., Toronto, Ont.; For Hamilton and District, George G. Lowe, Customs Bldg., Hamilton, Ont.; For London and District, George R. Tambling, London, Ont.

**\$2.21** Per Bu. **GUARANTEED WHEAT** 

**Oats, Barley, Flax, Live Stock** GREAT OPPORTUNITIES

**IMMENSE WEALTH IN WESTERN CANADA** **100,000 FREE FARMS**

OF 100 ACRES EACH. Government lands along the Canadian Northern, surveyed and ready for entry. Yours is waiting, and a share of the three-quarter billion dollars for crop production to be distributed to farmers this fall. Estimated crop values of Wheat, Oats, Barley and Flax seed alone for 1917 in Manitoba, Saskatchewan and Alberta is \$413,700,000.

**IMPROVED LANDS FROM \$15 UP PER ACRE**

ALONG CANADIAN NORTHERN. Risk, well located farms, close to railway—immediate production—can be purchased on easy terms, cash, or cash and crop payments. Means schools, good roads, telephones and convenient transportation. Act now—get away this spring.

**Tractors and other Farm Implements**

Easily available—new Government assistance plan. Capital or no capital—the work, the opportunity, is there, and the Canadian Northern offers the way. Write to-day for the new "Guide." Contains valuable information based on Government statistics. Any C.N.R. Agent, or General Passenger Dept., Montreal, Que., Toronto, Ont., or Winnipeg, Man.

SEND FOR FREE BOOK: "Homeseekers' and Settlers' Guide"

**LOW FARES**

**Ramsay's Fine Floor Paint**



is made to be walked upon, that is the floor paint you want. It is time tried for severe usage. There's a Ramsay dealer in your town; consult him, or write us for booklet.

**A. RAMSAY & SON COMPANY**

Makers of Paint and Varnishes since 1842  
TORONTO MONTREAL VANCOUVER



**"Hundreds of Dollars In Actual Profit"**

More than one farmer has told us—since he has got a copy of "What the Farmer Can Do With Concrete," that the advice it gave him netted him hundreds of dollars in actual profit.

Get the book—it's free—and by reading it you will see the profit there is in building improvements of CONCRETE according to its plain, simple directions. For instance, there's a page devoted to Watering Troughs—showing how to build the sanitary kind that will not rot, rust or leak. Several pages devoted to Concrete Silos. Others telling how to build concrete foundations for barns. All these are improvements a farm needs—its value will go up considerably if you use concrete in the building of them. And you'll be able to "work" your farm with less effort and on a more profitable basis if your buildings and utilities are of the modern Concrete type. This book gives all the directions you'll need.

Remember—Concrete improvements are fire-proof, rot-proof, vermin-proof and indestructible. The book also contains interesting photographs showing what other Canadian farmers have accomplished; with working plans revealing how they did it. Perhaps you are specially interested in some of the features listed in our coupon. Put a cross opposite the ones about which you want particular information.

Specify what you want information about	
FLOORS	DAIRY HOUSES
CONCRETE BLOCKS	BARNs
SILOS	FENCE POSTS
GARAGES	ROOT CELLARS
TROUGHs AND TANKS	ROADS
"What the Farmer can do with concrete"	

Canada Cement Company Limited 210 Herald Bldg., Montreal

Figure the Tires Waste involved in avoiding the bad road. Whether driving or motoring, you can travel over a two-mile stretch of concrete quicker than over a one-mile section of old-style road.

Permanent Highways of Concrete will enable us to greatly reduce the cost of hauling farm produce. All our country's business will be speeded up and economies by replacing the old-style, rut-filled roads with roads of concrete. You use Concrete on your farms to reduce the cost of farm up-keep—because Concrete eliminates "repairs." For the same reason, good for concrete as a road material—it is just as effective in reducing road up-keep costs as in increasing economy on the Farm.

**Fibre Cheese Boxes**

J. A. Ruddick, Dairy Commissioner.

SEVERAL thousand cheese were shipped last year in the new fibre boxes. In order to get accurate and unbiased reports as to the condition of these boxes on arrival in the United Kingdom I arranged with the Cheese Commission to notify my office at Ottawa when cheese in fibre boxes were included in any shipment, and the cargo inspectors employed under my direction at ports in the United Kingdom were instructed to be on the lookout for them and to make special reports as to their condition, and to obtain the views of the trade regarding them. These reports do not indicate that this package is a perfect one as manufactured at present. The covers are frequently torn loose and there is a tendency for the fibre to soften slightly, presumably by absorbing moisture from the cheese. When this occurs the box is liable to be crushed when it has to stand the weight of a pile of five or six boxes.

Quite a percentage of the boxes were reported as torn with the hooks used in handling. They will not stand that sort of usage. The patent cheese truck as used for wooden boxes also breaks or tears the fibre band, but this can be, and has been in some warehouses, remedied by an alteration in the truck which prevents the tearing. As I have already said, the fibre box is probably not a perfect box, but I think it is capable of improvement, and even at present it would appear as though it arrives in as good condition, if not better, on the average, than the ordinary wooden box.

I am rather hopeful that the fibre box, possibly with some improvements, will solve the box problem of the future, providing the cheese are all made of one diameter. In many cases the fibre boxes were too large for the cheese and the percentage of damaged boxes was much greater in such cases. This lack of management which results in cheese being shipped from the factories in boxes which are either too large in diameter or too low for the cheese, is inexcusable and it is coming to be recognized every day as a more serious defect. It is considered sufficient cause to reduce the grade of the cheese one. When there is a loss of one-half a cent a pound, or 43 cents per box, on account of these defects—that is badly fitting boxes in one respect or another—surely it is time to provide a remedy. If a cheesemaker has the ordering of the boxes it would be a much more reasonable thing to charge him with any loss arising out of such a defect than it is to charge him for inferior quality in the cheese itself.

**Why Public**

By THE fact "campaign" not been Few object to tions for patrio ic, especially large enough. to the sacred greater the rel know anything that most con "funds" are or less as bus to purchase s social obligati or considera ble conclusion their aim or have been discu fe, bribes to s ecution in the able underriking statement, but confirmed by re ing how certai special privilege public treasury tions to the "pa whole situatio founding loosen among those ca but one result.

**The Step**

Now, what sh first thing to do and overprovi against the proce Without this im thing further ca with it the next easy. The next a means, and legiative reme that such legiala fect or that it wi

If you re CREAM S

Let us

"Sanita

Six sizes - 135 and 800 lbs. each DETACHABLE SPLASH and GUARANTEE be built of the class workman easy to turn prices very low money refunded terms if desired. catalogue and loc

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**E. A. STROUT F Dept 150 Nassau St, N**

**When Writing Mention Farm & Dairy**

Why Publish Campaign Funds

By W. C. Good.

THE fact that contributions to "campaign funds" are kept secret has a sinister significance. Few object to having their contributions for patriotic purposes made public, especially if these contributions are large enough. But the larger the gifts to the sacred cause of "party" the greater the reluctance to let the public know anything about it. The fact is that most contributions to "campaign funds" are given and received more or less as bribes. They are intended to purchase special exemptions from social obligations or special privileges or consideration, and it is a reasonable conclusion that they would long since have been discontinued. They are, in fact, bribes to secure safety from prosecution in the carrying on of questionable undertakings. This is a strong statement, but it has been abundantly confirmed by recent exposures, showing how certain parties bought the special privilege of dealing from the public treasury by handsome contributions to the "party funds." In fact, the whole situation betrays the most astounding looseness of public morals among those concerned, and can have but one result.

The Steps to be Taken.

Now, what should be done? The first thing to do is to create a definite and overpowering public sentiment against the present practice of secrecy. Without this imperative demand nothing further can be done; whereas with it the next step is comparatively easy. The next step is to devise ways and means, and to suggest definite legislative remedies. No one pretends that such legislation can be made perfect or that it will be wholly effective.

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Rural Home

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PRICE 47

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### CIRCULATION STATEMENT.

The paid subscriptions to Farm and Dairy approximate \$6,000. The actual circulation of each issue, including copies of the paper sent to subscribers, who are but slightly in arrears, is approximately 30,000 to 32,000 copies. No subscriptions are accepted at less than the full subscription rates.

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

### OUR GUARANTEE.

We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading column, and because to protect our readers, we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you as one of our paid-in-advance subscribers, we will make good the amount of your loss. If any transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that we find the facts to be as stated, it is a condition of this contract that in writing to advertiser you state: "I saw your advertisement in Farm and Dairy."  
Requests shall not ply their trade at the expense of our subscribers, who are our friends through the medium of these columns; but we shall not attempt to adjust trifling disputes between subscribers and honorable business men who advertise, nor pay the debts of honest bankrupts.

## The Rural Publishing Company, Ltd

PETERBORO AND TORONTO

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

## Daylight Saving

ANOTHER effort is to be made to thrust daylight saving upon us. Last year a so-called daylight saving bill was introduced in the House at Ottawa, and received practically no support. It will be introduced again this year and a vigorous campaign in its favor is being waged by the city press. From the city standpoint we are prepared to concede that the idea has its good points. Folks will find it easier to get up at six o'clock if their timepieces register seven. Likewise if their timepieces go to bed at ten o'clock when the timepiece is registering eleven. It means, for city folks, a longer evening of daylight and more time for outside recreation. It is an admirable and elaborate scheme, whereby some four millions of Canada's city dwellers hope to deceive themselves into getting up early.

But how does it look from the farm viewpoint? We believe that the agricultural section of the Hamilton Board of Trade spoke for one hundred per cent. of the farmers of the land when it placed itself on record as being absolutely opposed to such legislation. For the farmer, a daylight saving bill would be a daylight wasting bill. In seed time the land is frequently frozen at six o'clock—seven o'clock by the proposed new time—while the soil is in admirable condition for working between five and six—six and seven by the new time. It is the same in harvest. The best part of the working day is late in the afternoon while the early morning hours cannot be utilized for field work.

It has been suggested that farmers can disregard the measure even if it does pass. The farmer knows better. He is an employer of labor and this year even more than other years a large proportion of his help will be from the cities and composed of men who are accustomed to working by the clock. And when the factory whistle blows in the neighboring town there will be trouble if the farm hand must keep on working for another hour. When going to town to transact business too, the farm routine will be affected by the changed hours of business in the

city with consequent loss in productive efficiency.

Daylight saving will be a small convenience to the city dweller. It will be a severe blow to the productive efficiency of the farmer and his help. Whose interests are to be considered as of most importance by our legislatures? Their action in connection with the daylight saving measure will indicate to which section of the community they choose to cater. If the majority of Canadian farmers would drop a card to their member telling him just what they think of this so-called daylight saving, the bill will meet with the fate it deserves.

## The Railway Rates Increase

AS announced in the daily press last week, the Dominion Cabinet has officially ratified the Railway Commission's order, granting a fifteen per cent. increase in freight and passenger rates to all Canadian companies, pending "further study" of the permanent solution of the "huge and complex" railway problem. The new rates become effective immediately and go out of operation one year after the conclusion of peace. Further amendments to the original order of the Board of Railway Commissioners, provide for special taxation of the Canadian Pacific Railway Company, which will bring back into the federal treasury the increased revenue that this company will derive as a result of the rate increases. In order to insure a correct accounting and to prevent any hide-away of revenues on the part of this company, the Government is providing for a thorough audit, and also for supervision of all expenditures on capital account.

These amendments to the original order will afford at least some consolation to the farmers organizations of Canada which alone presented a united front against railway rate increases when they were first proposed. Had it not been for the determined opposition of the organized farmers the order would, in all probability, have gone into effect months ago and that without any date set for its termination and no provision for diverting into the public treasury the extra and unnecessary revenues of the C.P.R. In this one instance alone our organizations have saved for the people of Canada many millions of dollars and have performed a public service of no mean importance. We will await with interest the result of the Cabinet's search for a "permanent solution" of this admittedly great and difficult problem. If they follow the expressed desires of almost all of the great democratic organizations in Canada, their solution will be along the lines of Nationalization of all Canadian railroads.

## Canadian Cow Still Leads

"Canadian Press Despatch" from Sacramento, California, which obtained wide circulation in Canadian newspapers last week, reads as follows:

"A world's record production of 918.6 pounds of milk was made in the seven days ended last night by Rhabella Johanna Aeggie III, a registered Holstein, owned by the Napa State Hospital. The best previous record was 902.1 pounds of milk in seven days, made by Riverside Sadie DeKol Burke, owned in Woodland, California."

Wrong! Good as both of these records are—and it takes a good cow to make records such as these—neither of them can compare with that of the Canadian cow, May Echo Sylvia. In seven days, this great Canadian cow made 1,095.8 lbs. of milk, or almost one hundred pounds more than the average of her two nearest rivals. This production was attained in her seven-year-old form. As a six-year-old, May Echo Sylvia is credited with 879 pounds of milk in seven days, and as an eight-year-old with 952.3 pounds of milk. The average of her three consecutive records is, therefore, 912.3 pounds of milk or only 6.3 pounds short of the California record, a showing which places May Echo in a class by herself as a milk producer. We trust the Canadian press, in justice to Mr. Hardy and Canadian Holstein interests generally, will correct the mistake for which they are responsible.

## The Federal Income Tax

UNDER authority of the Dominion War Tax Act, the Dominion Finance Minister announces a new measure of direct federal taxation. The call upon the fortunes of the people of Canada is to take the form of a graduated tax on all incomes of \$1,500 and over enjoyed by all unmarried persons, or widows and widowers without dependent children, and of \$3,000 and over, enjoyed by all other persons, as well as by all corporations and joint stock companies. There will be a tax of four per cent on all incomes above the amount exempted and an additional tax on all incomes greater than \$6,000 varying from two to twenty-five per cent., according to the size of the income.

