

FEBRUARY 5, 1920

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# FARMER'S ADVOCATE

AND HOME MAGAZINE

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Dept. of Agriculture

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LV.

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LONDON, ONTARIO, FEBRUARY 12, 1920.

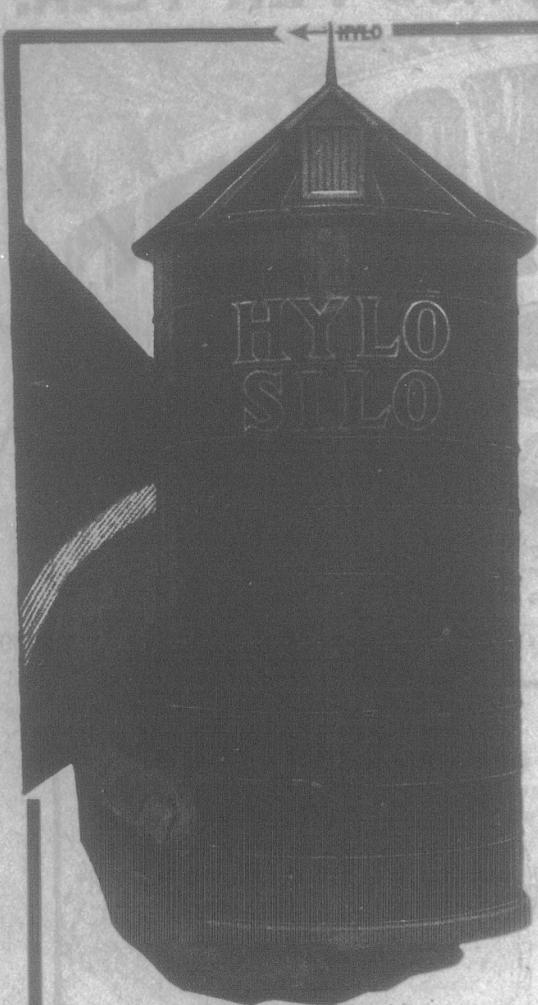
No. 1429

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Sturdy and strong, year in year out, Frost Fence will stand as a barrier for you against waste in crops, danger to stock, and uneasiness in your own mind. We put the best material in, and you get the best service out. Other products we manufacture are woven lawn fence, galvanized farm and ornamental gates, angle steel fence, bale ties, oiled and annealed wire, galvanized and plain wire.

**Frost Steel and Wire Co. Limited**  
Hamilton Canada

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## Take This Silo Now! We'll Pay For It!

**D**ON'T wait till you have saved enough money to pay cash for a silo. It may take you longer than you think, and all the time you are doing without the silo you are losing silo profits. In the end, you won't have any better silo for all your waiting and saving.

You don't have to wait and save for a Hylo Silo. We'll do the waiting and the Hylo Silo will do the saving. With the savings you can pay for it and you'll never miss the money. In a short time you'll own a fine silo that practically did not cost you a cent, instead of skimping and saving for years and having no silo at all. More important still, in the

## HYLO SILO

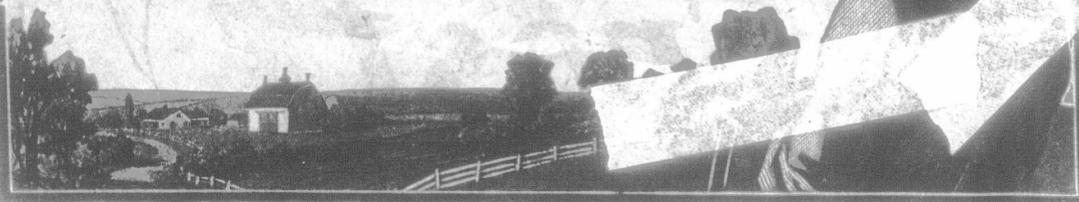
you'll have a silo that completely satisfies in every way. Maybe you want durability.

Properly cared for, the Hylo Silo will last a lifetime. Maybe you want good looks. The Hylo Silo is built along correct architectural lines, and will make a pleasing addition to your farm buildings, as well as give an air of prosperity to your home surroundings. Maybe you would like a silo that will never need attention. Our Silo Book will convince you by actual photographs that the Hylo Silo is of the design and construction best able to give you continuous service and satisfaction. Send for it. It is free.

But maybe, after all, you are one of that large army of sensible men who realize that the best silo is the one that keeps silage best. This is where the Hylo Silo is never surpassed and seldom equalled. It is designed and built, first and foremost, to produce the choicest silage, and is doing it to-day on 50,000 farms.

So it matters not whether you take advantage of our cash discount or buy on our easy terms, you get what you want—perfect silage from a perfect silo.

**Gilson Mfg. Co., Limited, 239 York St., Guelph, Can.**  
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Why wonder? You can have a record crop if you wish. NOW'S the time to look ahead. NOW'S the time to plan.



**WRITE FOR OUR FREE BOOK—**  
"Feeding the Farm."

It is a recognized authority on manure and the right way to handle and spread it. It gives you many helpful ideas on improving the texture and fertility of your land.

The GILSON Nisco will meet all your requirements.

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**T**HE soil cannot give more than it has got. You have got to fertilize. Manure is the best fertilizer. Good manuring will bring the best results and will insure a record crop.

For good manuring the Gilson Nisco is the accepted standard. **WHY?**

Because it has a very wide spread,—easy to adjust.

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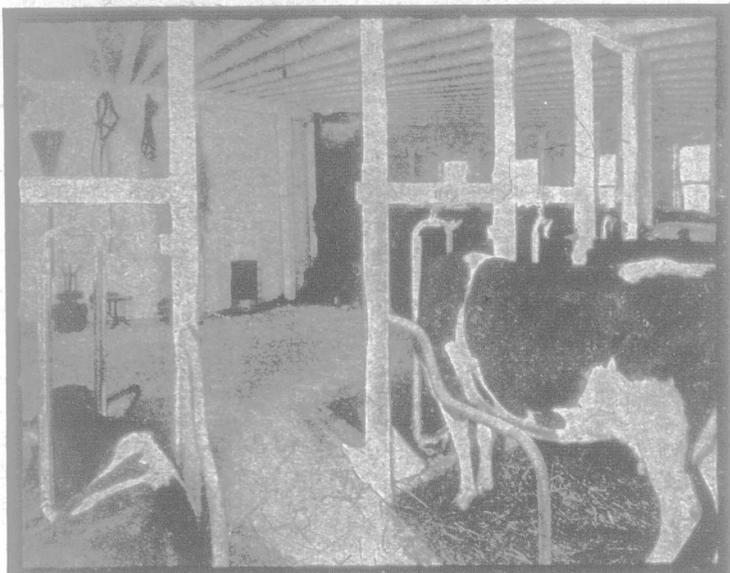
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Begin at once to replace your temporary buildings with Concrete buildings. Thus you'll save money and make money—and the book explains how.

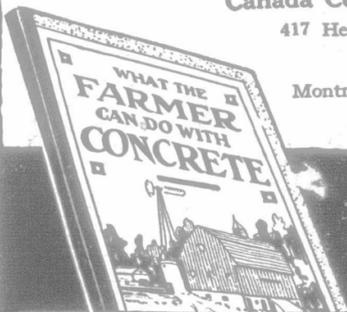
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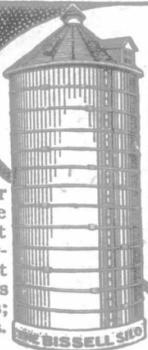
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Our Silos are made of Pine or Spruce Staves preserved in creosote oil; steel splines; steel hoops, large at bottom; doors on two-step plan, airtight; roof of "Barrett" roofing, cut into right size sections. Consult us freely as to particulars. All sizes; prices on request. Write for folders.

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### Brings Big Crops

A heavy crop is a mighty fine reward for your season's labor.

Make sure of heavy crops this year—capitalize on your land and your labor—use Freeman's General Crops 2-8-2.

It supplies Ammonia, Phosphoric Acid and Potash in the proportion to help you get the utmost from your soil.

Here are a few of the different brands of Freeman's High-Grade Fertilizers. Especially compounded for special purposes:

Double Strength Early Vegetable.

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Ask us about these brands.

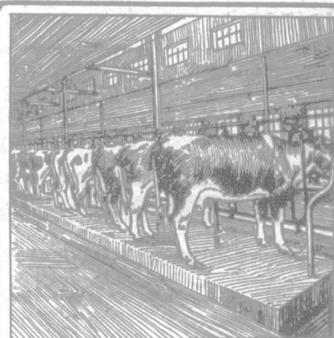
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Increase your income this year. Write us about the use of fertilizers—we can help you.

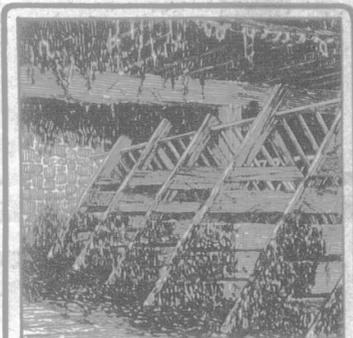
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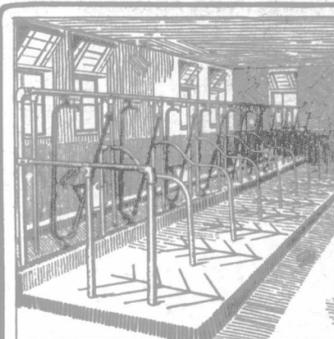
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**1.** With BT Steel Stalls you will have a barn that will save disease and keep your stock healthy. Disease germs and lice cannot live on the hard surface of the steel. There are no cracks, and nothing to absorb the liquid manure. BT Steel Stalls make your stable sanitary.