As announced on page 13 of this issue of Farm and Dairy, all farmers whose incomes were greater in 1911 than the amounts specified will be required to fill in and file forms with the District Inspectors of Taxation. In computing his gross income a farmer must include all revenues collected from the sale of farm produce of any kind whatsoever, interest on investments outside the farm and the value of all good and other necessities of his own production consumed by the taxpayer or his family. In computing the net or taxable income all monies expended in running the farm will be deducted from the gross income; this will include such items as the cost of hired labor, seed, fertilizer, feed purchased and small tools. An important item that the taxpayer should not overlook is a proper allowance for depreciation on buildings, (except the dwelling house), and implements; business concerns usually place this at ten per cent. Rent for the use of land or interest on mortgages are, of course, deductible also. We advise our Folks to read carefully the announcement on page 13, and, if liable, to file their forms with the District Inspectors as required.

## Test Seed Corn

EARLY in the season, before the Dominion Government placed an embargo on the seed corn of South Western Ontario, a Kent county grower sold \$500 worth of seed to a farmers' club in an Eastern county. A month later the grower returned the money with the statement that as his corn had showed a germination test of less than forty per cent. he did not feel justified in delivering it. This same grower at the corn show at Chatham informed us that some of the finest looking corn on exhibition had germinated only sixteen per cent. Another grower estimated that much of the seed corn planted in "the south western counties would germinate about forty per cent. Through the northern part of the United States, where Canadian ensilage growers go each year for a portion of their seed supply, conditions are similar to those prevailing in our own corn counties. In a few districts the seed corn is good, but over ninety per cent of the corn area, practically all corn gathered for seed was injured by early frosts.

The seed which has been procured for the silage growers of Canada by the Dominion Government will come almost altogether from the Southern States. This corn will show a higher germination test than seed from the Northern States or Ontario, but even with it, however, we cannot afford to be too sure of ourselves. Should we happen on a fifty per cent. sample and then plant the regular amount of seed per acre, we would have only half a crop of corn. The safe policy this year will be to test every ear, if we are fortunate enough to get seed corn on the ear, and reject all ears that do not germinate four kernels out of six. If the corn is shelled, which practically all of it will be, take a representative sample for a germination test and plant in proportion. If we find that our seed corn germinates only fifty per cent. instead of the usual ninety per cent., and we have been accustomed to seed at the rate of thirty pounds to the acre, then we can be assured of a full stand only by seeding at the rate of forty-five pounds to the acre this year. The man who takes a chance on the seed corn having the usual germinating power is risking crop failure this year more surely than ever before.

## Letters

### Chinese

DITOR, Farm and Dairy, I headed "Chinese" the question, "Do you want Chinese?" to say that they call farmer for agent in Canada. Of my 640 acres produce because conditions. Agree to improve the wages you pay labor in return for hours' labor a day. I feel and such like borrow money to is the case with labor in return for government favor. If Chinese labor will give good service I think farmers are of them indicating the benefit of Canada. Many Chineses are willing they cows, milk butters, which low price. As to "lowering inc." teaching Su of Chinese in Wis made me think th

### Ad

ADVERTISING THIS talk is w the breeder of it not a good a well-known fact though excellent test to produce records though farmers put though able to talk any subject, and pertaining to live stock answering letters. The lack of time, W 10 hours of the 24, he spending much of his answering correspond also that the farmer has got out of practice that which able to stock, he just natura man or a good cooper all, seamanship, and with everyone. For there is one way which sharp, persuasive advertisements come to the describe ads. With it, which sell. W as these, correspondence minimum. In many c be stated in the ad, has to do is to accept the goods.

In the case of the handle extensive correspondence differently. I am before the public entirely. But even in his suits. He changed frequently. However, it is a doubtful policy to have for weeks and months nothing for sale. In the becomes weary answering for weeks and months same form an ad. For some form for a few m "punch." The reader "Well, it's just the too even when the thing for sale his ad, p reception. It is to avoid this Dairy enables breeders lowest live stock ad, ra them to approach a year—often when they sell and are to buy quires. We want to get the most from their use large space when the special to offer, and small their offerings. Keep your ad. Fresh and as often as necessary same principle every morning, it has a fact in yourself—and you others. There are two ways of need. No one would be something to sell, and I would be willing to do there is nothing to do is quite effective. When summer since, business Farm and Dairy, G. McKILL, Live Stock Department, F.

Letters to the Editor

Chinese Labor Favored

**E**DITOR, Farm and Dairy.—In your issue of Jan. 24, in an editorial headed "Chinese Labor," you ask the question, "Do the farmers of Canada want Chinese labor?" and go on to say that they do not. As a practical farmer for 45 years, 13 of them spent in Canada, I disagree with you of my 640 acres, 480 of them are unproductive because of present labor conditions. Age keeps me from doing much to improve it and the "get all the wages you can and give as little labor in return" policy, the "two hours' labor a day earns a living," belief and such like, makes it useless to borrow money to do so. I think this is the case with all businesses that have to go on a close margin with no government favor.

If Chinese labor is effective, if it will give good service for a fair wage, I think farmers could employ a million of them indefinitely to the lasting benefit of Canada and of themselves. Many Chinamen seem underpaid, but if willing, they could milk and feed cows, make butter, care for poultry, etc., which few Canadians will do.

As to "lowering our standard of living," teaching Sunday school classes of Chinese in Winnipeg one summer, made me think they like automobiles,

Ad Talk

ADVERTISING THAT SELLS.

**T**HIS talk is written especially for the breeder of registered stock who is not a good respondent. It is a well-known fact that many farmers, though excellent stock men, though able to produce records as good as the best, though farmers par excellence, and any subject, and particularly matters pertaining to live stock, are not good at answering letters. This may be due to the lack of time. When a farmer works 18 hours of the 24, he does not feel like spending much of the remaining eight in answering correspondence. It may be many years since he wrote, and has got out of practice. Or it may be that, though able to produce the best of stock, he just naturally is not a salesman or a good correspondent; for, after all, salesmanship is not a natural talent there is one way which is better than all others—to advertise. That is, by crisp, sharp, persuasive advertising, when the offerings come to selling age; large space; descriptive ads. with liberal use of phrases which sell. With such methods as these, correspondence is reduced to a minimum. In many cases the price can be stated in the ad., and all the seller has to do is to accept the cheque and ship the goods.

In the case of the breeder who can handle extensive correspondence, it is entirely different. His name is better to be before the buying public continually. But even in his case copy must be changed frequently to give best results. However, in the former case, it is a doubtful policy to have an ad. running for weeks and months when there is nothing for sale. In that case a breeder becomes weary answering enquiries, and is bound to become careless. For the same form for a few months, it loses its "punch." The reader begins to think: "Well, it's just the same old thing." Too even when a breeder has something for sale his ad. receives the same reception.

It is to avoid this that Farm and Dairy enables breeders to secure their lowest live stock ad. rate, without forcing them to appear in every issue of the year—often when they have nothing to sell and are too busy to answer inquiries. We want our breeders, who do not wish for extensive correspondence, to get the most from their advertising, to use large space when there is something special to offer, and small space or none when their offerings are otherwise of. Keep your ad. fresh and crisp. Change its main principle as necessary. This is the very morning, it has a good moral effect on yourself—and you look better to others.

There are two ways of killing a business. No advertising when there is something to sell, and misdirected advertising. There is nothing to sell. First method is quite effective. When advertising use Farm and Dairy, business methods, and Farm and Dairy.

fine houses and clothes, good food, etc., as much as we do, and if our "evil eye" did not drive them back to China they would soon adopt our ways. I found some learning our language and ways that they might go back as interpreters. Such would go back. But Canada languishes because of "union labor" selfishness which is extending to farming.

But best of all would be for our government to commandeer unused land such as mine, at a fair rental, taking payments out of such rentals for needed improvements (it has as much right to fix rents by law as interest rates), and work these farms itself under experimental farm management. They could use Chinese labor, making use of interpreters such as are mentioned above, and send the net produce of these farms to carry on the war until it ends and then export it to help pay the cost of the war.—W. B. Hull, Humboldt Dist., Sask.

Grow the Hogs Anyway

**O**NE of Our Folks, Mr. G. A. Thompson, Simcoe Co., Ont., writes to Farm and Dairy as follows:

"Your paper is a money saver for me in many ways. Some articles are worth the dollar. We raise a lot of hogs. Have recently sold \$327 worth and have a lot yet to go. Even at the high prices there is not much money in hogs. But the dear boys at the front need bacon, and let us who can raise hogs do so. I would rather raise hogs at a loss than see the boys at the front baconless. To some it is discouraging to see the money grabbers getting gold while our boys are getting lead, and we are working 14 and 18 hours a day on the farm to get through, but we must forget it. We are in the second line trenches and we should be willing to live on potatoes and glory so long as we are winning the war. So the Golden Text to my farmer neighbors has been while the big men eat the honey, But Raise Hogs and Wheat."

Our Boys Overseas Must Have Plenty of Butter-Fat Next Winter

You can do your bit to help increase Canada's supply so that shipments abroad may be greater by installing an

IDEAL GREEN FEED SILO

From it you can feed your cattle juicy, milk-producing silage next winter—just like turning them out to pasture in June.

With an Ideal Green Feed Silo you can get 20 to 25% more milk, and at the same time cut your feed bills 15 to 20%.

Write to our nearest sales headquarters for our large illustrated catalogue, which explains in detail why the IDEAL is the most economical silo and will best meet your needs.



The DeLaval Company, Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA. Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos. Alpha Gas Engines, Alpha Churns and Butterworks. Catalogues of any of our lines mailed upon request.

Montreal Peterboro Winnipeg Vancouver  
50,000 Branches and Local Agencies the World Over

Not a Kernel Will Be Wasted

With Seed Corn so precious this year you will want it planted with brains—yet maybe a "green" hand will have to do it. By all means, use a

COCKSHUTT CORN PLANTER

Anyone who can drive can plant a model field with it. It's as near to being human and yet fool-proof that any machine can be.

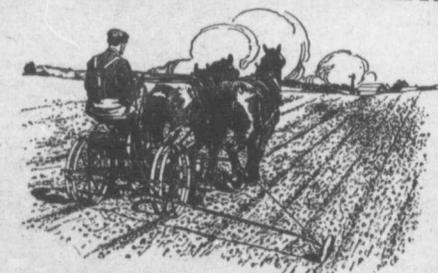
It has its famous Cockshutt light draft, with the highest grade materials, so you can get a lot of planting done in a hurry without wearing out your teams—yet it is rugged, durable and always ready for work.

Its absolute accuracy in planting has stood the severest tests again and again—yet it always delivers exactly the number of kernels desired, without the slightest bruise to the seed.

FERTILIZER ATTACHMENT CAN BE ADDED

Will sow any quantity desired. Fertilizer can be checked into the hills with the corn or drilled into rows with the seed. You can stop or change the flow by a simple movement with a foot lever without stopping the Planter. You can also alter the discharge.

A special Cockshutt corn planter folder will be sent gladly on request to the nearest Cockshutt Agent, or write our nearest branch to-day.



tances apart that you wish to do your planting. Give this machine your corn sowing to do—it will certainly get the seed into the ground in the best possible condition for germination.

COCKSHUTT PLOW CO., Limited  
Brantford, Ont.

Sold in Eastern Ontario, Quebec and Maritime Provinces by

The FROST & WOOD CO., Limited  
Montreal, SMITH'S FALLS, St. John.



YOU and I are making that mysterious, solemn thing we call character, moment by moment.—Alexander McLaren.

## The Heart of the Desert

(Continued from last week.)

KUT-LE'S eyes deepened. He turned and picked up his rifle. "Bring your friend back to dinner, Alchise," he said. "Our little holiday must end right here." They reached the camp at noon and while the squaws made ready for breaking camp, Rhoda sat deep in thought. Before her were the burning sky and desert, with hawk and buzzard circling in the clear blue. And had the old hatred of Kut-le gone? Whence came this new trust and understanding, this thrill at his touch? Kut-le, who had been watching her adoringly, rose and came to her side. The rampart hid the two from the others. Kut-le took one of Rhoda's hands in his firm fingers and laid his lips against her palm. Rhoda flushed and drew her hand away. But Kut-le again put his hand beneath her cleft chin and lifted her face to his. Just as the brown face all but touched hers a voice sounded from behind the rampart:

"Hello, you! Where's Kut-le?"

### CHAPTER XV.

#### An Escape.

Rhoda sprang away from Kut-le and they both ran to the other side of the rampart. Billy Porter, worn and tattered but still looking very well able to hold his own, stood staring into the cave where the squaws eyed him open-mouthed and Alchise, his hand on his rifle, scowled at him aggressively. Porter's eye fell on Injun Tom.

"U-huh! You pion Plute, you! I just nacherally snagged your little game, didn't I?"

"Billy!" cried Rhoda. "O Billy Porter!"

Porter jumped as if at a blow. Rhoda stood against the rock in her boyish clothes, her beautiful braid sweeping her shoulder, her face vivid.

"My God! Miss Rhoda!" cried Billy hoarsely, as he ran toward her with outstretched hands. "Why, you are well! What's happened to you!"

Here Kut-le stepped between the two.

"Hello, Mr. Porter," he said. "Billy stepped back and a look of loathing and anger took the place of the joy that had been in his eyes before. "You Apache devil!" he growled. "You snaf as smart as you thought you were!"

Rhoda ran forward and would have taken Porter's hand but Kut-le restrained her with his hand on her shoulder.