**2.** It is impossible to keep wood stalls and floors sanitary. Wood absorbs liquid manure. Cracks develop in the wood where disease germs and vermin breed. Wood partitions and posts obstruct light and ventilation. A dark, unsanitary stable breeds disease and prevents the stock from doing their best.



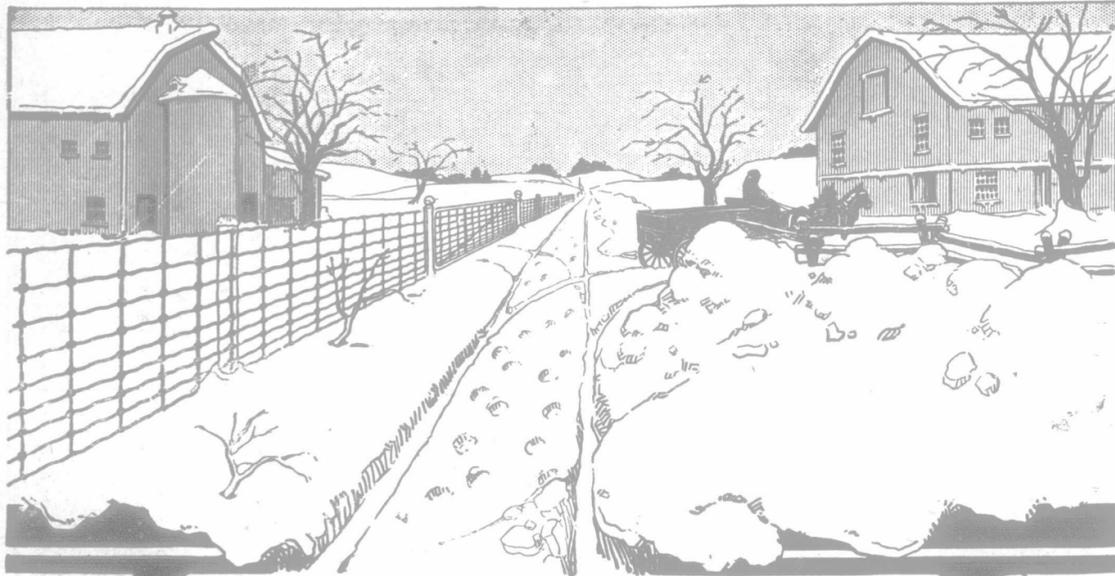
**3.** A clean sanitary stable will save you loss. It will save you veterinary bills, increase the milk flow from your dairy cows and keep your feeders and stockers healthy. The coupon below will bring the BT Barn Book which shows how BT Equipment saves disease and increases profits.

Send this coupon for the 32-page Barn Book. Tells how to plan and build the barn, how to ventilate, how to frame, how to save steps, labor, time and feed. This book saves you hundreds of dollars in building.

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Will you be snow bound or snowed under by the old time fencing methods or will you have a clear roadway and no snowdrifts? Farm owners should take notice of the difference—see illustration above—it means good fence argument. Good for your farm. The crimped horizontal wires allow ample provision for expansion and contraction from extreme changes in temperature and shocks from unruly animals.

As the snow gets wet and freezes to the wires, the weight will pull down a cheap fence, and it will not straighten up in the spring when the snow melts away, but the "Peerless" on account of the heavy, stiff stays, stands up under a weight of snow that leaves the fence in the spring, just as it was before winter set in.

The Peerless Lock (shown in the circles below) holds the intersecting wires in a firm grip that is non-slipable. Every part is heavily galvanized and No. 9 gauge throughout.

The money you spend on a Peerless Perfection Fence is working for you every day.

### Insurance, Investment and Property

It insures the safety of your stock. Year after year you have a fence that won't sag, rust or break down. You will find it in place doing fence work for you all the time—Winter and Summer. The same good Fence all the year round.

It costs no more to set posts for this strong and durable fence than for one cheaply made of light wire—no more to build.

All Peerless Fencing is made from heavy open-hearth steel wire, the most perfect fencing material known for the purpose, with the impurities burned out and its strength, durability and toughness greatly intensified.

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"For The Land's Sake" use

# STONE'S FERTILIZER

For Bigger and Better Crops

*Agents wanted where not represented*  
**WM STONE SONS LIMITED**  
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"Quality first" for 35 Years

### Galvanized "Eastlake" Shingles

**\$10.50 Per Square**  
FREIGHT PAID to most points

Lightning-proof, Fire-proof, Storm-proof, exceedingly Durable, Easy to Lay.

*Metal Shingles lead all roofings—for 35 years the old reliable "EASTLAKE" has led in metal shingles. Why experiment? Stick to the "old reliable" and be safe—buy "EASTLAKE".*

We also make "Empire" Corrugated Iron Spanish Tiles—Sidings Silo Roofs—Garages

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The **Metallic Roofing Co.** Limited  
Manufacturers  
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## Tudhope-Anderson

### Steel Wheels are safest to own

IN the event of an accident requiring you to get new spokes—if you have Tudhope-Anderson Made-in-Canada wheels you can replace them promptly. But—

If you have imported wheels you may have to buy an entire new wheel, for the spokes are cast in the hub.

Write us now for order blanks and full particulars about wide-tire Steel Wheels to be used for work about the farm. Can be made to fit any skein or axle bearing.

Made in Diameters 20" to 60", Tire widths, 3" to 10".

We also manufacture Low-Down Wide Tire Steel Wheel Trucks.

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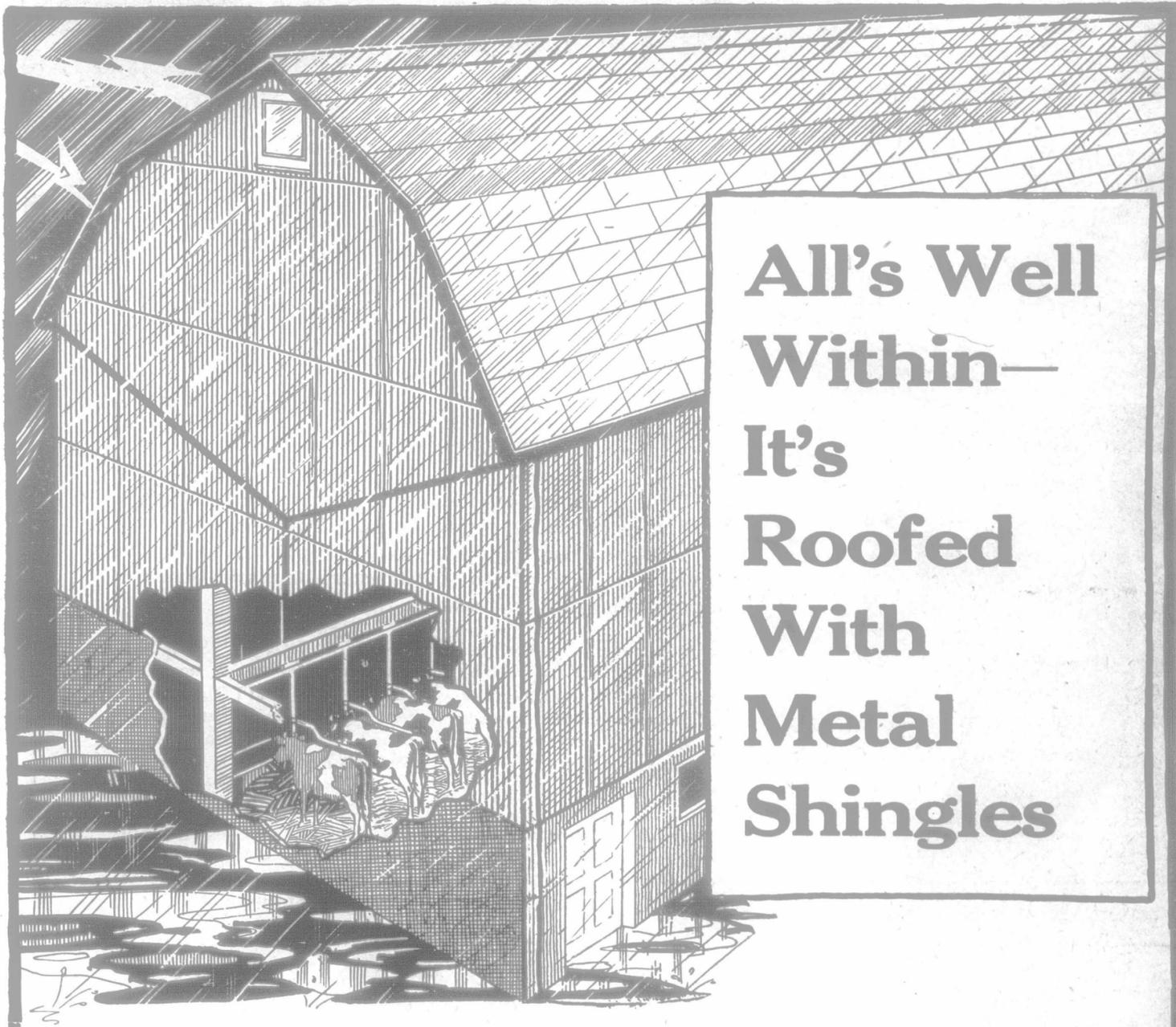


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With  
Metal  
Shingles

**L**ET her rip! My barn has a Metal Shingle Roof, Corrugated Iron sides, and concrete foundation. Lightning, wind and rain don't worry me."

So speaks the wise farmer from his cosy chair when the rain comes down by the bucket, and lightning turns night into day. No need to run to the window after each crack to see if "the barn got that one." No need to start all over again next day with a few animals saved, and a thousand or so from the Insurance Co.

Build wisely when you build. Repair for permanence when repairs are needed. Choose your materials on a *value-for-the-money* basis, and

*Use Metal Shingles on Barns, Houses, Sheds, and all other sloping roofs. Do your part in the movement for National Conservation by using and advocating this fire-proof, waste-preventing Roofing. Prices and full information from any of these firms.*

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Pedlar People  
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They are the "100 per cent. roof,"—they give protection—they give satisfaction—they give long life—they are easily laid. No other Roofing has so many points of merit, nor such a record of successful service on Canadian roofs.

Hundreds, yes, thousands, of buildings are burnt in Canada every year by lightning and sparks on roofs. The universal use of Metal Shingles would totally prevent this annual drain on our resources, which you and I and the other fellow all help to pay.

USE METAL SHINGLES  
for SAFETY and PERMANENCE



## The Bogey of many a game

**T**ORN clothes are inevitable, yet they remain the bogey of many a childish summer game. Fear of the scolding that may follow the discovery of a ripped blouse, or skirt or trousers, helps turn many a youngster into a prim little old man or a finicky little old woman.

OF course the good mother has plenty to do without the mending of unnecessary holes and the head of the family has sufficient demands on his income without having to buy unnecessary suits of play clothes.

**B**UT an excellent compromise may be made in this way: Ask at the Cottons counter for "PRUE COTTONS." For example, one

of the *Prue* Cottons is "*Steel Clad Galatea*"—and it is steel-clad. On the other hand PRUE Cotton prints offer a great variety of light, clean, cheery long-wearing and washable materials at prices so low as to make a rip or two seem unimportant. If these are not what you wish there is a wide range of ducks or heavy plain cottons, all with the PRUE Cotton mark to guarantee their superiority.

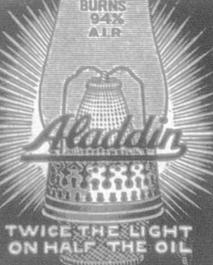


"PRUE" stands for PRUDENCE

It is the seal of the prudent housewife's approval that has established Dominion Textile Cottons—"Prue" Cottons—as the best entering the Canadian household

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**TWICE THE LIGHT ON HALF THE OIL**

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Beats Electric or Gasoline

**10 Days FREE—Send No Money**

**Men With Rigs or Autos Make \$100 to \$300 Per Month**

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**Yours FREE**

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Largest Coal Oil Manuf. & Lamp House in the World

We don't ask you to pay as a test until you have used this wonderful modern white light in your own home ten days, then you may return it at our expense if not perfectly satisfied. We want to prove to you that it makes an ordinary oil lamp look like a candle; beats electric, gasoline or acetylene. Passed by Insurance Underwriters. Children handle easily. Tests by Government and 35 leading Universities show that the new ALADDIN BURNS 70 HOURS ON ONE GALLON common coal oil, no odor, smoke or noise, simple, clean, won't explode. Over three million people already enjoying this powerful, white, steady light, nearest to sunlight. Won Gold Medal at Panama Exposition. Greatest invention of the age. Guaranteed. \$1000 Reward will be given to the person who shows us an oil lamp equal to the new Aladdin in every way (details of offer given in our circular). We want one user in each locality to whom we can refer customers. To that person we have a special introductory offer to make, under which one lamp is given free. Write quick for our 10-Day Free Trial Offer and learn how to get one free, all charges prepaid.

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77 Front St., E., Toronto, Can.

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# The Farmer's Advocate and Home Magazine

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1866

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L.V.

LONDON ONTARIO FEBRUARY 12, 1920.

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## EDITORIAL.

When arranging programs, don't overlook local talent.

Good seed is just as essential as good live stock; one is the corollary of the other in good agriculture.

Sawdust and other insulating material is not so plentiful as it used to be, but there is no dearth of ice this winter.

A ring should be placed in every bull's nose by the time he is a year old, and renewed as often as necessary to keep it strong.

The greatest wonder of the age is how many rural clergymen are able to live and survive on salaries set ten or fifteen years ago.

Argentine butter exports for the nine months of 1919 were practically six times as much as was exported during the same period in 1914.

Many of the old gentlemen who have seen thousands and thousands of Januarys without a thaw will have to make an exception for the January of 1920

Indications point to a considerably increased interest being taken in the grading and marketing of butter according to its commercial value this year.

The live-stock breeders' meetings at Toronto during the first week of February always mark a new epoch in the year's live-stock business and operations.

Silage may be fed with safety to the young calf and is very much relished by it. It is a good idea to pick the pieces of ears out of the silage fed to calves.

Scours in calves are by far the most common source of trouble in calf raising. If a feeder is able to avoid the occurrence of scours in his calves, it is very seldom that other ailments will annoy.

Immigration to Canada for 1919 totalled 117,633, an increase of 67,363, or 134 per cent., over 1918. Of the immigrants in 1919 there were 57,000 from the British Isles and 52,000 from the United States.

Make the hens work for what they get during the winter months, by feeding a scratch mixture in the litter. Feed about one-third of the mixture in the morning and two-thirds in the afternoon.

A progressive, ambitious program of investigation and experimentation should be outlined and undertaken by our stations and colleges in 1920. Work of this nature has been dragging for five years.

To be successful at the shows next fall, begin now to prepare for them. The number of fairs at which one can exhibit is growing, and the compensation for fitting and showing will be increased proportionately.

January, February and March are the months when most of the pruning work of the orchard can be done. Utilize any bright, mild day and save labor in the spring months. Grapes, in particular, should be pruned early before there is any chance of bleeding.

When old Sol gets control of the situation and the weather becomes mild, time might profitably be spent in cleaning some of the dead wood and rubbish out of the orchard. It will do the orchard good and much of the timber cut out can be used for firewood.

## Production Increases the Value of Our Dollar.

There is a cry being heralded across the land to buy made-in-Canada goods so our dollar will be worth one hundred cents wherever it may be presented. In other words, buy less in United States and our dollar will be worth more there, which is true enough. When our exports to United States balance our imports then our dollar will be worth one hundred cents to Uncle Sam, and his dollar will be worth one hundred cents to us. More than that, everyone likes to see home industries prosper by square dealing, for then we have well-balanced communities and a well-balanced nation. However, there is another way of restoring our financial equilibrium, and that is by increasing our exports. Let everyone give agriculture a boost, make profitable production a possibility, popularize farming and we shall have sufficient exports to balance the ledger. There is no reasonable excuse for the unfavorable balance of trade continuing to depreciate the value of our currency. If we would all go to work and produce we would soon make United States our debtor, for they are quickly becoming a consuming nation, and we could supply them with their wants. Let the cry be produce! produce! and we shall soon be able to meet any nation on an equality basis so far as our currency is concerned.

We should curtail in the use of all luxuries, whether they are purchased across the line or in Canada. Luxuries and extravagant living have played a large part in the depreciation of our currency. There is an element of selfishness in the slogan "Buy made-in-Canada goods," which we do not care to endorse. We prefer to take the broader view and to urge production in Canada to such an extent that our own needs will be supplied by manufacturers and producers here at home, and still have a large exportable surplus. We would furthermore urge that agriculture be given every consideration, for upon it the future prosperity of this country must depend. Sir George Paish, the eminent British economist, is reported to have said "Europe needs and will continue to need all the produce Canada can create." If we keep this in mind, and endeavor to produce to the limit of our possibilities we shall have no need to worry about a depreciated currency.

## Pass Your Ideas Along.

If you have an idea or bit of information that is worth dollars to you, it would be worth thousands of dollars to a neighbor farmer, and by discussing the subject privately or publicly you do not lessen the value of the idea to yourself. Our experiment stations arrive at certain conclusions which are applicable in a general way, but they are not dividend producers until farmers take them up, try them, and determine their suitability for the various localities and special conditions. Here is where farmers might co-operate more with one another by making known the results they have on their own farms. Many farmers, too, happen on to bits of information and learn things from experience on their own farms. Many labor-saving devices and certain practices in regard to cropping never originated at an experiment station. They were the outcome of someone's experiences or experiments. Gradually these findings have been disseminated and thousands of farmers are now using implements, or cropping methods, without any idea where they originated, and in fact, it matters little so long as they are useful.

Farmers entertain differences of opinion these days regarding certain crops and cultural methods. They are seeking the truth, or, in other words, they want to know just what method is best for their district, and in no way can this be better dealt with than by farmers describing their own experiences and results for the benefit of others. A short, pithy article, outlining your experiences, experiments and results, published in

"The Farmer's Advocate," would reach thousands of farmers and be eagerly read. For instance, what has been your experience in growing corn for silage? What rate of seeding do you find best? and where do you find the greatest production, from hill or drill planting? Are flints or dents most suitable for your districts, and of these what varieties do you find most suitable for husking and silage purposes? There is considerable discussion now about sweet clover, and there seems to be some uncertainty as to the rate of seeding, whether white or yellow varieties are best, and whether cattle will bloat on it when used as pasture. Hundreds of farmers have had experience with sweet clover for pasture, hay, seed, and as a soil renovator—their experiences would be valuable to others. Winter hog feeding, too, is not an all-round satisfactory business. Some are successful, others are not, and right now a great many farmers want to know how they can raise hogs when their whole milk is sent to the condensery or milk-powder factory. In the dairy line, a discussion on economical feeding would be valuable, and this would embrace the mixing of rations, compounding purchased concentrates with home-grown feeds, and methods of feeding. Calf rearing, too, is important and in this connection experienced dairymen could add a great deal of information to what is already known.

We have only mentioned a few items that would make interesting and profitable discussion. There are other important phases of live-stock husbandry and general farming that might well be discussed. Farmers seem to have got out of the habit of writing about their experiences and results, and we invite all those who think they have an idea or a bit of information that would be useful to their neighbors to set it down in the form of a short, pithy article for publication in "The Farmer's Advocate."