"Where did you come from, Billy?" cried Rhoda. "Where are the others?" Billy's face cleared a little at the sound of the girl's voice.

"They are right handy, Miss Rhoda."

"I'll give you a few details, Rhoda," said Kut-le coolly. "You see he is without water and his mouth is black with thirst. He started to trail Injun Tom but got lost and stumbled on us." Rhoda gave a little cry of pity and

running into the cave she brought Billy a brimming cup of water.

"Is that true, Billy?" she asked.

"Are the others near here?"

Billy nodded then drained the cup and held it out for more.

"They are just around the corner!" with a glance at Kut-le, who smiled skeptically.

"Oh!" exclaimed Rhoda. "What terrible trouble I have made you all!"

"You made!" said Porter. "Well that's good! Still that Apache devil doesn't seem to have harmed you. Just the same, he'll get his! If I shot him now, the other Injuns would get me and God knows what would happen to you!"

"Whom do you call an Apache devil?" asked Kut-le. Rhoda never had seen him show such evident anger.

"You, by Judas!" replied Porter, looking into the young Indian's face.

For a strained moment the two eyed each other, hatred glaring at hatred, until Rhoda put a hand on Kut-le's arm. His face cleared at once.

"So that's my reputation now, is it?" he said lightly.

"That's your reputation!" sneered Billy. "Do you think that's all? Why, don't you realize that you can't live in your own country again? Don't you know that the whites will hunt you out like you was a rat? Don't you realize that the folks that believed in you and was fond of you has had to give up their faith in you? Don't you understand that you've lost all your white friends? But I sup-

pose that don't mean anything to an Injun!"

A look of sadness passed over Kut-le's face.

"Porter," he said very gently, "I counted on all of that before I did this thing. I thought that the sacrifice was worth while, and I still think so. I'm sorry, for your sake, that you stumbled on us here. We are going

to start on the trail shortly and I must send you out to be lost again. I'll let Alchise help you in the job. As you say, I have sacrificed everything else in life; I can't afford to let anything spoil this now. You can rest for an hour. Eat and drink and fill your canteen. Take a good pack of meat and tortillas. You are welcome to it all."

The Indian spoke with such dignity, with such tragic sincerity, that Porter gave him a look of surprise and Rhoda felt hot tears in her eyes. Kut-le turned to the girl.

"You can see that I can't let you talk alone with Porter, but go ahead and say anything you want to in my hearing. Molly, you bring the big man some dinner and fix him some trail grub. Hurry up, now!"

He seated himself on the rampart and lighted a cigarette. Porter sat down meditatively, with his back against the mountain wall. He was discomfited. Kut-le had guessed correctly as to the circumstances of his finding the camp. He had no idea where his friend's might have gone in the twenty-four hours since he had left them. When he stumbled on to Kut-le he had a sudden hope that the Indian might take him captive. The Indian's quiet reception of him nonplussed him and roused his unwilling admiration.

Rhoda sat down beside Porter.

"How is John?" she asked.

"He is pretty good. He has lasted better than I thought he would."

"And Katherine and Jack?" Rhoda's voice trembled as she uttered the names. It was only with the utmost difficulty that she spoke coherently. All her nerves were on the alert for some unexpected action on the part of either Billy or the Indians.

"Jack's all right," said Billy. "We ain't seen Mrs. Jack since the day after you was took, but she's all to the good, of course, except she's been about crazy about you, like the rest of us."

"Oh, you poor, poor people!" moaned Rhoda.

Porter essayed a smile with his cracked lips.

"But, say, you do look elegant, Miss Rhoda. You're a good sight better."

Rhoda blushed through her tan.

"I forgot these," she said; "I've worn them so long."

"It ain't the clothes," said Billy, "and it ain't the prettier your fine health. It's more—I don't know what it is! It's like the desert!"

"That's what I tell her," said Kut-le.

"Say," said Billy, scowling, "you've got a nerve, cutting in like this when a parlor conversation you had cut in on casual. Just keep out of this, will you?"

Rhoda flushed.

"Well, as long as he can hear everything, it's a good deal of a nerve not to let him talk," she said.

"Parce!" exclaimed Billy. "Say, Miss Rhoda, you ain't sticking up for this ornery Plute, are you?"

Rhoda looked at the calm eyes of the Indian, at the clean-cut intelligence of his face, and she resented Porter's words. She answered him softly but clearly.

"Kut-le did an awful and unforgivable thing in stealing me. No one knows that better than I do. But he has treated me with respect and he has given me back my health. I thank him for that—and I do respect him!"

Kut-le's eyes flashed with a deep light but he said nothing. Porter stared at the girl with jaw dropped.

"Good Lord!" he cried. "Respect him! Wouldn't you come and get him? Do you mean that you want to stay with that Injun?"

A slow flush covered Rhoda's tanned cheeks. Her cleft chin lifted a little.

"At the very first chance," she replied, "I shall escape."

Porter sighed in great relief.

"That's all right, Miss Rhoda. He said leniently. "Respect him all you

to start on the trail shortly and I must send you out to be lost again. I'll let Alchise help you in the job. As you say, I have sacrificed everything else in life; I can't afford to let anything spoil this now. You can rest for an hour. Eat and drink and fill your canteen. Take a good pack of meat and tortillas. You are welcome to it all."

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"That's all right, Miss Rhoda. He said leniently. "Respect him all you

want to. I don't see how you can, but women is queer, if you don't mind my saying so. I don't blame you for feeling thankful about your health. You've stood this business better than any of us. Say, the squaw seems to be puttin' all her time on making up my pack. Can't I negotiate for something to eat right now? Tell her not to put pison into it."

Kut-le grinned.

"Maybe Miss Tuttle will fix up something for you, so you can eat without worrying."

"Well, she won't, you know!" growled Porter. "Her wait on me! She ain't no squaw!"

"Oh, but," cried Rhoda, "you don't know how proud I am of my skill! I can run the camp just as well as the squaws." Then, as Porter scowled at



Ready for Action on the "Firing Line."

These boys are evidently ready to commence operations on the wood pile. The award was taken on the farm of Mr. Frank Webster, Victoria, B.C. One of the boys with axe in Master Webster, and the one with the saw is a town boy, who was "doing his bit" in the last summer, and enjoyed it too.

Kut-le, "He didn't make me! I wanted to, so as to be able to take care of myself when I escaped. When you and I get away from him," she looked at the silent Indian with an expression of daring that brought a glint of amusement into his eyes, "I'll be able to live off the trail better than you!"

"Gee!" exclaimed Porter admiringly.

"Of course, in one way it's no credit to me at all," Rhoda went on, stirring the rabbit stew she was warming up.

"Kut-le—" she paused. Of what use was it to try to explain what Kut-le had done for her!

She tasted fresh tortillas and poured the stew over them and brought the steaming dish to Porter. He tasted of the mess tentatively.

"By Hen!" he exclaimed, and he set upon the stew as if half starved, while Rhoda watched him complacently.

Seeing him apparently thus engrossed, Kut-le turned to speak to Alchise. Instantly Porter dropped the stew, drew a revolver and fired two rapid shots, one catching Alchise in the leg, the other Injun Tom. Before he could get Kut-le the young Indian was upon him.

"Run, Rhoda, run!" yelled Porter, as he went down, under Kut-le.

Rhoda gave one glance at Injun Tom and Alchise writhing with their wounds, at Porter's fingers tightening at Kut-le's throat, then she seized the canteen she had filled for Porter and started madly down the trail. The screaming squaws gave no heed to her.

She ran swiftly, surely, down the rocky way, watching the trail with secondary sense, for every other was strained to catch the sounds from above. But she heard nothing but the screams of the squaws. The trail

(Continued on page 21.)



An Attractive Entrance to a Farm Home.

The illustration herewith was framed by one of our editors along a country road, near Peterboro. As will be seen, the fence across the lawn is neatly pointed and attractive. Bashes on either side of the gate, also add to the homey appearance. It pays to make our home grounds as pleasing as possible.

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The Circulation Department FARM AND DAIRY PETERBORO, N.H.



### The Upward Look

Before and Now

IT is good for me that I have been afflicted that I might learn Thy statutes."—Pa. 119: 71.

She was the gayest and giddiest of the frivolous set. Her college year. She was selfish, too. Never did it seem to occur to her to sacrifice herself for anyone else. Then the love came, also of her class, came into her life. Intending to become a medical missionary, he felt his nation's need first and went overseas. Then came the word to her that he had been wounded and there was no hope. She at once set sail, but reached him three hours too late.

Now I see her often, one of the sweetest, serious, self-sacrificing and cheerful of girls, for she is really that. Grey is her favorite color with touches of pink. Now she is particularly sought for as one of Christ's work that requires special tact and understanding.

When you look into her face and eyes, you see the suffering, the patience, the hope and the joy. For life ever holds far more than she ever imagined in those days before the greatest of joys and the greatest of sorrows were hers. She was always beautiful, but never then as she is now. Months of joy could never have given to her countenance the strength, the depth, the pathos, the trust and the joy that she now has.

Can you think of a truly noble and great-souled person who has never been to the school of suffering? On the other hand, think of those who live nearest to Christ and most for others. Has not sorrow been their portion as well as joy? Because our Heavenly Father also sends joy as well as the sorrow, which justifies and sanctifies and brings us very close to humanity and humanity's Christ—I. H. N.

home helps to build up character as well as work at school.

"The first Women's Institutes in Alberta were organized in 1912, and there are now from 180 to 200 branches with an enrollment of 8,000. Since Women's Institutes were organized we have also organized other women's association, called the United Farm Women's Association, which came into existence in 1915. The difference between these organizations is that the latter deals largely with political questions. After the franchise was given to the women in Alberta this organization went forward by leaps and bounds. Already Alberta has two women members of parliament.

"We are asking for better roads, good schools and medical inspection in the West. We are trying to overcome the menace of the mentally defective and must have a large building which will cost \$100,000. We will get it, too, though I don't know how."

### The Spirit of Unselfishness

Mrs. Walter Pariby, Ails, Alta.

SINCE the great war began we have been busy cheering one another with the thought that the world can never be the same when at last the struggle shall cease. Poor old platitudes, how mightily hard it has been worked, and even yet it is not dead. What are we doing, you and I, to ensure that this stale platitude shall become a living truth?

Who are we to say that war shall cease, the world be cured by the quick medicine of a glorious internationalism? Today the world is bleeding to death in its efforts to conquer a false nationalism, the only true internationalism, is a spirit of mutual sympathy and understanding among all the people—in other words, the spirit of unselfishness which is the essence of what we call co-operation. Until we can bring about the birth of that new spirit among the nations, until we can grow it in our own homes, our own communities, our own Dominion, as well as cry out to stop the stars in their course as bid wars to cease. Here is work for every individual woman of us, every group of organized women, work in the doing of which you may feel you are bringing perhaps a little nearer that time when there shall be a new heaven and a new earth—Extract from an address.



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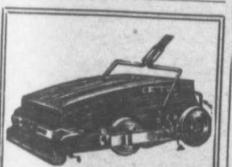
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### Items of Interest on Alberta Institutes

MRS. ELEAN MILDREW, of the Controller's Office, told the delegates at the Women's Institute Convention in Toronto, something of the work of Women's Institutes in the West and particularly in Alberta, as her home is in Edmonton. In speaking of the school question in that province she said:

"I know some of the difficulties the teachers have to put up with and I know the effort the teachers make to overcome them. But they cannot do everything themselves. The solution is to put women on the school boards. In this connection I would advise the women of the East not to put one woman on their school board. This mistake was made in one of our Western centres, with the result that she was swamped. Put in two women and then stand by them. Whenever any question on schools comes up in the West, we from the East have a tendency to tell them how well things are done in Ontario. Ontario has the best educational system. It is not well, however, to think that the Ontario system is perfect. It is a good thing to have a divine discontent.

"Out in the West we borrow ideas from the United States and they do likewise from us. One idea we borrowed from them was that home and school should be one and that there should be no distinct cleavage. Neither should the child be allowed to think that school life is beautiful and home life drudgery. The system which we have worked out is called "School Credits for Home Work". The teacher makes a bargain with the parents to keep track of the hours of work done by the child at home and marks are given by the parent for this work in a book kept for the purpose. The child is therefore taught that work at

### Watering of Plants

THE person who is successful with house plants realizes that considerable importance is laid on the watering of the plants, as they may be as greatly injured by too much water as by too little. Plants should not be watered except when they require it and then the watering should be thorough.

It is sometimes difficult to keep plants in good condition when they have to go without water for a few days. Some people fill the flower pot saucers full of water. This is a very poor plan, but it is better still to fill the bottom of the saucer which is filled with water. The pot, thus lifted gets a certain amount of air otherwise cut off from.

To tell when a plant needs watering, try this method: Knock the side of the pot sharply with your knuckles; if the resulting sound is dull you may be sure that the soil has water in it. But if the sound be hollow, then you know that the soil is dry.

When possible, place the potted plants in a pail of water. The water should not reach, of course, to the top of the pot. Now the water passes through the drainage holes to the soil. When the top surface of the soil is wet, remove the pots from the receptacle. Whatever method of water-

# "Kindling Fires in Cold Rooms"

ONE of the finest eulogies ever uttered referred to the late Earl Grey, once Governor-General of Canada:—

"He lit many Fires in Cold Rooms."

This expression summed up a life of exceptional benevolence. Any citizen might justly exert himself to deserve such a commendation.

No other expression could more aptly describe the work of a life insurance company, because it is devoted to the kindling of fires in homes that would otherwise be comfortless.

Take the Mutual Life of Canada. Since its organization in 1869, nearly twenty-three millions of dollars have been distributed among policyholders or their beneficiaries.