## Seed Improvement Necessary.

Just now both Federal and Provincial Departments of Agriculture are co-operating for the elimination of the scrub bull. Everyone realizes the importance of live stock in Canadian agriculture, and those who know anything at all about dairying will realize that the dairy cow can claim perhaps a greater place in the upbuilding of Ontario agriculture than any other single production factor. At the same time, when we talk about live stock and its very great importance, we are apt to overlook the tremendous significance of good crops. Just as the scrub bull is a menace to the live-stock industry, so is scrub seed a menace to the production of field crops. Dr. C. A. Zavitz has said recently that the average yield per acre of our field crops has been increasing, due to the influence of better seed and better varieties, and points to the fact that under normal conditions, as they existed twenty years ago, yields per acre were decreasing, but that dividing the last thirty-six years into two periods of eighteen years each the last period shows in yields per acre of field crops an appreciable increase over the first. In our issue of February 5 appeared a report of a conference held under the authority of the Minister of Agriculture for Ontario, and which dealt with the problem of good seed almost entirely. As brought out at that conference, the problem that faces those interested in the distribution of good seed is a big one, because not only does it involve the education of farmers to the use of better seed in the district, but it involves the working out of some plan whereby those who are growing seed commercially may obtain sufficient quantities of pure foundation or stock seed. Thus it is suggested that the Government should assume the responsibility of originating new varieties, or making such selections from established varieties as will meet the varying conditions of soil and climate found within the Province. It is also assumed to be the duty of the Government to see that pure stock seed of such varieties is multiplied sufficiently and

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## The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

Published weekly by  
THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.

Agents for "The Farmer's Advocate and Home Journal,"  
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available for purchase by commercial seed growers, in such quantities as to yield the necessary quantity of bulk commercial seed when multiplied by those who grow seed for sale. There is no reason why some constructive, efficient and adequate policy of seed improvement and distribution should not be put into effect under Government supervision.

The Government, however, should not be held responsible for all the objections which can be raised to the quality of our field crops. Individual farmers in thousands of cases pay too little attention to the quality of seed they sow. It may be difficult to obtain pure seed, but many farmers do not sow seed as good as can be obtained. Those who use seed from last year's grain crop often neglect to clean it thoroughly. There is no excuse for sowing grain from your own crop that has not been run through the fanning mill at least two or three times until all the light, shrunken grains are blown out, and nothing but the very best remain. Let us make a concerted effort this spring to eliminate so far as we can do it individually the poor seed, which in so many cases makes the stand of crop uneven, and markedly cuts down the returns from farming. Let us educate ourselves, by an honest trial, to the fact that good seed pays, and then when the Government has succeeded in establishing centres for the distribution of pure seed, let us see that what we use is the best that can be obtained.

Southwestern Ontario farming conditions are different, in some respects, from those prevailing elsewhere in the Province. On this account a local experiment station would be of great service to several counties in the Peninsula and a Winter Fair at Chatham would carry the gospel of good farming, combined with more and better live stock, to a great many farmers who never attend winter fairs located east and north.

If you have an idea don't bury it away in a napkin. Pass it along and see it multiply.

## Guard Against Bolshevism.

BY ALLAN MCDIARMID.

News of the successes of the Bolsheviks in Russia ought to have the effect of rousing up the civilized nations of the earth to the danger that lies ahead of them. Since history was first written we know that, almost invariably, the ruling classes have been those that stood for law and order. If the movement that is on foot in Russia now gets into full control they will not stop at the borders of their own country. And the result may be that the class that have for their religion anarchy and revolution will gain temporary control of the world.

We don't say that the above result is probable, but it is quite possible if we just continue to do nothing about it. It is the unlooked for things that are always happening. Two years ago no one would have believed that the farmers would, so soon, have got control of the Provincial Government. It is safe in their hands, we are all satisfied, but the tendency of humanity is to go to extremes and who knows what these revolutionary movements may accomplish.

Good has come out of some of the revolutions of the past but it was because they were brought under control before the real danger-point had been reached. Revolution and Bolshevism carried to its logical conclusion means anarchy and a final relapse into barbarism. The Government it attempts to set up is responsible to no one and as a consequence the mass of the people have no say as to the way their laws shall be made or the country ruled. By the voice and vote of the whole people a nation should be governed and this plan has been adopted the world over. But Bolshevism, insofar as it has been demonstrated, is mob rule and not rational Government.

People in this country are not very much concerned over the possibilities of a revolution that may take place some time in the distant future. But, in this 20th Century, what affects one country is likely to affect all, for the world to-day is more nearly one family than it has ever been in the past. And the seeds of Bolshevism that are being planted all over America won't take very long springing up with the right temperature and surroundings.

For the last quarter of a century, or more, the United States and Canada have been doing all they could to bring in immigrants from foreign countries. Whether they came from the hot-beds of anarchy in Russia, or from somewhere else, it was all one so long as our countries were populated. Every immigrant was a consumer and more consumers meant more business and more prosperous towns and cities.

Unrestricted immigration is one of the greatest mistakes that any Government can be guilty of. When it comes to getting neighbors and business associates for our people it's quality we want. Quantity is a secondary consideration.

We may not be able to avoid all the consequences of a revolution in Europe but we can help to handle the situation to far greater advantage if we haven't the germs of the same trouble developing in our own land. I don't believe in the cry, "Canada for Canadians," but I do hold to the idea of keeping this country for men and women who are reasonably sure to become good citizens and who will be likely to support its institutions.

Let us get our land populated as soon as possible, consistent with safety, but, "safety first." Canada couldn't choose a better watchword, for the rest of this century, probably, than "Restricted Immigration."

Another question comes up in connection with this subject. What are we to do with our foreign-born population once we have admitted them to the country? Should we exercise some oversight in regard to them or is it advisable to let them shift for themselves and make the best of it?

If it is possible to do it I think our immigrants should be looked after by the Government for a certain time, at least, after they arrive here. This would have the effect of making the stranger more kindly disposed towards the institutions of the country of his adoption and at the same time it would create the opportunity whereby more of our foreign-born citizens might be directed on to the land, and for two or three reasons that is where we want to get them.

In the first place for their own good they are better on a farm than in the over-crowded towns. There is hardly any argument as to that point.

In the second place we need them there to keep down, to some extent, the increasing cost of living. I think the best interests of farmers, as well as of any other class, will be best served by the prevention, in some way, of prices going any higher. The cost of living is what is creating, to a great extent, the unrest and labor troubles that have become so common throughout the world during the past year. As farmers, the increased prices we have been getting for our produce have reacted on ourselves to a large extent, in the way of higher cost of production. And the higher the price for food goes the more it is going to cost us to produce it. Calling a halt to the whole business of price-raising would be serving the interests of all concerned. And the one way to bring this about would seem to be for as many as possible of our incoming settlers to take up farms. Government help should be given these people to enable them to get properly started. It would be an investment that would be likely to return good dividends—better than the G. T. P.

By putting these people on farms we take them out of the hands of the strike-promoter and the Bolshevik orator. They can do their work in the towns and cities only. Mob-riots were never heard of out in the country. The most law-abiding and peaceable citizens of a country

are always found on the farm. This is not in any way a boast. It is only stating a fact. And that being the case the moral is easily read. Simply get the individual that we are not quite sure of, the one who has come to us from the land of the Revolutionary, out on to the land where he won't have to be watched so closely and where hard work and healthy surroundings will make a man of him. I can't imagine any better medicine for the cure of Bolshevism than country air and ten or twelve hours a day following the plow. It has cured many other troubles just about as bad.

## Nature's Diary.

By A. BROOKER KLUGH, M. A.

### The Origin of Cultivated Plants—3.

The Apple, *Pyrus malus*, is indigenous in southern and central Europe and as far east as the Persian Province of Ghilan, and grows wild to-day over much of this area. It was made use of by the inhabitants of the ancient lake-dwellings, being dried for use in winter, and judging from the size of some of the fruit found in these dwellings was cultivated by this prehistoric people. Practically all the different varieties of apples now in cultivation have sprung from *Pyrus malus*, but the Siberian Crab, *P. baccata*, has been introduced into the Northern States and Canada, and certain other crabs, such as the Souldard and the Matthews, are apparently hybrids between a native American species *P. iowensis*, and *P. malus*.

The Pear, *Pyrus communis*, grows wild over the whole of temperate Europe and Western Asia, and has been used from ancient times as is shown by remains found in the Swiss lake-dwellings.

The Peach, *Amygdalus persica*, is a native of China, where it has been cultivated for at least five thousand years. The original type of this species has a downy skin and a rounded shape, and from it have been derived the flattened varieties and also the smooth kinds known as nectarines. The peach was very early carried from China to Persia, and the Greeks first came in contact with it in Persia in 332 B. C.

The apricot, *Prunus armeniaca*, is likewise indigenous in China, and is referred to in Chinese literature of the date 2205 B. C. It was introduced into Western Asia in 100 B. C.

At the present time there are several hundred varieties of plums. Most of these have been derived from *Prunus domestica*, which is a native of Anatolia and Northern Persia. The Romans, two thousand years ago, cultivated a great many varieties of plums and the Damson was a variety known to them as abundant about Damascus, whence the name "damascene" and our common name. Some plums now cultivated in North America, such as the Golden Beauty, Honey Drop and Wayland, are derived from one or other of the American species of wild plums.

Most of the cultivated cherries are derived from *Prunus avium*, the Bird-cherry, which is native in Europe from Southern Sweden to the mountainous parts of Greece, Italy and Spain, and in Western Asia. Some, such as the Montmorency, are, however, derived from *P. cerasus*, a species with sour fruit, which is a native of the Caspian region.

The modern cultivated strawberry is the result of the crossing of several species found in different parts of the world. The foundation stock is *Fragaria vesca*, which grows wild over a very large portion of the Northern hemisphere, being found in Europe, Asia and America. This species was not cultivated by the Greeks or Romans, and its culture was first undertaken in England and France in the fifteenth century. The improvement in recent times has been brought about by crossing with the Virginian strawberry, which is our commonest and best-flavored wild strawberry in Canada, and with the Chili strawberry, which was brought to France in 1715.

The European wild raspberry, which is a native of temperate Europe and Asia was first taken into cultivation about five hundred years ago. This plant was introduced into America in early days, but did not withstand either the cold of the North or the hot summers of the South, and the varieties we now grow are all derived from native species. The first of the native raspberries to be taken into cultivation was a natural hybrid between the Red raspberry, *Rubus strigosus*, and the Black-cap *R. occidentalis*, though at the time its hybrid origin was not suspected. The culture of this hybrid was begun in 1825, and from this plant all the purple raspberries and the best of the red berries have been derived. In 1832 the Black-cap was brought into cultivation by Nicholas Longworth and became known as the Ohio Everbearing, while in 1860 the Red raspberry was domesticated, but has not given rise to as promising varieties as the hybrid.

Red and white currants are both derived from the common wild red currant of temperate Europe and Asia, of which a variety is native to Canada, while black currants are the larger cultivated form of the European wild black currant. Both were brought into cultivation some six hundred years ago.

The gooseberry, which attains to such a large size and so excellent a flavor in English gardens, is the descendant of the common European *Ribes grosularia*. When introduced into America this plant was found to be subject to a native species of mildew to such an extent as to render it unprofitable. Consequently horticulturists turned to the American wild gooseberries, and about 1847 Abel Houghton produced a cultivated variety of *Ribes oxycanthoides*, and from this variety known as the Houghton, the Downing, which is the most widely cultivated gooseberry in North America, was derived about 1853.

(To be continued.)

## THE HORSE.

### Diseases of the Respiratory Organs.—V.

#### CONGESTION OF THE LUNGS.

Congestion of the lungs—pulmonary apoplexy—consists in engorgement of the functional blood vessels of the lungs, usually due to weakened condition of the heart from over-exhaustion, especially when the animal is not in condition, but is occasionally due to exposure to cold. It is also occasionally seen during the progress of many diseases, as, inflammation of the various organs, as the feet, joints, intestines linings, in heart affections, and various prostrating diseases. The most common cause is subjecting a horse to severe exercise when he is not "in condition," or is taxed beyond his strength. In order to bring a horse into "condition" for severe exercise, it is necessary that he be gradually prepared. Congestion may also result from actual want of air in horses that are housed in badly ventilated stables.

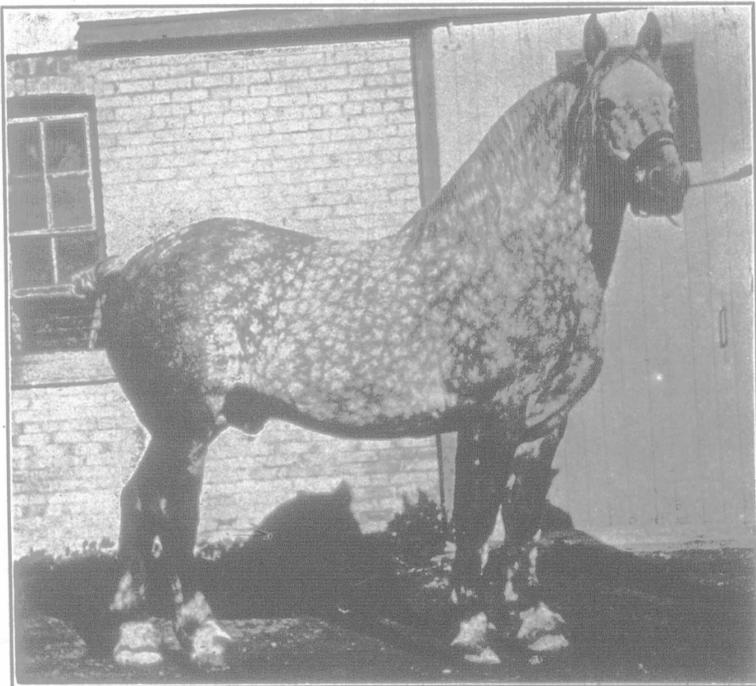
Symptoms.—The symptoms are usually very distressing. The animal stands with outstretched legs and seems to "fight for breath." The nostrils open and close quickly, the flanks heave rapidly, the eyes are blood-shot and wild in appearance, else sunken and dull, the legs and ears are cold, and cold sweats bedew the body; the pulse is small and indistinct, and usually very frequent, perhaps 100 or more per minute in extreme cases; the heart's action is tumultuous but weak. In some cases there is a discharge of frothy blood from the nostrils. If at liberty, he will stand, if possible, with his nose extended facing the open air.

Treatment.—In the first place it is necessary to have the patient so placed that he can obtain as much fresh air as possible. He must be placed where his head comes in contact with pure air. By reason of the congestion of the functional blood vessels, the general circulation is largely checked; hence to stimulate the circulation it is good practice to rub the body smartly with cloths or wisps of hay or straw, and then clothe warmly. It is also good practice to place the feet in tubs of hot water and bathe the legs well for half an hour or longer with the same, then rub them well with a stimulant liniment, as one made of two ounces oil of turpentine, four ounces tincture of camphor, one ounce of tincture of iodine, four ounces alcohol, and water to make a pint. After being rubbed well with the liniment, the legs should be well wrapped, as high as possible, with woolen bandages. If proper bandages cannot be obtained they may be substituted with ropes made of straw or hay. In an hour or two the bandages should be removed, one at a time, the legs well rubbed as above, and the bandages then replaced. The medicinal treatment should be directed towards equalizing and balancing the circulation. This is a case in which sedatives and stimulants may be used at the same time. In order to directly relieve the congestion of the vessels, it is good practice to extract four or five quarts of blood from the jugular vein. The administration of medicinal sedatives, as aconite, is contra-indicated as it will decrease the strength of the already greatly weakened heart, but have no action in relieving the congested vessels, but blood-letting, by decreasing the quantity of blood in the vessels, tends to relieve the congestion and of course, also weakens the heart's action. In order to counter-balance the weakening action of the heart, it is necessary to give stimulants both before and after blood-letting. For this purpose any diffusible stimulant, as sweet spirits of nitre in two to three ounce doses in a little cold water, given as a drench, or alcoholic spirits as whiskey, brandy, gin or rum in four to six-ounce doses in a little water as a drench are helpful. The stimulant may be repeated about every two hours as long as necessary, but it is seldom wise to repeat the blood-letting. If the weather is cold, it is necessary that all parts of the animal be clothed to maintain heat, but in no case may the patient be moved to a warmer stable where the ventilation is not good. Heat may be sacrificed for pure air; it can be substituted by clothing and bandages, but nothing can be substituted for fresh air. The patient should be allowed all the cold water he will drink, and, so long as his appetite remains, given a reasonable supply of soft, easily digested and laxative feed. If the appetite fails and he will drink milk, it should be given instead of water, and in order to keep up his strength, if necessary, he should be drenched with milk and raw eggs beaten up in it, or with gruel or boiled flaxseed. Opinions differ as to the benefit

derived from the application of counter-irritants to the breast and ribs. This may have the action of stimulating the circulation of the skin and thereby tend to relieve the congested vessels. After the symptoms of congestion have passed, the patient must be very carefully treated, else there will be great danger of inflammation of the lungs following. Bearing in mind the probability of this sequel, the patient must be carefully attended to for a few days. His feed should be somewhat limited in quantity and of a laxative, easily digested nature, and water supplied as freely as he will take it. It is good practice to dissolve in his drinking water twice daily for two or three days, two to three drams of nitrate of potassium. He should be kept in well-ventilated quarters, guarded from drafts, and he should be well clothed until convalescence is complete. WHP.

### The Horse Association of America.

An organization has been brought into existence in United States that should prove exceedingly useful in placing the horse honestly and truthfully before the public. This forward movement for the horse industry is not backed only by the breeders but is subsidized heavily by all commercial interests who are in anyway interested in horses. The new organization is called "The Horse Association of America," and back of it financially and morally are such kindred interests as manufacturers and distributors of leather goods, (particularly harness and saddles), feed dealers, horseshoe companies, steel and wire firms and other industries whose business depends on the popularity of the horse. Needless to say the breed associations are enthusiastic in their support but commercial interests will raise \$4



Jabot.

A splendid Percheron stallion, owned by T. J. Berry, Hensall, Ont.

to every dollar raised by the horsemen. The Horse Association of America will surely accomplish something with such financial and moral support.

## LIVE STOCK.

Keep the sleeping quarters of the hogs dry.

Pigs covered with parasites will not thrive. Use a little machine oil on their bodies.

Young pigs injuring the sow's udder with their sharp teeth is sometimes the cause of sows becoming vicious with their young. Remove them or break off the tiny sharp tusks.

There should be no reason for a score or more of hogs or sheep to die in a car when in transit to market. Rough handling, overcrowding and slow transit are contributing causes to loss.

A short time spent, with clippers or shears, in trimming up the cattle will make a marked difference in the appearance, and appearance has a cash value when it comes to selling stock.

It has been reported that in United States 200 cars of cattle a year go into rendering tanks on account of being infected with tuberculosis. This is a heavy toll on the industry. What is Canada's loss?

The abuse to which stock is subjected at shipping points and in transit is causing a heavy loss each year. If we cannot view the effect of abuse from a humane

standpoint possibly it will touch us from the dollars and cents side. A bruise means loss in value of the carcass and yet stockmen, drovers and stock-yard employees continue to wield heavy clubs over the backs of hogs and cattle.