The hearth-fires still burn in many homes that to-day would be desolate were it not for the protection afforded by a policy in our Company.

## The Mutual Life Assurance Company of Canada Waterloo, Ontario



ing you apply let it be a thorough one. The fern ball and hanging baskets are hard things to water. This suggestion may help. Take a small can, make a pin hole opening in the bottom, and fill the can with water. Place it in the midst of the foliage in the top of the hanging basket or fern ball. The water slowly and constantly drips out of the hole in the can. If the foliage is dense, the can may be quite hidden from view.

### COOK'S CORNER

#### The Potato, a Good Friend

DESPITE the increase in price since the war, potatoes are still among the cheapest of foods. One pound of roast beef costs 10 times as much as a pound of potatoes, and 20 per cent. of beef is bone. Three and a third pounds of potatoes supply 1,000 calories of energy, at a cost of less than 10 cents, while about 2,500 calories are required for full grown persons working indoors. That is to say, if all foodstuffs as cheap as potatoes were to cost us 25 cents a day, healthy men have lived and worked for months on a diet of nothing else than potatoes, butter and a little fruit. Potatoes contain protein of the very best kind. They also contain mineral salts which neutralize harmful acids in the body. The food material in potatoes is 98 per cent. digestible.

Canadians have large supplies of potatoes, carrots, onions and turnips and by consuming these vegetables freely, they can economize with bread. More than 300 ways of cooking potatoes are known. They combine well with many flavors. They can be used to economical advantage with meat and fish, in stews, croquettes, hash, soups, and casseroles, etc. One half a cup of mashed potatoes and two cups of flour make a bread mixture that helps the flour go farther.

Good cooks know the ways of using potatoes are various—boiled, steamed, lyonnaised, baked, chipped, fried, hashed brown, creamed, scalloped, stuffed, an grain, and scores of combinations.

Canada has plenty of potatoes and, although the price is high compared to normal times, it is not high in comparison with other foods in war time.

#### Finishing Touches for Breakfast

NOTHING seems to fill the bill so nicely for breakfast in many of our homes as porridge and toast. They are easily prepared and something which we do not tire of easily. To really add a finishing touch to breakfast, however, we need fruit of some kind to eat with toast and it is sometimes difficult to vary this part of the meal. Those of us who have a supply of honey or maple syrup on hand are fortunate indeed, as either one is very palatable for breakfast. Jam or marmalade is also acceptable. Nowadays when we are urged so strongly to save sugar it is a good idea to make use of fruits for marmalade which will supply the sugar themselves. Here are several recipes which do not call for any sugar. If too tart, a small portion of sugar might be added, although it is claimed that they will be found sweet enough if directions are followed as given here:—

#### Apple-Raisin Marmalade.

To one cup ground seeded raisins add one cup chopped apples and one cup water. Cook until thickened. A little orange and lemon juice and grated rind may be added if liked.

#### Date-Prune Jam.

Wash one pound prunes, soak over

night; cook in same water and remove stones. Remove stones from one pound dates and cut in small pieces. Cook with prunes until mixture is thick. Add small amount of lemon juice.

#### Prune-Apple Butter.

Wash one pound prunes and one-half pound apricots; soak overnight; stew until very soft in same water; rub through colander. Return to sauce pan and cook slowly until thick like apple butter, being careful that it does not burn. Do not add sugar.

Cooked dried fruits such as apricots, pears, peaches or prunes may be used in combination with ground raisins also in any proportion desired and these fruits such as apricots, apples and raisins may also be combined.

Catsup added to some of these marmalades makes a simple fruit relish to serve with cold meat.

A jam which does not require any sugar is made by stoning two pounds of dates and putting them into a preserving pan with one and a half pints of water, one ounce preserved ginger and one pint lemon jelly squares. Simmer for half an hour. (Lemon juice and rind may be added if liked). This makes four and a half pounds of delicious, nutritious and cheap jam.

#### Other Folks' Clothes

With the Household Editor.

WHEN I can remember how in our childhood days we wore clothes which had been made over from an old dress of mother's or a pair of white, or probably a suit of father's which was too badly worn for further use by him. Mother would rip them up, clean and press the material and by and by we would have a dress or probably a coat which would look "almost as good as new."

It is still a common practice for children in the home to wear "other folks' clothes" in very little quantities, which no mother needs object to, especially in these days of drift. How many children there are, however, who object most strenuously to wearing clothes which are not absolutely new. Why is this? We believe the difficulty is often due to the fact that these clothes have not been made becoming to the children.

An absolute essential in making over clothes for the kiddies is to see that they are attractive and becoming. For instance, a new bit of lace or ribbon added to the costume will make a wonderful difference in the appearance. At other times instead of using one material for the whole dress, two pieces of goods like a piece of blue chambray and a piece of checked material such as gingham, would make up very nicely. We should make a special point too of having these made-over clothes fit very nicely, as this improves the appearance to a large extent. If clothes of the older children are cut down for the younger ones, special attention should be given to making the right length and length and the waist line properly adjusted. A new touch, such as a fresh yoke, will transform such a dress and please the wearer.

None of us should scorn the idea of making over cast-off clothing for the children, especially in wartime, but we should be very careful in seeing that such clothes present an attractive appearance. Just one more suggestion: Make it a point to get each child a new dress or some new article of clothing occasionally, as it will please them greatly, for children are quite as fond of new clothes as are the grownups. By doing this we will not often hear some such remark as "I just hate wearing other folks' clothes."

"I have never met," she said, "more than two really lovely women." "Ah!" she said, looking up innocently into his face, "who was the other?"

"Continued from page 307." "I twisted violet ribbons from a dress she spun about me. She stood above me, then stooped on her heaving bosom. A man was riding in the trail. Her eyes were blue. The girl seemed to be in the throoping son of a gun. Her face, full of throat and tapers, was closed by the one button miss the beautiful. In the backings, Rhoda, three to come. John DeWitt took guard face went shoulders heave. "O John! DeWitt Rhoda. "Turn Rhoda, an running away holds Lu-let!" DeWitt held of to her, unbelieving in his eyes.

Rhoda put her stretched, shaking. "Rhoda, DeWitt gasped, in his eyes. For an instant his heaving chest was wet with tears. He had stopped. It was only for a moment. Her face was pale. "Come!" she cried. "Take my arm, carry you!" "Fuh!" she exclaimed. "Keep up with me, DeWitt, DeWitt stopped and mouthed. Then a superb health she line of face and big eyes. Rhoda, I never thought way!" Rhoda gasped. "I am so strong!" "Where are the DeWitt, running?" "What were those?" "Billy Porter found shot Alchide and I and Katie were with them. Then Rhoda has ought to go back an. But John pulled up. "Leave you until I see why, Billy himself. I thought of me there, a three Witt pointed to a we swing around to diana won't see us!" "Hand in hand, the swinging trail. The pursuit was on them. merced their first job left them panic-stricken. He ran with his hand, when well heat of the desert, the pace no longer rapid walk. Still the of pursuit.

"Was Porter hurt?" "Not when I left." "I wonder what he John." "He left the to trail Injun Tom. him as quick as a camp."

Rhoda looked up at ly. "You are very the John." "And you!" cried down at the girl wit. "What comes to you?" "I never dreamed it be health like this! I ped, with head to one bear anything? What

130-Egg Incubator and Brooder for \$15.75. Includes text about ordering, shipping, and contact information for Wisconsin Incubator Co.

Big Yields—Less Labor. Cutaway Double Action Disk Harrow. Includes text about the benefits of the harrow and contact information for The Cutaway Harrow Co.

**The Heart of the Desert**

(Continued from page 18.)  
 twisted violently near the desert floor. She sped about one last jutting boulder. Then stopped abruptly, one hand on her heaving breast.

A man was running toward the foot of the trail. He, too, stopped abruptly. The girl seemed a marvel of beauty to him. With the curly hair beneath the drooping sorbrero; the tanned, flushed face, the parted scarlet lips, the throat and tiny triangle of chest disclosed by the rough blue shirt, the one button missing from the top, and the beautiful lithe legs in the clinging buckskins, Rhoda was a wonderful thing to come upon unexpectedly. As John DeWitt took off his hat, his hard-gard face went white, his stalwart shoulders heaved.

"O John! Dear John DeWitt!" cried Rhoda. "Turn back with me quick! I am running away while Mr. Porter holds Kule!"

DeWitt held out his shaking hands to her, unbelieving rapture growing in his eyes.

**CHAPTER XVI.**

**Adrift in the Desert.**

Rhoda put her hands into the outstretched, shaking palms.

"Rhoda! Sweetheart! Sweetheart!" DeWitt gasped. Then his voice faltered.

For an instant Rhoda leaned against his heaving chest. She felt as if after long wandering in a dream she suddenly had stepped back into life. But it was only for the instant that she paused. Her face was blazing with excitement.

"Come!" she cried. "Come!"  
 "Take my arm! Or had I better carry you?" exclaimed DeWitt.  
 "Huh!" sniffed Rhoda. "Just try to keep up with me, that's all!"

DeWitt, despite the need for haste, stopped and stared at the girl, open-mouthed. Then as he realized what superb health she showed in every line of face and body, he cried:

"You are well! You are well! O Rhoda, I never thought to see you this way!"

Rhoda squeezed his fingers joyfully. "I am so strong! Hurry, John! Hurry!"

"Where are the Indians?" panted DeWitt, running along beside her. "What were those shots?"

"Billy Porter found our camp. He shot Alchise and Injun Tom and he and Kule were wrestling as I ran." Then Rhoda hesitated. "Perhaps you ought to go back and help Billy!"

But John pulled her ahead.  
 "Leave you until I get you to safety! Why, Billy himself would half murder me if I thought of it! Our camp is over there, a three hours' trip." DeWitt pointed to a distant peak. "If we swing around to the left, the Indians won't see us!"

Hand in hand the two settled to a swinging trot. The dreadful fear of pursuit was on them both. It submerged their first joy of meeting, and left them panic-stricken. For many minutes they ran without speaking. At last, when well on into the burning heat of the desert, they could keep up the pace no longer and dropped to a rapid walk. Still there came no sound of pursuit.

"Was Porter hurt?" panted John.  
 "Not when I left," answered Rhoda.  
 "I wonder what his plan is?" said John. "He left the camp yesterday to trail Injun Tom. We'll go back for him as quick as I can get you to camp."

Rhoda looked up at DeWitt anxiously.  
 "You are very tired and worn, John," she said.

"And you!" cried the man, looking down at the girl with the swiftings, wireless stride. "What miracle has come to you?"

"I never dreamed that there could be health like this! I—" She stopped, with head to one side. "Do you hear anything? What do you suppose

**FARM AND DAIRY**

they are doing to each other? Oh, I hope neither of them will get killed!"  
 "I hope— They have all promised to let me deal with Kule!" said DeWitt, grimly, pausing to listen intently. But no sound came across the burning sands.

Rhoda started at DeWitt's words. Suddenly her early sense of the appalling nature of her experience returned to her. She looked with new eyes at DeWitt's face. It was not the Newman ranch. John had the look of a man who has passed through the fire of tragedy. She gripped his burned fingers with both her slender hands.

"O John!" she cried. "I wasn't worth it! Let's get to the camp quickly, so that you can rest! It would take a lifetime of devotion to make up for that look in your face!"  
 John's quiet manner left him.

"It was a devilish thing for him to do!" he said fiercely. "Heaven help

him when I get him!" Then before Rhoda could speak he smiled grimly. "This pace is fearful. If you keep it up you will have a sunstroke, Rhoda. And at that, you're standing it better than I!"

They slowed their pace. DeWitt was breathing hard as the burning lava dust bit into his throat.

"I haven't minded the physical discomfort," he went on. "It's the mental torture that's been killing me. We've pushed hot on your trail hour after hour, day in and day out. When they made me rest, I could only lie and listen to you sob for help until— O my love! My love!"

His voice broke and Rhoda laid her cheek against his arm for a moment. "I know! O John dear, I know!" she whispered.

They trudged on in silence for a time, both listening for the sound of pursuit. Then DeWitt spoke, as if he forced himself to ask for an answer that he dreaded.

"Rhoda, did they torture you much?"  
 "No! There was no torture except that of fearful hardships. At first— you know how weak and sick I was, John—at first I just lived in an agony of fear and anger—sort of a nightmare of exhaustion and frenzy. Then at Chira I began to get strong and as my health came, the wonder of it, the— Oh, I can't put it into words! Kule was—" Rhoda paused, wondering at the reluctance with which she spoke the young Indian's name. "You missed us so narrowly so many times!"

"The Indian had the devil's own luck and we always blundered," said DeWitt. "I have had the feeling lately that my bones would be bleaching on this stretch of Hades before you ever were heard of. Rhoda, if I can get you safely to New York again I'll shoot the first man who says 'desert' to me!"

(Continued next week.)



**Complete Service to Ford Owners Everywhere**

**C**OURTEOUS attention to your needs wherever you may travel is something you appreciate, and being a Ford owner you can get it. You are always "among friends".

There are more than 700 Ford Dealer Service Stations throughout Canada. These are always within easy reach of Ford owners— for gasoline, oil, tires, repairs, accessories, expert advice or motor adjustments.

The cost of Ford Service is as remarkably low as the cost of the car itself. Nineteen of the most called for parts cost only \$5.40. Just compare this with the cost of spare parts for other cars and you will realize the advantage of owning a Ford.

**Ford**  
 THE UNIVERSAL CAR

- Runabout . . . \$578
  - Touring . . . \$595
  - Coupe . . . \$770
  - Sedan . . . \$970
  - One-Ton Truck \$750
- F. O. B. FORD, ONT.

F. O. B. FORD, ONT.

**Ford Motor Company of Canada, Limited**  
 Ford, Ontario



"The man you can hire to work on a farm for nothing will just about earn his wages."—Josh Billings

IT'S the same with cheap farm engines as with cheap farm help. You can buy a poorly designed, cheaply made engine for less than the price of an Alpha, but you will find that a cheap engine is always "balking" or getting out of kilter just when you need it most.

And there will be endless expense for repairs.

You will practice real economy by buying an

## ALPHA GAS ENGINE

which runs along, day after day, without giving you any trouble. You can always depend on the Alpha.

In the Alpha there are none of the trouble-making contrivances that render so many "farm" engines impracticable. It contains no delicate electric batteries, but runs on a simple, low-speed magnet, guaranteed for the life of the engine.

Alpha Gas Engines are made in twelve sizes, 1½ to 28 H. P., and each size is furnished in stationary, semi-portable or portable style, with hopper or tank-cooled cylinder. Write or call up the nearest Alpha selling agency today, or if you don't know who they are, write us direct.

## THE DE LAVAL COMPANY, Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA.  
Sole manufacturers in Canada of the famous De Laval Cream Separator and Ideal Green Feed Silos. Alpha Gas Engines, Alpha Churns and Butterworks. Catalogues of any of our lines mailed upon request.

MONTREAL    PETERBORO    WINNIPEG    VANCOUVER  
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

Not made over—  
Not added to—  
Built right, basically)

That's the Sharples Suction-feed Cream Separator.

No loss-alarm tacked onto it to remind you to turn faster.

Sharples skims clean at any speed, so it is not necessary to put on a contraction to prod you up to a fixed speed. You can judge how important this is when tests show that 95 per cent. of all separators are turned under speed much of the time, causing a waste averaging 10 pounds of butter per cow yearly. Sharples saves all this—automatically.

## SHARPLES SUCTION-FEED CREAM/SEPARATOR

The skin-clean-at-any-speed principle (suction-feed) is built into the Sharples, just as Nature built teeth into you. When you don't have any Nature-teeth, store-teeth are better than none, but they never measure up to the built-in kind. Think that over! Sharples construction has also eliminated troublesome discs—the simple tubular bowl containing but one piece. There are only half as many parts as in other separators—that's why a Sharples lasts longer than any other. Write for catalog to nearest office, addressing Dept. 77

Toronto, Ont. The Sharples Separator Co. Regina, Sask.  
The Mitchell & McGregor Hardware Co., Brandon, Man.  
Distributors for Manitoba



## The Makers' Corner

Butter and Cheese Makers are invited to send contributions to this department, in connection with matters relating to cheese making, and to suggest subjects for discussion.

### New Plan for Cow Testing

THE Dairy Record Centre, of which \$5 have been in operation in Canada, is to be abolished. The Dairy Commissioner proposes to enlist the services of cheesemakers and buttermakers or other qualified persons to do the testing at the rate of 10 cents per test, the milk testers to provide their own equipment. This remuneration we believe will be sufficient to induce many cheesemakers and buttermakers to get their patrons interested in the work of keeping herd records.

The cheese factories and creameries are natural centres for herd record work. The samples are conveniently collected on the milk or cream wagons and it is always easy to communicate with members who are patrons of a cheese factory or a creamery. An increase in the production of the herds in the district means not only greater returns to the farmers themselves, but a larger output for the creamery or cheese factory, thus ensuring a larger revenue for those who are depending on it. In many localities, an industrious man could earn very good wages by devoting his whole time to the business of testing milk, while at almost any cheese factory or creamery the wages of one assistant could easily be earned.

In order to carry on herd record work in any district under the new arrangement, it will only be necessary for the farmers to cooperate with some qualified milk tester by weighing and sampling each cow's milk night and morning, on three days every month, and by delivering the samples at the appointed place of testing.

The Department of Agriculture, through the Dairy and Cold Storage Commissioner's Branch, will—

- employ a supervisor in each province;
- pay 10 cents per test for all Babcock tests made and recorded on the sheets sent to Ottawa;
- make the necessary calculations and send every farmer a monthly statement of the milk and fat produced by each cow in the herd, also send each cow's total production at the end of the season; and
- supply blank forms for recording weights and tests of milk, preservative tablets for the composite samples and sulphuric acid for testing. The routine as far as the farmers are concerned will be the same under the new plan as it has been heretofore and the same forms will be used.

### How the Province Stands

THE following table shows the number of cheese handled by the Cheese Commission from June 1 to December 31, 1917, by provinces, with the percentage of different grades in each case.

Table 1.—Classification of Cheese.

Province of Origin	Boxes	Grades	
		No. 1	No. 2
Ontario	1,697,365	843	20
Quebec	748,719	79.88	37.13
P. E. I.	17,483	98.85	9.00
Dominion	1,861,537	84.32	14.85

The standards on which the classification was made are practically the same as those which have been observed in the trade for many years. Roughly speaking grade No. 1 may be described as including all cheese of good commercial value, well boxed, and having no objectionable flavors. Cheese were considered No. 2 grade

## CULTIVATE For Greater Production

The better the cultivation, the better the growth.

Men right around you found the benefit of first-class cultivation last year. In the construction of the Peter Hamilton Cultivator, every need has been considered and every requirement provided for. The different groups of three rows of teeth are subdivided again, and the front teeth are attached to an overhead shaft, back row to another. All teeth cultivate to an even depth and thoroughly work up every inch of ground.

### PETER HAMILTON Cultivator

Is a light draft implement, in spite of its superior strength. Teeth are strongly reinforced and will stand all the hard work they will get. Sections are made from extra heavy steel. See the Peter Hamilton Cultivator before buying.

Agents wanted  
in open territory

The Peter Hamilton Co. Ltd.  
PETERBORO, ONT. 17



## CURDALAC AND SPONGY PEPSIN

(STANDARDIZED)

The First and Original Peptic Compound. Not an experiment. Time-tried and a demonstrated success in the manufacture of Canadian cheese.

## START-O-LAC

(LACTIC ACID CULTURE)

A pure culture of selected and tested lactic-acid-producing bacteria for preparing milk and cream, and improving the quality and flavor of cheese, cottage cheese, butter and buttermilk.

## GERMTOX

(NOT A POISON)

A scientifically prepared Germicide, Disinfectant and Deodorant. The ideal sterilizer for all dairy utensils.

The above products are sold by all dealers in dairy supplies.

Write to us for descriptive booklets and any other desired information.

PARKE, DAVIS & CO.  
WALKERVILLE, ONT.  
MONTREAL, QUE.

Mention Farm & Dairy  
When Writing

If there were of flavor, true acidity, too much gassy, cracked finish, or too or more of the to place the ci 3 grade cons were badly of rancid, or very any cheese on No. 2 grade on degree.

The quantities of forest districts in the matter of the II.

Table II.—Onta

District. In Western Ont. 4 Northern " 24 Central " 24 Eastern " 75 In subdivision "Western Ont. territory west of "Northern Ont. 5 Suburbary a "Central Onta province and Lennox and Add "Eastern Ont. 2 Frontenac and extension to the Q The action of sion in setting tween the price grades allows the monetary loss su from poor cheese 2 the patrons rec less for their mil No. 1, and 10 c cheese.

### Greater Pro

WORKING A between the ment of Ag Canada Food Board and the Provincial riculture on the agreed upon and ganization are now pletion. Ontario 1,600,000 additional Quebec, 600,000 ad the Maritime prov or an increase of A greater product be formed in every ish, the members of fessional farmers vi visit their neighbor secure the earnest

The Ontario Depar ture is hopeful for a duction in Ontario 2 000 bushels, this be cause of the restrict wheat; 20,000 cards production of the sent out as well as describing the best wheat growing in Ont just 182,000 acres wheat in the provin 500,000 acres in silm be attained if 100,000 raise five acres of spr

Regulations have b Ottawa prohibiting a stock in the live sto eight hours immedi slaughter. No wheat shall be used for feedi stock yards, no ba No. 3 and no oats ab Regulations also prov son shall purchase wh the purpose for the f, except where wh grown with other gra be separated economic mixture not to contain per cent. of wheat. A lastly any of the prov regulations is liable to exceeding \$200 and not to imprisonment not ex led of three months, of and imprisonment.





Road Street, Oakville, Ont. Constructed with "Tarvia-X" in B.E.S.

## How Good Roads Reduce the Cost of Living---

**G**OOD roads are like oil in machinery — they reduce friction-resistance. Without good roads a community rusts—sticks—stagnates. With good roads, the wheels of industry spin and produce. Good roads multiply the earning power and value of remote farms. They bring a new flood of produce to the freight-station. They increase the community's buying power and make for prosperity.

Bad roads add to the cost of every ton that drags its weary way over them, while good roads set the farm-wagon, automobile and motor-truck rolling smoothly to market. Government statistics prove

that the people of backward counties often waste, in a few years, in excessive hauling costs, money enough to build a big system of modern roads.



Good roads used to be expensive to construct and keep up. To-day they are not.

Built and maintained with Tarvia, modern roads are made automobile-proof, frost-proof and durable. Over a period of years Tarvia Roads are less costly than any other form of good-road construction. They are a delight to owners of horse-drawn vehicles and motor-cars alike. They give horses perfect traction.

A system of Tarvia Roads in your community will do much to increase its prosperity and reduce the high cost of living. We have booklets about Tarvia which we would be glad to send you if you are interested.

## The Barrett Company

MONTREAL TORONTO WINNIPEG VANCOUVER  
ST. JOHN, N. B. HALIFAX, N. S. SYDNEY, N. S.

# PEERLESS PERFECTION

For the Big Ranch, or the small farm, put up a fence that will last a lifetime, that does not serve only as a mere boundary line, but one that gives real fence service—one that is built strong enough to withstand the onslaughts of stock as well as the ravages of all kinds of weather.

**PEERLESS Perfection** is one of the easiest fences to erect, because it stays "put." It can be erected over the most hilly and uneven ground, without backing, or running through streams, or rusting.

Animals can't break through it no matter how they attack. It simply can't be broken. Just spring back in shape like a bed spring. It's made of heavy Open Hearth steel galvanized wire with all the impurities taken out and all the strength and toughness left in. Will not corrode or rust. Top and bottom wires are extra heavy. Will not sag. Requires less posts than ordinary soft wire fences. Absolutely guaranteed.

Send for Literature agent. We also make a complete line of poultry and cranberry fencing. Agents wanted everywhere. Agents wanted in unassigned territory.

The Barwell-Buzin Wire Fence Co., Ltd.  
WINNIPEG, MAN. HAMILTON, ONT.

## Direct Tax on Farmers

**A** DESPATCH from Ottawa to the Toronto Globe forecasts direct federal taxes on the farming industry. It reads as follows.

"Plans for the taking of a direct taxation on the farming community. So far all farmers are practically exempt from war taxation on incomes or other forms of direct Federal taxation. But, with the imperative need of increased revenues to meet the burden of the war and its aftermath, the Government realizes that increased direct taxation falling on everything must come. As yet there is no adequate or detailed information as to the form of the questionnaires sent out to each farmer asking for data as to his revenues and expenditures, the value of his land, stock, buildings, etc., the net return on his investment after allowing a reasonable amount for the labor of himself and family, and all other information tending to show as accurately as possible the financial status and yearly income of each farmer.

"Details as to the method and time of taking the census are still to be settled, but it is probable it will be made in connection with the coming national registration next June."

Elsewhere in this issue of Farm and Dairy, farmers are requested to fill in forms to be provided, in connection with the new federal income tax order. If this despatch in the Globe be correct, still further direct taxation must be in contemplation.

## Items of Interest

Mr. P. F. Woodbridge, secretary-treasurer of the United Farmers of Alberta for nearly seven years, has, on account of ill health, been forced to give up his arduous task. His plans for the future are still indefinite, but his present intention is for a time at least to return to an outdoor life and in all probability for the immediate future, he will reside in British Columbia.

Prizes of \$30, \$20, \$10, \$7 and \$5 are being awarded in each of four districts in Ontario by the Ontario Vegetable Growers' Association for the best gardens of three acres or more. An entry fee of one dollar is being charged which may be forwarded along with the application to the secretary of the association, Mr. J. Lockie Wilson, Toronto.

Not 25 per cent. of the available maple trees in Canada are being tapped. Statistics show that out of 55,000 farmers in Eastern Canada who produce maple sugar and syrup at all, only very few tap more than a quarter of the trees they have available on their farms. This 25 per cent. production is worth \$1,500,000 annually. This amount might easily be doubled. One man can take care of doubling the sap from 5,000 trees as easily as from 500.

Canadian fertilizer manufacturers have united in establishing a Soil and Crop Improvement Bureau with headquarters in the Temple Building, Toronto. This is a purely educational bureau, whose purpose it will be to disseminate reliable information on crop production and the use of fertilizers. The work is under the direction of Henry J. Bell, who has been in charge of similar work in the United States, formerly Professor of Agronomy at the University of Maine and Assistant Professor of Fern Crops at the Iowa State College. Prof. Bell is a native of Ontario and a graduate of the Ontario Agricultural College. "How to Increase Ontario

## Niagara Soluble Sulphur

San Jose Scale, Oyster Shell, Blister Mite, Peach Leaf Curl, Aphid and Peari Scylla are more easily and effectively controlled with Soluble Sulphur than Lime Sulphur.

Thousands of farmers in Canada and the United States have proven by actual use that Niagara Sulphur is an excellent fungicide and combats with Calcium Arsenate it makes the best insecticide.