It is estimated that had the common quality beef animals, sold at public stock yards in Canada during 1919, carried enough fat and finish to grade as good in quality the additional revenue would have approximated \$10,000,000.

A full report of the live-stock meetings held in Toronto will appear in this issue. It is to every stockman's interest to learn what the breed associations are doing and to know the men who are directing the associations.

Ability to carry weight and finish is a virtue not possessed by the offspring of scrub bulls. Of the marketing of over 1,000,000 head of stock at Canadian stock yards in 1919 only 20,000 head, or 2 per cent., were of weights and quality desirable in export beef.

A Wellington County farmer advertising in his local paper offers a grade Durham bull for sale. It is bad enough for a man to use a grade on his own herd without offering to sell it to the public. All grade male calves should be castrated. A good steer is more valuable than a common bull.

In Great Britain a good deal of live stock of all classes is sold by auction. Would it be to the interests of live stock feeders if stock shipped to our large markets were disposed of by auction to the highest bidder instead of sold privately. We would like to have some of our readers discuss this question.

According to reports of men who closely follow the markets the number of stockers and feeders returned to the farms for winter feeding was below par last fall. This will mean a shortage of finished bullocks this spring. According to the law of supply and demand the prices for prime stock should be satisfactory to the feeder.

Ewes due to lamb early should be closely watched, and be in a warm pen when lambing. February and March temperatures are rather trying on the new-born lamb unless the housing accommodation is comfortable. A dead lamb does not mean so great a loss as a calf or colt but nevertheless it is a loss which should be prevented if possible.

### Why the Popularity of the Scrub Sire?

If, as some authorities state, over fifty per cent. of the bulls in service in Canada are of the scrub type and character, this particular class of herd headers must be popular among the stock raisers. It has been proven, times without number, that the progeny of scrub bulls, be they pure-bred or grade, is of mediocre quality, compared with the progeny of well-bred sires. The appearance of the latter is much superior, they make larger gains in the feed lot, they weigh more at two years and they command a higher price per pound on the market. Why then are any scrubs kept in service? The first cost is undoubtedly less and this influences many. The dollar in the hand blinds the purchaser to the future results of his investment. He may know full well that the breedy animal is the best proposition but he hates to part with the extra fifty or one hundred dollars. This may be termed poor business. If the better bred, higher-priced sire costs a hundred dollars more than just a bull, and his progeny at one-year-old are worth anywhere from ten to twenty-five more than the progeny of the cheaper scrub, wouldn't the more expensive bull be the bargain rather than the other? It is time that the future of our herds was considered more intelligently instead of just drifting along the road of least resistance and then waking up ten years hence to the fact that the herd is of no better quality than it was at the beginning. But, price is probably not the only reason for the pre-eminence of the scrub. When discussing the scrub bull campaign with a farmer recently the remark was made that the scrub got the cows in calf when the pure-bred failed and for this reason the scrub had a place. If the prolificacy of the scrub is greater than that of the pure-bred there must be a cause. The former class of sires grow up under natural conditions. At no time in their career are they loaded with fat. Is it possible that in some cases, pampering and too high feeding of the well-bred calf, from the time it is dropped until it is mature, is rendering it impotent? It is well known that faulty methods of feeding and care, overfeeding, insufficient exercise, etc., are contributing factors to sterility. The class of sires termed scrub usually have a free run and are not overfitted. They don't show much breed-type or character but they leave progeny after their kind, and the service fees of such sires do not amount to much—neither do their progeny as a rule. If over-fitting is a stumbling block to the spread of pure-breds of high quality it may pay breeders to let the good calves grow up under more natural conditions even though they do not develop quite so quickly as under forced feeding. The service bull should be in a thrifty condition without an over load of flesh. Too few bulls get sufficient exercise to keep them in the best form for service. The feed has something to do with the importance. We know of one bull in particular that failed to stop the

cows when he was fed a liberal quantity of silage. When this feed was dropped and roots, rolled oats and clover hay comprised the ration there was a marked improvement. After a couple of weeks without silage there was seldom a cow returned.

Breeders and feeders should be careful not to weaken the sire by over-fitting or pampering. There should be no reason why the well-bred bull should not be as sure as the scrub. About the only thing a scrub sire has in his favor is that he gets the cows in calf but it is time that more attention was paid to the quality of the calf. A square, blocky, fine-quality, easy-feeding calf cannot be expected from a long-legged, shallow-bodied, peaked-umped, weak-constituted, expressionless-headed sire. If a good calf is wanted a good sire must be used and even then the progeny may not fill the eye but it will be a lot better than if its sire was of poor quality. If attention is given to the character and quality of the sire there will soon be an improvement in the females. A constructive policy in breeding is necessary on every farm if our live-stock industry is to be improved.

We do not want to be misunderstood in regard to conditioning the animals. While a few breeders may pamper their young stuff the far too great a tendency on the average farm is to skimp the feed to the calves and young stock. Liberal feeding of bone and muscle-forming feeds is essential in raising stock. A thrifty, growthy condition is important, but having a deep layer of soft, flabby fat on the herd sire is not considered advisable. Plenty of exercise is important and it will tend to harden the animals. Sterility may result from abnormal physical conditions which are in no way influenced by the feeding. It will pay to use the best sire available as the bull is half the herd.

**Some Sheep Barn Notes.**

EDITOR "THE FARMER'S ADVOCATE":

A sheep is one farm animal that requires less expensive housing than any other. It is safe to say that one can put more money's worth of sheep under less roof value and get results than can be done with any other class of live stock.

Yet on most farms one will see sheep housing facilities carried to either one of two extremes. Either very expensive buildings or else they are allowed to seek shelter in any sort of a shed that isn't occupied by other live stock. Very often, however, we have seen sheep do better in a cheap barn than others were doing in an expensive barn because the first was built with an understanding of the animals' needs and in an attempt to meet those needs.

In housing sheep two factors are essential, dryness and freedom from drafts. Sheep can stand any amount of dry cold. I have seen sheep that had stayed in a spruce and birch thicket on the back end of a farm in Cape Breton until the snow was three feet deep. A path had to be tramped in the snow before they could be brought to the barn, yet no ill after effects were observed.

Damp barns will cause more trouble in a flock of sheep than will anything else, but a vicious dog. They cannot stand moisture, and wherever one economizes it is folly to do so in the roof.

Another condition very detrimental to the welfare of the flock is exposure to draughts. One mistake is to have too many small doors. These admit only a small amount of air at a time. When two or more doors are open a draught is caused. One large door eight or ten feet wide is usually best. The large door will let the sheep out quickly if they happen to be stampeded and there will be less jamming in the doors. The wide door again, will permit driving a wagon into the barn. Thus, even if it is not desired to haul feed in, manure may be hauled out. Very often the sheep barn is only cleaned two or three times during the winter and it is surprising the amount of litter that will accumulate. It is a simple matter to clean out a barn when one can drive in and load directly on to the sleigh or wagon.

Sunshine is another very necessary thing in a sheep barn. One cannot have too many windows. Sunshine prevents the growth of many harmful bacteria. It also helps to keep the building dry. A dry, light barn is always more sanitary than a dark, damp one.

One does not build a sheep barn, or for that matter, any other barn every day. It is a question that needs a lot of thought and planning. This is a good time to think it over, later you may be too busy with other work.

In selecting a site for the sheep barn, have the ground around the barn as dry as possible. Have it placed so that it will be easy to get at from the other buildings and also close to the lane that leads to the pasture.

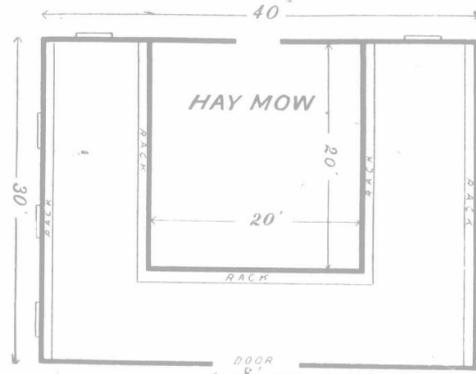
The man who expects to increase his flock must build with an eye to future needs. At least from seven to ten square feet of floor space per head should be allowed and for breeding stock sixteen square feet would not be too much. It is far cheaper to build the barn large enough at one time than to add to it later.

It is hard to say which is the best type of building. I have yet to meet two sheep men who exactly agree on this point. Sketch "A" shows a style of sheep barn that has given satisfaction. This one is really a building twenty feet square with a fourteen foot post. Around three sides is built a shed ten feet wide for the accommodation of the sheep. This gives the sheep eight hundred square feet of floor space. There are a hundred and twenty feet of rack space placed as shown in the sketch.

The hay mow including the space over the shed should hold about eighteen tons of hay. The door is eight feet wide allowing a team to be driven in. When

this barn was first built there were two doors on the opposite side to where the door is shown in the sketch, one at each end of the sheep space. This was found to be drafty so the doors were closed, windows put in their places and the door cut on the other side.

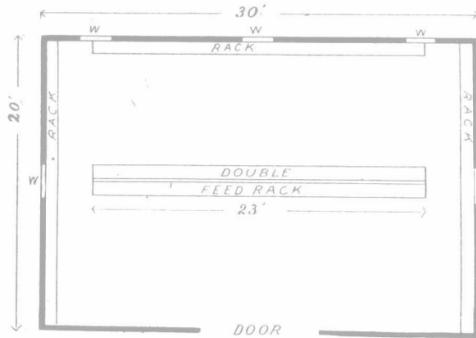
Chutes lead from the side of the mow to the racks but the best way is to pen the sheep outside until the feed is placed in the racks. A description of the racks is found later. The ventilating shafts are not shown in sketch but they are built up to the roof of the main



A. Sheep pen with 120 feet of feed racks; 800 square feet of housing space and storage for hay.

part of the barn. The size and plan will no doubt be modified to suit individual requirements. Sketch "B" shows the floor plan of an open-front sheep shed. This is designed to house about fifty head of sheep. The idea of construction is to have a building air-tight on the East, North and West sides and open at the South.