**Costs Less Than Lime Sulphur**  
Soluble Sulphur saves many dollars per acre on the use of spraying. A 100-pound drum costs less than a barrel of Lime Sulphur; makes more spray, says its freight on 500 lbs. water. No leak—no loss.

THE NIAGARA SPRAY GUN should be part of every spraying and does the job more thoroughly. Everything for Spraying and Dusting.

**Niagara Brand Spray Co. Limited**  
Burlington, Ont. 600 lbs. Lime Sulphur

## FOR SALE AND WANT ADVERTISING

THREE CENTS A WORD, CASH WITH ORDER

**WANTED**—Assistant for Rocket Cheese Factory, for season, one with or without experience. Apply stating wages, Wm. Landon, Rocket, Ont.

**WANTED**—A cheese factory to manage for 1918, with supplies furnished; these make not under \$50,000 lbs. Am also who butter maker; 20 seasons' experience. Hold certificate. Bert Coulter, 9 Crowdy street, Kingston.

**FOR SALE**—Privet, Barberry, Cedar, Spruce, Fir, Oak, Chestnut, Walnut, Maple, Alder, Hedges, Windbreaks, Timber, mailing site. Prepaid. Dozen name variety, one dollar hundred, five dollar Lists free. John Downham, Strathroy, Ont.

**FOR SALE**—O. A. C. No. 71 Onta at \$1.25 per bus.; O. A. C. No. 21 Barby at \$1.75 per bus. Forgoing from registered. Apply to J. T. MIBNER, Barby, Ontario.

## DAIRY CONFERENCE

to be held in the Massey Hall, O. A. C., Guelph, APRIL 4th AND 5th, 1918

The spring of the year is a good time to consider plans for greater efficiency in dairying for the coming season.

Speakers for this conference are: Hon. Mr. Cressy; (Co-Operative) Dr. Creelman, Dr. G. L. McKay, Chica, Ontario; Mr. Robinson, Toronto; Messrs. Stonehouse and Doherty, representing Milk Producers; J. Bingham, Ottawa; W. H. Porter, Hamilton (Milk Dealers and Joe Creams); G. A. Putnam, E. J. McLean, (Produce Dealers); F. Boyce (Cheese Mfrs.); F. Hertz, G. C. Fubrow, (Milk Producers); Dr. McMillan, S. B. Trainer.

The President of the Eastern and Western Dairymen's Association, Mr. M. L. Long and Dr. McMillan, one of the speakers, will be in charge of the session.

Two of the sessions will be devoted to the Association at the first session. The following is the program for the first phase of Dairy Industry in Ontario. Every dairymen and dairywoman is invited. Meet at 9:30 in evening session. For programs, apply to H. H. DEAN, O.A.C., GUELPH, ONT.

Crop Yields," the first bulletin from this bureau is now ready for distribution.

## Spring Management

A. A. McMillan, M.A.S. Spring approaches and getting feeding space. If this should be required, are expected to lamb the warmest and most pen in the building. be taken that the floor level, as ewes the lamb are more apt. The lambing be provided with eggs a number of individuals can easily be constructed. These are to and are built along the of the pen. The ewe in the individual lamb of twins being born, together and there is either of the lambs from the mother. This ewe to mother one of

# Food

Greater Canada are importance. on old soils adian yields, except when ods produce pictured here

Announcement of Canadian farmers' movement B. College, later of Canadian

## DAIRY

If the labor p crop you can per cent. by selection and J and thus use it. Fertilizers food constituent, but in more. Dr. C. A. Zav following results used with winter of 5.2 bushels per bush applied in the of 8.3 bushels per bush spring.

## Send Soil

**Spring Management of Ewes**

A. A. McMillan, Macdonald College.  
 AS spring approaches and the ewes are getting heavy in lamb they will require more pen and feeding space. If the flock is large it should be divided, and ewas which are expected to lamb first removed to the warmest and most comfortable pen in the building. Care should also be taken that the floors of the pens are level, as ewes that are heavy in lamb are more apt to get on their backs. The lambing pen should also be provided with equipment, so that a number of individual lambing pens can easily be constructed when required. These are usually movable and are built along the warmest side of the pen. The ewe is much quieter in the individual lambing pen. In case of twins being born, both are kept together and there is no danger of either of the lambs getting strayed from the mother. The failure of a ewe to mother one of her lambs in-

variably results from one lamb getting strayed from its mother shortly after birth. In case the ewe requires special attention at lambing, this can be given in the separate pen without disturbing the rest of the flock. Good ventilation should be provided in the lambing pen as the ewes must, of necessity, be more closely confined. It is important that the attendant be on hand at lambing time to see that everything is going well. Ewes should not be disturbed unless assistance is necessary. The most common causes of trouble at lambing are large lambs and malpresentations. In the first case the ewe may be assisted in giving birth to her lambs, and in the second case the attendant should make himself familiar with the various forms of malpresentation and the method of correcting same. Failures on the part of the attendant to service the ewe will necessitate the aid of a veterinarian.

Enough Milk for Twins.  
 With proper feeding a ewe usually

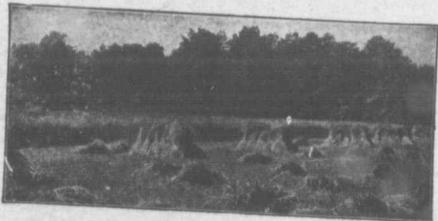
has sufficient milk for two lambs. When three lambs are born, the third that has only one lamb or one that may have lost her lamb. If a ewe dies after giving birth to a lamb, or if a ewe for some reason cannot raise her lamb, it should, if possible, be placed with another ewe rather than trying to raise it on the bottle. The change is most readily made shortly after the lambs are born. In some cases the change may be made without difficulty while in other cases the ewe obstinately refuses to mother a strange lamb. In such instances various methods are used to induce the ewe to adopt the lamb. When a lamb placed on the ewe may be removed and ewe to adopt and usually no trouble is experienced. The ewe may also be closely penned or tied, the lambs brought in only at regular intervals until the preference disappears. This may be assisted by milking some of her own milk on the head

of the strange lamb and by the application of strong smelling drugs to the nose of the ewe, such as alcohol, brandy, etc.

A few days after lambing the ewe may be gradually brought back to her full grain allowance besides giving her all the hay and roots she will eat. A little oil cake may be added to the oat and bran ration, particularly if clover or alfalfa hays are not available. Mangelis may be substituted for swedes as they are better milk producers. The ewes should be kept on a liberal and highly nitrogenous ration until they are turned to pasture. At ten days to two weeks of age the lambs will usually begin to nibble at grain and they should be given all they will eat. A lamb creep provided with a trough will allow them to feed at their leisure. Crushed oats, bran and oilcake together with clover or alfalfa leaves provides a suitable ration for growing lambs. The change from inside feeding to pasture should be made gradually.

# Forty-nine bushels to the acre

Grown in Ontario



Greater Crop Yields

The splendid wheat yield pictured here was grown in Western Ontario last summer on well prepared soil enriched with 300 pounds of fertilizer

Greater crop yields in Canada are of world-wide importance. European yields on old soils far exceed Canadian yields on new soils—except when improved methods produce crops like that pictured here.

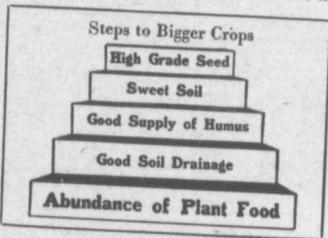
Announcement: The Canadian Fertilizer Association have established a Bureau which will encourage and assist Canadian farmers to achieve greater results in soil tillage, fertility maintenance and crop production. This Soil and Crop Improvement Bureau, under the direction of Henry G. Bell (a native of Ontario and a graduate of the Ontario Agricultural College, later Prof. of Agronomy University of Maine), co-operates with all organizations working for the improvement of Canadian Farming. Farmers are urged to take full advantage of this valuable information service which is free to all.

## Fertilizer

If the labor problem limits areas under crop you can increase yields 50 to 75 per cent by careful soil preparation, seed selection and judicious use of fertilizers, and thus use the labor to best effect.

Fertilizers carry exactly the same plant food constituents as are carried by manure, but in more concentrated form.

Dr. C. A. Zavits reported in 1917, the following results. Complete fertilizer used with winter wheat gave an increase of 5.2 bushels per acre at a cost of 82 cents per bushel (pre-war prices) when applied in the autumn; and an increase of 8.3 bushels per acre at a cost of 51 cents per bushel when applied in the spring.



### What to Do Now

Top-dress fall wheat with fertilizers. It is your last opportunity to increase 1918 fall wheat yields. Prepare to fertilize spring crops. Use fertilizers this spring and profit by high crop prices.

## Manure

Manure spread thin yearly (4 or 5 tons per acre) pays better than manure applied in equal quantity at one application every four or five years.

8 tons manure (protected from rain and snow) strengthened by 320 lbs. acid phosphate to the acre increased wheat yields at Ohio Experimental Station 5.38 bushels per acre.

Similar fertilization increased corn yields 11.54 bushels per acre.

If you do not have enough manure to apply this quantity per acre, use complete fertilizers rather than acid phosphate.

Send postal card today for Bulletin, "How to Increase Ontario Crop Yields"

**Soil and Crop Improvement Bureau**  
 of the Canadian Fertilizer Association  
 1111 Temple Building, Toronto



# Yes! Yes! We Will Wait

100 For the Self Selling, Satisfying Sale of 100  
Honest, Healthy, Handsome

## HOLSTEINS

By Belleville Sold on April 3rd  
Big Business Breeders

Whose past seven spring sacrifice sales are guarantees of faith, friendship, fraternity and Big Bargain Buying

Catalogue now ready to mail to you.

ADDRESS

F. R. MALLORY, Frankford, Ontario



**THE FARMERS SEEDSMAN SEEDS FIFTY-TWO YEARS SERVICE**

1866 **DECIDE WHAT TO PLANT NOW!** 1918

Seeds will be in greater demand this year than ever before on account of the big shortage of good seed and the Government's demand for increased production. Do not delay your order. Make your selections now from our new catalogue and get the best seed money can buy and pay no more than you should.

<p><b>CORN.</b></p> <p>On account of the severe shortage of seed corn this year, practically none being obtainable from Canada—we will accept orders NOW for seed corn (shelled) Southern grown, subject to our receiving delivery from United States War Board. This corn is of excellent quality and is on the way now. We quote the following varieties—</p> <p>Red Cob ..... 5.00 Early Prince Charlie ..... 5.00 (Would do as a substitute for Wisconsin No. 7.) Leaming Improved ..... 5.00 Leaming Fodder ..... 5.00 Mammoth Southern ..... 5.00 Freight paid on all orders of 25¢ and over to Ontario and Quebec points.</p>	<p><b>GLOVER AND TIMOTHY.</b></p> <p>Government Standard bushel No. 1 Red Clover ..... 24.00 No. 1 Alsike, No. 1 for purity ..... 15.50 Alfalfa, Ontario variegated No. 2, almost No. 1 for purity ..... 24.00 Sweet Clover, White Blossom ..... 15.00 No. 1 Timothy, extra No. 1 for purity ..... 6.25 No. 2 Timothy, extra No. 1 for purity ..... 5.75 No. 2 Timothy, No. 1 for purity ..... 5.25 Kentucky Blue Grass, 2½¢ per lb., postpaid, 25¢ lb. Marquis Spring Wheat (Ontario grown) ..... 2.00</p>
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We are in the market for 4-rowed and 2-rowed Barley, Marquis Wheat, Emperor Black Barley, Sweet Clover hay, Buckwheat, O. A. C. No. 3 Oats, Silver Hulled Buckwheat. Send samples. We pay railway freight to all parts of Ontario and Quebec on orders of \$25 or more.  
Bags for Clover and Timothy, 45¢ extra. Bags for Grain Free.

GEO. KEITH & SONS  
SEEDS

124 KING ST. E.  
TORONTO

Deal with Farm and Dairy Advertisers

### MAPLE GORE HOLSTEINS

Our 3-year-old Pauline cow has just completed a record of 6144 lbs. milk, 28.02 lbs. butter, 7 days; 2604 lbs. milk, 117.30 lbs. butter in 35 days. Her son, 2 months old, and grandson 3 months old, sired by our Alpartra bull, whose dam and sire's dam, average over 50 lbs. butter in seven days; also another grandson, 5 months old, sired by the 30-lb. bull, KING SIDGE OF FOREST RIDGE, for sale at reasonable prices. These are choice and will please you.

ELS WORTH PLANT R. R. NO. 2 BURFORD, ONT.

## Complete Dispersion Sale of Pure Bred Holsteins Monday, April 1st, at 1 p.m.

Owing to the scarcity of help I have decided to sell by Public Auction at my farm about three miles east of Brampton, my entire herd of Pure Bred Holsteins.

The offering consists of 35 cows and heifers, either fresh, or due to calve, some with R.O.M. and R.O.P. official records, others not tested.

ALSO THE HERD BULL, LAKEVIEW JOHANNA RATTLER, 25763, whose dam is the highest producing daughter of LAKEVIEW RATTLER, 37.54 lbs. butter in 7 days, and also former Canadian Champion in the 8 mos. after calving division. This bull is 2 years old, a show animal, and second to none in Canada in point of type or breeding.

Brampton can be reached by either C.P.R. or G.T.R., and is only a half hour's ride from Toronto.

In corresponding, address

B. F. SWEDELIUS. R. R. No. 4. Brampton, Ont.

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You a

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SIMPLY CAN'T

Filter makes it able to  
the lightest rainfall  
elevation and rapid  
speedily. Made in  
Greece is rightly call

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because of its  
safety, durability, et  
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Write today for  
GILSON MANUF

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same style and p  
L. ROGERS

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BEANS—Rangle

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BEEF—Rennie's

CABBAGE—Ren

CARROT—Renn

CORN—Rennie's

CUCUMBER—W

LETTUCE—Renn

Nonparal

MUSKMELOON

Lined

PARSLEY—Chan

PEAS—Little Ma

Improved

RADISH—Cooper

TOMATO—Bonn

Early

TURNIP—Golden

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THE WILLIAMS R  
KING & M  
150 A

# HILL-CREST HOLSTEINS

TYPE-BREEDING-PRODUCTION

The Union Stock Yards—Toronto—Thursday, March 28, 1918

You are cordially invited to attend.

This Sale will set the Price for yours—Make it a "Hummer."

## THE WONDERFUL GILSON

**SIMPLY CAN'T BE CLOGGED.** The simple, scientific, carefully worked-out construction of the light running Gilson Silo elevator makes it absolutely impossible to clog the throat of the blower. The Gilson elevator and rapid work with light power. A 4 h.p. operates the small size silos in rightly called the

### KING OF SILO FILLERS

because of its remarkable elevating powers, absolute safety, durability, strength and simplicity—it stands on wheels; patented safety reverse—and is guaranteed to cut and elevate more tonnage with the same power than any other engine cutter in the world. Write today for catalogue and proof. Manufactured and guaranteed by—  
GILSON MANUFACTURING CO. LTD. 507 York St., GUELPH, Ont.



"GOES LIKE BUTY"

## CREAM WANTED

We again solicit the patronage of both old and new shippers for the coming season. Shipments will receive the same careful attention as in the past, and highest prices will be paid promptly for good churning cream.

WRITE US FOR PRICES AND PARTICULARS.

Reference, Merchants' Bank, or any of our cream shippers.

Valley Creamery of Ottawa, Ltd.  
319 Sparks St., Ottawa, Ont.

## CREAM WANTED

We supply cans. We pay all express charges. We remit daily. We guarantee highest market prices. For prompt service ship your cream to us. A card will bring you cans.

MUTUAL DAIRY AND CREAMERY COMPANY  
N. Yankoo & Co.,

743 KING STREET WEST

TORONTO, ONT.

## 12 MONTHS OLD SIRE

SUNNYBRAE SYLVIVUS—more black than white; straight lines; low down; heavy body. Price for quick sale \$100.  
SUNNYBRAE VALENTINE RATTLER—10 months; 3/4 white; same style and price.

L. ROGERS "SUNNYBRAE" MANVERS, ONT.

# RENNIE'S SEEDS

**FOOD** production—that is the big cry for 1918. Everyone must produce as much as possible—which means every available square yard under cultivation, and the widespread use of Rennie's seeds.

### LOOK FOR THE STARS

Every item in the Rennie 1918 catalogue represents unexcelled value, but the names in star borders are simply wonderful.

	Pkt.	oz.	3/4 lb.	lb.	5 lbs.
BEANS—Rennie's Stringless Green Pod	10	.18	.58	2.50	
BEEF—Rennie's Spinach Beet	10	.25	1.00	3.00	
CABBAGE—Rennie's Worldbeater	10	.75	2.25	4.50	2.00
CARROT—Rennie's Market Garden	10	.40	1.20	3.50	
CORN—Rennie's Golden Bantam	10	.25	.65		
CUCUMBER—White Wonder	10	.30	.90	3.00	
LETTUCE—Rennie's Selected Nonpareil	.05	.30	.90	2.75	
MUSKMELON—Delicious Gold Lined	10	.40	1.20	3.50	
PARSLEY—Champion Moss Curled	.05	.25	.75	2.25	
PEAS—Little Marvel	10	.15	.45	2.00	
RADISH—Cooper's Sparkler	10	.15	.45	2.00	
TOMATO—Bonny Best	10	.20	.65	2.20	
TOMATO—Early Detroit	10	.60	1.75		
TURNIP—Golden Ball (Orange Jelly)	.05	.25	.75	2.50	

Prepaid Not Prepaid  
lb. 5 lbs. lb. 5 lbs.  
-.25 1.70 .25 1.20

ONION SETS—Yellow Sets—Selected.

### FLOWER SEEDS

	Pkt.
Lavender Gem Aster	.15
Early Blooming Cosmos—Mixed	.10
Giant Yellow Tulip Poppy—California	.10
New Red Sunflower	.10
Rennie's XXX Mammoth Flowering Hollyhock—Mixture	.25
Mastodon Pansy—Mixture	.25
Rennie's XXX Select Shirley Mixture—Single	.10

When buying from dealers, insist on Rennie's. If your dealer hasn't them, we will ship direct.

THE WILLIAM RENNIE COMPANY LIMITED  
KING & MARKET STS. TORONTO  
100-102 WILSON ST. WINNIPEG MANITOBA

## NEPONSET ROOFS

NEPONSET PAROID ROOFING NEPONSET TWIN SHINGLES

THRIFT and production are the farmer's watchwords this year. Paroid is a tremendous help to the thrifty farmer, because the price is right, it is easy to lay, will require no repairs, and will last for many, many years. To date, Paroid has a record of over 19 years' service.



## NEPONSET Paroid ROOFING

If you are roofing, or repairing roofs this year give your building the protection of Paroid. For instance, burning cinders falling on a Paroid roof die out harmlessly.

Paroid makes an attractive roof, too, either in the gray finish, or with the red or green crushed slate surface.

Insist on the genuine Paroid. Look for the label as shown here.

Neponset Twin Shingles for All Residences  
Sold by Hardware and Lumber Dealers

BIRD & SON - Head Office, Hamilton, Ont.

—Warehouses:—  
Montreal, Toronto, Winnipeg, Calgary, Edmonton, St. John  
The Largest Manufacturers of Roofings, Wall Board and Roofing Felts in Canada



AYRSHIRE SALE AT WOODSTOCK.

NO more admirers of Ayrshire cattle will have the opportunity of securing at unreserved auction sale of the choicest breeding, which will go on Wednesday, March 27th. The Southern Counties Ayrshire Breeders' Club is on that date, and is offering 41 females and 19 young bulls. Many choice animals have been sold at former sales, but be equal, if not superior, to anything alive breeders' club. A large proportion due to freshen this spring.

Messrs. MacVicar Bros., Belmont, are containing nine head of females, among which are some grand dairy cows. This herd had at its head for several years bull, Garciagua Prince Fortune stock who is a half brother to the dam of world's champion Ayrshire cow; record, 25.28 lbs. milk, 1,066 lbs. butter. Following Prince Fortune came Advance of the ex-world's champion, Jean Armour better—20,174 lbs. milk and 903 lbs. of butter—and whose dam was a daughter of Scottie, the Canadian R.O.P. champion sire. What more could be asked for in Ayrshire breeding?

Mr. J. L. Stansell, Stratfordville, is putting in eight head, and it is needless to say that it follows as a logical sequence that there will be some "good stuff" in young things, sired by his famous herd. A choice lot of young cows due to freshen about time of sale.

Mr. E. B. Stansell, Vienna, Ont., while one of the younger club members, is rapidly coming to the front as a breeder and discriminating buyer. He will be found some of the pions of this breed. Three extra well-bred type young bulls are included in this lot.

Mr. John A. Morrison, Mount Elgin, is putting in two young bulls, possessing great utility backing, and four females, one of them, Milkmaid 2nd, a five year old, being an exceedingly useful appearing cow.

Mr. F. H. Harris, the president of the club, is consigning a females of very rich breeding. Most of them are in calf to his noted herd sire, Burrado Lucky Master Swell, a son of R. H. Ness' famous champion, Masterpiece.

Mr. E. Burgess Palmer, Norwich, is sending one bull and three females. The bull, a two year old, is a son of Briary King of Springfield, while his dam is a half sister to the Canadian champion R.O.P. cow, Lady Jane. This surely is breeding that should appeal production. The seven-year-old cow, Aargie's Beauty, bidding at the sale, should arouse some spirited bids in R.O.P. with nearly 12,000 lbs. milk, and has just gained another record son, Norwich, and putting in the noted famous bull, Snow King. She will be the best in milk for the sale.

Mr. R. J. A. Smith, Hatchley Sta., is consigning six head, all females. The span of this lot is undoubtedly the five-year-old cow, Jean Armour, of Fairfield. She possesses the fashionable spacy. She is a granddaughter of the other. She carries a large, well-placed udder, with large, well-placed teats. Messrs. Jax Dugg & Son are putting in a strong, young bull with good R.O.P. backing, and Mr. C. M. Howey, Berford, is also putting in a good yearling bull, sired by a son of Mr. Wm. Cahier, while his dam comes from the noted Lady Jane family. He is a good bull, and he had a good herd. The sale will be held in the Dr. Rudd

50 HEAD



50 HEAD

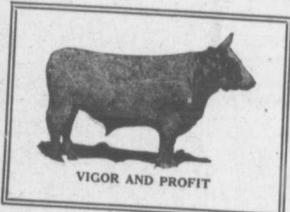
SIXTH CONSIGNMENT SALE

PURE BRED AYRSHIRE CATTLE

Southern Counties Ayrshire Breeders' Club

THE DR. RUDD SALE STABLES, WOODSTOCK, ONT.

March 27th, 1918, at 1 p.m.



VIGOR AND PROFIT

F. H. HARRIS, President, MOUNT ELGIN, ONT.

Write the Secretary for a catalog.

JOHN McKEE, Sec. and Sales Mgr., NORWICH, ONT.

MOORE & DEAN, Auctioneers.

The heaviest producing strains of Ayrshires in Canada are represented in this sale. Ten richly bred young bulls and 41 females, many of them due to freshen about sale time.

This is the district from which the great producing Ayrshires are coming. JEAN ARMOUR, LADY JANE, and SCOTCH THISTLE were all bred in this district. ATTEND THE SALE and secure some of the good ones. No by-bidding or bidding-in at our sales.

sale stables, which are situated in the central part of the city. The sale room will be seated for the occasion, and everybody made comfortable. Write to John McKee, Secy.-Treas., Norwich, Ont., for a catalogue.

TANGLEWYLD AYRSHIRES

The Leading R. O. P. Herd Large Cows, Large Teats, Large Records, High Testers. Choice Young Bulls and Bull Calves and a Few Cows for sale. WOODSIDE DRILL, S. S. R. H., NORFIELD, ONT.

SPRINGBANK AYRSHIRES

Bulls from one month to seven months old for sale. All are red and white. If you need a well bred bull write at once. A. S. TURNER & SON, Ryckman's Corners, Ontario.

JUST A WORD about our offering to the BIG AYRSHIRE SALE

At Woodstock, MARCH 27, 1918 2 extra good bulls, old enough for service; 1 choice 18-month-old heifer by SHELDON PRINCE freshen about sale time, selected individuals of gilt-edged breeding. Just the kind for foundation stock. REMEMBER: OUR PRICES MONEY REPAUNDED, cows with every animal we offer. Write for catalog and look up our consignments. J. L. Stansell, Stratfordville, Ont

Every farm should have an Ayrshire



WHILE YOU WAIT FOR MORE PROFIT BUY AN Ayrshire FROM THE CANADIAN AYRSHIRE BREEDERS' ASSOCIATION HUNTINGTON QUEBEC

CHOICE AYRSHIRES

A high-class Ayrshire bull calf for \$25. Then, IRMA'S CHERY BLOSSOM (Imp.) No. 3588, a son of LEBESSNECK LADY GRACE (Imp.) 3247. Also, HELL KING OF HEALITS (Imp.) 3376. When at the sale at Stoneycross. J. B. CAIRNCROSS - Box 124 - STE. ANNE DE BELLEVUE, QUE. A Short Distance East of McDonald Cottage.

PEACH BLOW AYRSHIRES

Young Stock for sale, always on hand (both sexes), from high-tasting breed producers. Good udders and large teats a special feature of our offering. Three fine Young Sires ready for service. Get particulars of these if you need a sire. R. T. BROWNLEE, Peach Blow Farm, HEMMINGFORD, Que.

CHOICE YORKSHIRE HOGS AT RIGHT PRICES

Dams and sows, all ages, from best prize-winning strains—a few good bred sows, also younger stock. S. C. White Lehighs, one or two younger sows' 285-egg strain. S. C. White Lehighs, one or two younger sows' 285-egg strain. R. R. Brown Lehighs, one or two younger sows' 285-egg strain. Fawn and White I. K. Duck eggs, \$2 per 11. Chinese geese \$1. A KING

MILTON, ONTARIO.



MARKET REVIEW AND FORECAST

TORONTO, Mar. 19.—The sensation of the past week was the high price for hogs. Fed and wabred Toronto, at \$20 per cwt., the highest price ever realized on this stock. For \$15.85 on the fed and wabred basis, so the realization of \$20 is not unexpected. It is anticipated, that this new finished hogs in the country, and all fill. The local price was advanced to \$19.50 per cwt., developed in \$15.00 on the average advance on the butchers running from 12c to 15c, but due to lack of stock under-finished.

The egg market is nervous. New laid eggs undoubtedly are in great demand, but the rapid drop of a week ago seem to have come to an end. Due to the strengthening of the United States market, there is greatly increased consumption of eggs for fresh eggs in Ontario, the price of eggs on hand are moving slowly at 12c to 13c. It is reported, that wholesalers are fearful of buying for storage, as a reaction may be taken by the Food Board, in consequence this week for a little later. Receipts of live and fresh dressed poultry were never known to be as light as they are at present, and the market for all grades is very firm. In the United States the market is firm and to be by the trade with the Food Control Act. We might note that in the United States the slaughter of wens and turkeys has been finished.