The building is twenty by thirty feet, with a twelve foot post, and three quarter pitch roof. The foundation is of concrete two feet deep and a foot wide. The frame is of plank covered with inch-boards, tar paper

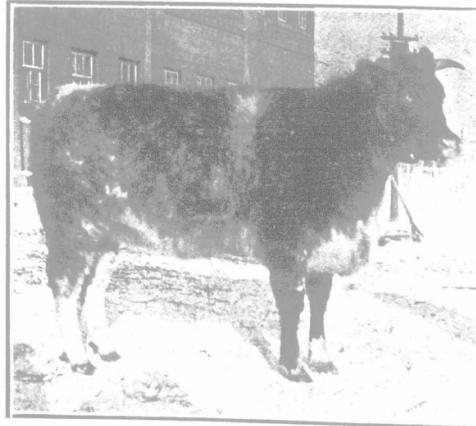


B. Rack on three sides and in the center.

and shingles. There are five windows, each four by five feet, thus allowing plenty of sunlight. The door is ten feet wide. It is hung on rollers and is closed only during storms. The floor is made of two-ply inch boards.

As the lower story is seven feet high there is quite a space left above for storing hay. Chutes are built against the wall and over the feed racks through which the hay is sent down.

There are racks along three sides of the shed with a double one in the centre. The racks are built twenty-



Jealousy 9th.

Champion Shorthorn heifer at Ottawa for Kyle Bros., Drumbo, Ont.

one inches wide. The bottom and sides are built tight to a height of three inches so that chopped roots or grain may be fed in the same rack as the hay and straw. The sides are slatted about nine inches apart so that the sheep may poke their heads into it while feeding.

These racks are found very useful. They save feed and prevent waste by stamping. They also keep the sheep from crowding into one place. I have seen racks of the same pattern used for feeding roots to the flocks on several large farms in Yorkshire and one shepherd made the remark that of several different kinds used they had given the most satisfaction.

The foundation of this shed took six and a half

barrels of cement and seven or eight yards of sand and gravel. The frame took about two thousand feet of two inch stuff, four, five and six inches wide. The floor took 1,200 feet of rough inch-boards. It is laid double with break seams. The walls and roof took two thousand five hundred feet of rough inch-boards, seven rolls of building paper and twenty-five thousand of shingles. The second floor require 600 feet of inch-boards.

Such a building should, at least, last twenty years. Therefore, five per cent. depreciation would be enough to charge against the building. This with six per cent. interest on the cost of the building would bring the charges for housing fifty sheep for one year to about thirty-five dollars, or about sixty-nine cents per head.

**THE FARM.**

**Winter in Leeds County.**

EDITOR "THE FARMER'S ADVOCATE":

It is some time since I wrote you, and as there seems considerable to write about, and not being rushed very badly, I thought possibly it might interest your many readers to let them know conditions in this section of Leeds County. As winter is well underway, with the thermometer running around twenty-six below zero, I find that close to the old stove is a fairly comfortable place to put in the time; and profitable, too, for farming is a business which requires a great deal of calculation to make it a success, and a farmer must lay his plans a year ahead.

The past fall saw about all of the plowing and other necessary work well in hand, and, with a plentiful hay crop in 1919, the farmers in this locality are fairly well supplied with fodder, with the exception of grain which was badly drowned out in many parts, and in other places none was sown last spring owing to the excessive rains. With very little snow at this writing, late in January, the farmers are able to do all that is to be done, such as getting a supply of wood and hauling out manure, and at the present time they are all busy putting in a supply of ice for the purpose of cooling milk so that it may reach the condensery or cheese factory in Number one condition. There has been a large number of auction sales last fall and this winter, all stock selling at a high figure, grade cows selling from \$80 to \$140. With the high price that manufacturers are asking for new stuff, second-hand machinery commands a good price. A great many farms are changing hands, for various reasons. Some are leasing their farms with stock and implements, while others are selling outright and either going into some other occupation, retiring, or buying in another locality. The drovers have been busy picking up all surplus stock in the cattle and hog line, at fair prices for all cattle but a decline in the pork product. Since the price-setting of cheese last fall, a great many farmers have gone out of the hog business and are sending their milk to the condensery, where they are making more money than was made with cheese at 25 cents. The condensery has made great changes in this part of Leeds County. A great many cheese factories have had to close, while some owners are selling their equipment; others are putting things away in good condition to be in a position to manufacture cheese again, if necessary. As the cheese and bacon industry go hand in hand, and with farmers selling their brood sows and the condenseries paying around \$70 per ton for milk testing 4.2 per cent., it looks as though pork and pork products—like cheese and condensed milk—will cost the laboring man, who is eternally clamoring for shorter hours and more pay, a great deal more in 1920 than he has ever paid before. Should the farmers adopt the eight-hour day, which our city cousins are getting, farming will be a cinch instead of drudgery as it has always been under the sixteen-hour day system.

This locality is keeping up with the times as regards education, as the people are going in for a consolidated school system. A beautiful site has been secured, containing six acres, at a cost of \$1,800 or an average of \$300 per acre. It is the finest location in town, and the building is to be of concrete foundation and cement blocks bare, and red pressed brick for the balance of the structure. It will have a floor space, I believe, of 50 by 120 feet, and will have all modern furnishings throughout. The brick and lumber are being got on the ground ready for business as soon as spring opens up. The cost of the structure, I am informed, will be in the neighborhood of \$25,000.

I am pleased to see that our new Government is going ahead full steam with the Provincial Highway, which is badly needed. Surveyors have been at work, laying out the route, and it looks as though many a fine shade tree and some fine laws will be badly cut into in order to get the desired 86 feet required, but, with the increased motor traffic and the necessity for a wider track, they will have to go.

As to the prices for farm products in this locality, they range fairly high. Cheese is retailing out of country stores at 41½ cents, with butter selling for 62 cents. Fresh eggs are worth 75 cents per dozen, with live pork at 18 cents. Hay in stack is selling at \$16, and some baled hay of good quality is being brought in, I believe, at \$23 per ton. Oats are selling at \$1.05 per bushel, and potatoes at \$2.25 per bag. Dry hardwood, 16 inches long sells readily at \$4.50 per cord. With the large number of horses that were gotten rid of last fall, it looks as though anything fairly good would bring a good price. By seeding time, taking all things into account and with the enthusiasm displayed by the people in the past four years, I have every reason to believe things will go by the tick of the clock in 1920.

[Leeds Co., Ontario.

W. F. ARMSTRONG.

**Some Sweet Clover Points Explained.**

EDITOR "THE FARMER'S ADVOCATE":

Seeing E. A. Letts' article in "The Farmer's Advocate" of January 22, commenting on my article of January 8, I thought I would reply to it. Now, Mr. Letts has misconstrued my article somewhat, although perhaps I did not explain it to his satisfaction. Three years ago I sowed sweet clover on an acre, or a little over, in a field which sloped to the south, then rose to rather an abrupt knoll at the cross fence. The field began with a sort of black loam at the north, then dipped down into clay, then rose at the south with a sandy loam knoll. There is hardly an acre alike in this part of the country. The sweet clover was a little uneven on the black loam; I couldn't complain very much on the clay, but it was a total failure on the sandy loam, except for one spot which had been the scene of a brush bonfire a few months before seeding where a perfect stand was had.

The next attempt at growing sweet clover was on three acres or a little over, on limestone land. This field had a low spot running through it. The seed was obtained from a reliable seed dealer, and everything looked promising. The next spring all the sweet clover in the low spot was heaved out of the ground, from three to four inches, by the frost. So much for low ground for sweet clover. "Did not the sweet clover with the exposed roots come on and grow?" you may ask. Yes, in a sort of way. After the hay was cut the sweet clover grew again and produced seed, but I was waiting for the low ground, and thus lost several bushels of seed. Now, I was only stating for the good of everybody or anybody contemplating farming, when I said to have well-drained limed land on which to grow sweet clover. Of course, if the land has limestone in it, and the land is well drained, it hardly needs liming. When a farmer sows sweet clover on good tillable land, he generally does it to plow under for humus, also getting some benefit from the roots. Why not complete the good work by liming it, thus preparing the land to grow good red clover seed, or alsike, which in this part of the country is worth so much more?

As for sweet clover growing on sand, I have also seen it growing on the sandy bayshore, but very uneven. It is one thing to grow it, and another to produce hay. A farmer should not sow any more than he can handle, for if it is left to go to seed on strong land, it is very difficult to harvest. Also, a heavy rain renders it unfit to feed to stock, as I know of a farmer losing a valuable sheep through feeding it washed sweet clover. As for sweet clover growing on wet land and sandy land, it has seeded itself, and if anybody had sowed it there they would have become thoroughly tired and discouraged. I think there is quite a difference from sowing it on good fertile soil and sterile land.

Mr. Letts mentions sowing it with the husk on. Why do you suppose, if it doesn't make any difference, do all the seed dealers always clean it to the best of their ability when selling it? Several United States farming experts and farmers advise against sowing it with the husk on. They also cure the clover straw for the silo which they claim makes good feed. Sweet clover seed, with the husk on, is more apt to germinate when it lies on top of the ground, than when it lies in the ground. It requires some energy to break the husk open; then if it is in the ground, it requires more to reach the surface. It works on the principle of all tightly-clasped things; the tight clasp must break or else it will die. The husk on the sweet clover, when it lies on top of the ground, acts as a protection till wind, rain and sun help to rot and shrivel the husk off, or perhaps for the sand to drift over it. I have found that heat, or dry, warm air helps more than anything except rolling to liberate the seed, which conditions you will agree, do not exist in the damp, moist earth. The seed can be easily cleaned after it comes from the threshing machine by taking it to a clover huller or dresser in the fall, whenever such comes into your neighborhood.