Wheat. Wheat features nowadays as the most popular hog feed. American corn is not so high as it was, and the price is lower than the rank and file of farmers are receiving for their wheat, which is more coming for a choice between what to do for corn, which may or may not be sold, or selling their wheat for \$2.05, the farmers may increase if they do not feed it. Recent orders from Ottawa, however, restrict the feeding of wheat in a mill grade to farm poultry coming forward. In Manitoba, wheat No. 1 northern, at 21.25, with freight extra, \$1.17; No. 4 wheat, \$2.05; Ontario wheat—New crop, No. 2, \$2.22, basis in store, Montreal.

Chickens ..... 27c to 30c 30c to 30c Milk fed ..... 25c to 30c 25c to 30c Hens, 3 1/2 lbs. .... 25c to 30c 25c to 30c Roosters ..... 25c to 30c 25c to 30c Ducks ..... 25c to 30c 25c to 30c Turkeys ..... 30c to 35c 30c to 35c

Dairy. An active demand continues for creamery butter, and wholesalers are paying 42c to 55c for creamery butter for solids report the supply just sufficient. They demand the strength of the United States butter market, and the present prices are likely to hold for some time. The price for butter fat for some country is about 55c a lb. The Montreal market on the other hand is not so strong, and there has been a general decline of one cent per lb. There the demand is not as great as in the United States, and this in turn is helping to strengthen the butter market. Dairy cattle are quoted at country prices, 34c to 36c. Wholesale prices to the retail trade are as follows: Creamery solids ..... 48c to 55c do prima ..... 48c to 55c do fresh made ..... 51c to 53c Cheddar dairy prints ..... 48c to 52c Cheddar ..... 52c to 55c Ordinary ..... 52c to 55c Creamery (factory gr.) ..... 32c to 33c A few lots of f.o.b. country points are quoted at 30c. The Ontario points are quoted at 30c. The Commission (British Government) is paying 34c for large quantities of butter. The Ontario producers hopeful that the price recently will be presented at the last year, which presented 1.50 and greatly increased cost of production. Regarding March 15th, were 33 boxes, an increase of 173 boxes as compared with the boxes as compared with the same week last year. Last year, however, 6,234 boxes were received from the United States.

Coarse Grains. Manitoba oats have regained the strength which they lost earlier in the week. Ontario oats are now offering more freely, but buying is not extensive, as dealers claim to be pretty well supplied. No. 2 oats are being offered at 12c and No. 3 at 9c to 10c. Barley American corn is arriving daily. Some local lots No. 2, \$1.85; Barley—Malting, Ontario Flour—Winter, in new bags, prompt shipment, quality, present shipment, \$10.70; Montreal, \$11.50, according to freight. Buckwheat \$1.50 to \$1.85.

Live stock market. The high prices for hogs as the feature of the live stock market. These receipts are likely to remain for some weeks in the country. The prevailing price a year ago was \$15.60. Questions: Heavy steers, choice, \$11.00 to \$12.85 do good ..... 11.00 to 11.80 Butchers' steers and heifers, choice ..... 11.25 to 12.00 do medium ..... 10.25 to 11.40 do common ..... 9.75 to 10.75 Butchers' cows, choice, ..... 9.75 to 9.75 do medium ..... 9.00 to 9.50 do common ..... 8.75 to 9.75 Heavy fat ..... 8.50 to 9.50 Butchers' bull, choice ..... 10.25 to 10.75 do medium ..... 9.25 to 9.75 do common ..... 7.75 to 9.00 Feeders, ..... 9.00 to 10.25 Stockers, best ..... 9.75 to 9.75 Year cows ..... 7.00 to 7.75 Milkers and calves, choice ..... 10.00 to 12.00 Calves, choice ..... 6.50 to 8.00 do medium ..... 14.00 to 17.00 do common ..... 11.00 to 12.00 Heavy fat ..... 8.00 to 10.00 do common ..... 11.00 to 12.00 Sheep, choice ..... 11.75 to 20.00 do medium ..... 11.75 to 14.80 do heavy fat and backs ..... 11.00 to 12.00 Hogs and watered, ..... 20.00 to 20.00 Loss fat ..... 20.00 to 20.00 f.o.b. ..... 15.25 to 20.00 Less fat to 12 on light or thin hogs; less \$2 to \$2.69 on sows; less \$4 on steers; less \$5 to \$5 on heaves.

Milk feeds are very scarce at any price on account of the small supplies of wheat car lots delivered. Toronto quotations include: Bran, 22c; shorts, 40c; mid-Montreal quotations: Bran, 22c; 40c a bag, 40c; middlings, 48c to 50c; meal, 50c to 52c.

High prices for hogs as the feature of the live stock market. These receipts are likely to remain for some weeks in the country. The prevailing price a year ago was \$15.60. Questions: Heavy steers, choice, \$11.00 to \$12.85 do good ..... 11.00 to 11.80 Butchers' steers and heifers, choice ..... 11.25 to 12.00 do medium ..... 10.25 to 11.40 do common ..... 9.75 to 10.75 Butchers' cows, choice, ..... 9.75 to 9.75 do medium ..... 9.00 to 9.50 do common ..... 8.75 to 9.75 Heavy fat ..... 8.50 to 9.50 Butchers' bull, choice ..... 10.25 to 10.75 do medium ..... 9.25 to 9.75 do common ..... 7.75 to 9.00 Feeders, ..... 9.00 to 10.25 Stockers, best ..... 9.75 to 9.75 Year cows ..... 7.00 to 7.75 Milkers and calves, choice ..... 10.00 to 12.00 Calves, choice ..... 6.50 to 8.00 do medium ..... 14.00 to 17.00 do common ..... 11.00 to 12.00 Heavy fat ..... 8.00 to 10.00 do common ..... 11.00 to 12.00 Sheep, choice ..... 11.75 to 20.00 do medium ..... 11.75 to 14.80 do heavy fat and backs ..... 11.00 to 12.00 Hogs and watered, ..... 20.00 to 20.00 Loss fat ..... 20.00 to 20.00 f.o.b. ..... 15.25 to 20.00 Less fat to 12 on light or thin hogs; less \$2 to \$2.69 on sows; less \$4 on steers; less \$5 to \$5 on heaves.

Wholesalers are paying the following prices for seed at country points: No. 1 fancy, bush, \$12.50 to \$12.00 do No. 1, per bushel ..... 11.75 to 12.25 do No. 1, per bushel ..... 8.99 to 10.00 do No. 2, per bushel ..... 11.00 to 11.00 do No. 1, per bushel ..... 11.00 to 11.00 do No. 1, per cwt. ..... 18.50 to 20.00 do No. 2, per cwt. ..... 6.75 to 9.00 Potatoes and Onions. The price of potatoes is dropping. Ontario potatoes are selling at \$1.15 on the farm. This drop is due to the mild weather, which has permitted farmers to store their pits and sell with safety. The weakening of the potato market, due to the large supplies which are said to be available in the country. The price of potatoes is dropping. Ontario potatoes are selling at \$1.15 on the farm. This drop is due to the mild weather, which has permitted farmers to store their pits and sell with safety. The weakening of the potato market, due to the large supplies which are said to be available in the country. The price of potatoes is dropping. Ontario potatoes are selling at \$1.15 on the farm. This drop is due to the mild weather, which has permitted farmers to store their pits and sell with safety. The weakening of the potato market, due to the large supplies which are said to be available in the country.

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DUTCHLAND COLANTHA SIR MONA LAKEVIEW STOCK FARM, T. A. Dawson, Mgr., BRONTE, ONT.

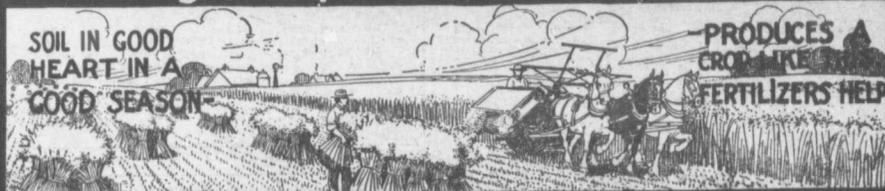
LANINGDALE STOCK FARM HOLSTEINS Offers for Sale 23.25 lbs. etc., and bred by the son of a 29.42-cow, who has 13 R.O.M. daughters.

ENTERPRISE HOLSTEINS 20 head, calves to mature cows; males: 1 calf and our stock bull of 1 year; herd is selection of 10 years' breeding.

46 GREAT DISPERSION SALE 46 Head Registered Jersey Cattle Head at "Riverside Jersey Farm" WEDNESDAY, March 27th, 1918 SALE COMMENCING AT 1.30 O'CLOCK P.M.

DISPERSION SALE 27 Registered and Unregistered Jerseys 27 (all pure bred) Will be held at "Rosebank Farm," Manilla, Ont. The property of H.Y. GLENDINNING & SON on Thursday, April 4, 1918, 1.30 p.m.

# Heavier yields per acre with larger profits-



## It Pays to Feed the Soil

The soil is a vast reservoir of plant-food, but most of it is not immediately available for plants. Only to the extent that this supply is rendered available can profitable crops be grown. Good cultivation, and the action of plant and soil acids, increases the yield by increasing the amount of plant-food which the crops can obtain. Manures and fertilizers add to this amount.

Good cultivation and the use of fertilizers are particularly important this year. It is the will of the farmers of Ontario that every acre of land shall produce the maximum yield this coming season that circumstances permit.

### Lime and Humus—the Winning Combination

If your land has been well cultivated and is well drained but the yields have not been satisfactory, it will pay you to study the lime and humus question carefully.

#### Why Lime is Essential

- (1) It is a soil corrective; many soils have become acid because the lime has been leached away. Crops will not thrive in an acid soil.
- (2) It stimulates plant growth by acting on the compounds in the soil containing plant-food, making these more available for plant use.
- (3) It acts upon the texture of heavy soils, making them less sticky and producing a better condition of tilth.
- (4) It produces a condition of soil under which beneficial bacteria thrive best.
- (5) It hastens decay of organic matter, thus liberating humus and nitrogen.

Sufficient lime for ordinary soils may be supplied by applying from 1 to 2 tons of ground limestone rock per acre or  $\frac{1}{2}$  to 1 ton of burned lime per acre. Do not use freshly burned lime on light soils or on a growing crop.

### Humus is Absolutely Necessary

- (1) Humus is only another name for decayed vegetable matter in the soil.
- (2) It is practically the sole source of nitrogen for the plant, other than that gathered by nitrogen-fixing bacteria, or whatever is added in a mineral fertilizer.
- (3) It furnishes acids which aid in bringing into solution the potash and phosphoric acid in the soil.
- (4) It greatly increases the water holding capacity of the soil.

(5) It very much improves the physical condition of the soil.

### Humus is Best Supplied

By (a) farm-yard manure, (b) ploughing down clover sod, (c) ploughing down green crops.

Farm-yard Manure supplies the most-needed fertilizing elements—nitrogen, phosphorus and potash—as well as humus. These are supplied in varying amounts, however, and are not always in the proportions required to ensure the biggest yields of different crops. That is why it is often best to use both farm-yard manure and commercial fertilizer.

Ploughing Down Clover Sod is a decidedly cheap way to supply humus. It usually pays best to take off but one crop and plough the sod. Then, too, bacteria which go with clover, gather nitrogen from the air and store it within the plant—in the roots as well as in the stem and leaves. Thus, this most costly of plant-foods (nitrogen) is thrown into the bargain as it were. It is one of the few chances to get something for nothing.

Green crops of any kind, ploughed under, assist in producing humus and in increasing necessary bacterial action.

### Commercial Fertilizers Increase Crops

All of the foregoing practices are highly important, but they are not always sufficient to return to the soil the food elements taken out by the crops. Commercial fertilizers used in conjunction with farm-yard manure will usually give best results. Nitrogen, Phosphoric Acid and Potash are the food elements supplied by these commercial fertilizers. It is always wise when purchasing these to insist upon an analysis showing the available quantities of these plant-food elements. Study the guaranteed com-

position that must be printed on each bag of fertilizer sold. Information will be sent upon request to the Department of Agriculture which will enable you to make a satisfactory comparison of different analyses.

### What Does My Soil Need?

That is the question each man must ask himself in studying this fertilizer question. The needs of different soils vary according to the crops grown in the past, the manure previously applied and the character and origin of the soil.

First: Send a representative sample of your soil to the Department of Chemistry, Ontario Agricultural College, Guelph. Give information regarding subsoil drainage, the crops that have been grown and the crop you expect to grow this year—and what manure has been applied for the past three years. An examination will be made and as much information given you as possible.

Second: There is no doubt that commercial fertilizers have an important place in Ontario farming when used as a supplement to farm-yard manure and good cultivation. In order that you may note the results of applications, always leave a strip through the field unfertilized so that the effect of the fertilizers may be observed.

For full particulars regarding any phase of the fertilizer question write the Office of the Commissioner of Agriculture, Parliament Buildings, Toronto. Send for Bulletin 223, on "Fertilizers," and Bulletin 238, "Lime and its Uses in Agriculture."

## Ontario Department of Agriculture

Parliament Bldgs., Toronto

SIR WM. H. HEARST

Minister of Agriculture

DR. C. C. CREELMAN,

Commissioner of Agriculture



ONTARIO

THIS THIN CROP  
DOES NOT PAY  
PRODUCTION COSTS



PROPER METHODS  
OF FERTILIZING WOULD  
INCREASE PROFITS

-can be obtained when soil is properly fertilized