Prince Edward County, Ont. A. G. V.

**CANADA'S YOUNG FARMERS AND FUTURE LEADERS.**

**Poor Fences a Handicap.**

EDITOR "THE FARMER'S ADVOCATE":

I purchased a farm two and a half years ago and started farming for myself, therefore, I have still a lot to learn about farming. Before purchasing I looked over several farms, some that were for sale and some that were not, and I found on every farm practically the same handicap—poor fences. I believe this to be one of the greatest, if not the greatest handicap to mixed farming. With fencing, posts and labor at present high levels, this is a hard problem to get over. My idea is to fence what you can each year and do it the best you can so that you will never have to go over the work a second time.

I use nothing less than ten-wire woven fence with a barb wire on top; then, no matter whether I keep hogs, sheep, cattle or horses, when I put them in a field they stay there till they are taken out. Good fences go a long way to insure good neighbors, as there is nothing more annoying than to come home after a day's outing and find your neighbor's stock was also having a day's outing at your expense, or vice versa. I am writing from a mixed farming standpoint, and I believe a small farm should be fenced in small fields and larger farms in proportion.

F. F. ARMSTRONG.

One so often sees five acres of wheat in a fifteen acre field. This means, through improper fencing, ten acres standing idle all fall, which otherwise might have given considerable pasture at a time of year when pasture is usually scarce. With the young farmer, capital is usually limited, therefore I say stock your farm with good stock that will sell readily when you have it finished. I might also suggest to the young farmer, whether you keep hogs as your main stock or only as a side line, to try the use of tankage. It will give you more desirable hogs, reduce your feed bill and thereby increase your profits. The best way to find out which branch of your farm is paying the best is to use a farmer's account book, which can be secured free from some branch banks. I would like to see some other readers' experiences along these lines. Wishing "The Farmer's Advocate" every success.

Lambton Co.

JOS. WELSH.

**Handicaps in Prose Poetry.**

EDITOR "THE FARMER'S ADVOCATE":

Among your topics to discuss was one, 'twas labelled somewhat thus: Experiences, impressions too, of those to agriculture new. Beneath this heading I should come, as farming I have just begun. A farmer once I used to be before I sailed the deep blue sea, where, 'neath the army's tender care I went a soldier's life to share. I thought to haste to Sunny France to make the German Kaiser dance, to get a V. C. to my name and an honored place in the Hall of Fame. Instead, I plowed through seas of mud and shed no drop of German blood; I hauled our rations up the line, and got bombarded all the time. The officers it did delight to make us work with all our might, and oftentimes when working there I would most solemnly declare, if e'er I reached my old farm home to stay: there till the crack of doom. But, ere our peace time work began, the Government hit

me with a "fond adieu." I got a farm and some fine day I hope to make the blame thing pay. My chiefest difficulties are (by one and all blamed on the war), the lack of cash to run the farm, to keep the stock both fed and warm; the lack of thought that's being spent by this our present Government, who seemingly the farm despise, instead of boosting to the skies. The Government's appointed men to run the show from stern to stem. "Thou shalt not raise the price of milk, or other products of that ilk;" when Western wheat goes up in price, Ontario's stays as firm as ice; commissions set to figure costs are always by consumers bossed. One consolation now I find—and it is in most every mind: On next Dominion polling-day we all are going to have our say. The farmers then will be in power and be the heroes of the hour; the manufacturers will stand on open markets with all hands; the capitalists will have to start to work from dawn till after dark; we'll crank our Fords and ride away, and milk the cows just once a day.

Lambton Co., Ontario.

JIMMY.

**AUTOMOBILES, FARM MACHINERY AND FARM MOTORS.**

**Sagging Gates.**

Whenever a moving-picture director has a scene calling for a dilapidated farm home he invariably puts a decaying strip of fence with a sagging gate across the lawn of the domicile. It makes no difference whether the beautiful but poor heroine is pining away in the tumbling home of her forefathers or whether the place is the rendezvous of necklace smugglers—in reel life the sagging gate is nearly always on the job.

Of course, this does not indicate that the sagging



Contented, Thrifty-looking Shorthorn Cows and Calves.

on a plan to lend some money to the men who fain would start to farm again. A man could buy a farm, it seems, the price to be five thousand beans. Of this he anten ten per cent.; the rest comes from the Government. First mortgage on the farm to be the Government's security. He pays this back—that's if he can—on the amortization plan. At five per cent.—the interest's scant—what more could any soldier want. When I got home from "Over there," I said "I'll be a millionaire; this is so easy soon I'll say that farming's no work and all play." So for this money I applied to buy the farm where I'd reside. An answer came in course of time to say what duties now were mine. I must fill out a lengthy form with all my deeds since I was born; the education I'd received, in what religion I believed, where both parents lived when born and where I lived when I was home, whereas, why not and heretofore, and other things like this galore. When this was answered to their taste, they answered me in moderate haste: "Please send five hundred bucks—your share—while we find out if title's clear. And then the deeds you'll shortly bring made out to George the Fifth, the King." I straightway thought "This is a sin," and asked them "Where do I come in?" They answered: "My, but you are bold; the farm you'll by agreement hold." Now, this agreement's still to me a source of endless mystery. I asked their agent when he came if he could explain the same. He couldn't, much to his regret, but said to ask the District Rep. I called the District Rep. by phone, but "of his business it was none." I wrote the Board to this intent: "The act you did misrepresent. You said you would be satisfied if a first mortgage I'd provide. Instead you want me now to mail five hundred hard-earned army kale, that you might have a title clear on which my name does not appear. My guarantee is very small that I'll be on the farm at all. I would not deal with any man on such a blindly trustful plan. I'll manage without help from you and quickly bid you

gate always goes with a broken-down farm house or that such a house always goes with a sagging gate, but it does seem to imply in a subtle way that the listing gate has unsavory attributes. The funny thing about it is that this eyesore on the farm is easily remedied. A simple cure is to get a wheel, either small or smaller—from an old piece of machinery, say—and bolt it to the front end of the gate in such a way that the gate will be held level. A discarded plow wheel will do, and if the gate fits closely with the post it is only necessary to chisel off a little wood at the bottom of the post to permit the gate to close without scraping. Any gate on the farm will respond to this treatment of the sagging habit.

**Paint and Keep Your Credit Good.**

A prominent banker makes the statement that he is influenced in lending money to people by the appearance of their property. If their houses, barns, and other buildings are painted as often as necessary in order to give them a spick-and-span appearance, he feels that they are a better risk than those who do not paint their buildings and let them go to rack and ruin through neglect.

It is a condition in almost all mortgages on buildings that the buildings shall be insured, for the protection of the lender against fire. Some lenders make the stipulation also that the buildings shall be kept painted at regular intervals. This is a wise precaution, as a building can deteriorate from lack of paint so as to lose a large part of its value in just a few years. In a way, paint is also fire protection, since it is the slow combustion of the oxygen and other elements in the air that causes the decay of building material.

Besides, if for any reason it is desired to sell a property, the prospective purchaser can easily be

induced to pay a higher price for a well-painted house than for a shabby one. A good buyer looking over a shabby property is quick to assume that the owner is bankrupt or badly in need of money if his property has a run-down appearance, and makes his offer accordingly. If it is neatly painted, however, he assumes that the owner is prosperous and hesitates to make an under-value bid. In short, in case of a sale, a coat of paint will bring a price for a house enough higher than could be obtained for an unpainted building to more than cover the cost of painting.

Therefore, any way we look at it, paint is a good investment for a property owner.

### Engine Troubles.

It is not uncommon to hear people who are only slightly familiar with internal combustion engines state that these engines get tired the same as animals, or that they have "cranky" spells and then the only thing to do is to wait for them to get over it.

This idea is absolutely wrong. It has doubtless been caused by the fact that occasionally something will happen to an engine while it is running, which will cause it to lose power for a while and a little later on, without the operator doing anything to it, it will again develop full power. There is always a mechanical reason for such erratic operation. A piece of carbon or dirt may lodge under a valve and remain there for some time, lowering the compression and decreasing the power. After being hammered for some time by the valve the carbon or dirt may be pounded out flat or may become loosened and pass out through the exhaust, after which the engine will operate normally. There are other rather unusual causes which will have a like result.

The operator of any engine which loses power should make a careful investigation to ascertain just where the trouble lies, for he may rest assured there is a reason for it, and it is possible to locate it if he will make a thorough and intelligent investigation.

#### A POOR SPARK WILL CAUSE LOSS OF POWER.

The quality of the spark has a great deal to do with the power developed by a gas engine. When the spark is weak, the charge is not ignited as quickly or as thoroughly as with a hot spark and the result is that the charge does not burn as rapidly as it should, and perhaps has not finished burning by the time the exhaust valve opens. The difference between a poor and a good spark has been aptly illustrated by the comparison of firing a pile of straw with a match and with a blow torch. The straw can be ignited with either, but it will start burning much more slowly when a match is used than when a blow torch is turned on it. The same

principle is involved in igniting the charge in a gas engine cylinder.

There are a number of things which may cause the spark to weaken while an engine is in operation and so decrease the amount of power developed, resulting in the condition known as a "tired" engine. Dirty spark plugs are probably the most common cause of a poor spark. As most every engine operator knows, when the porcelain or other insulating material on the end of the plug which is inside the engine becomes coated with carbon, part of the current which should furnish the spark is short circuited through the carbon and only part of the current jumps the spark gap on the plug, making a smaller spark and one not so hot as would result from the full current.

Another frequent cause of a weakened spark inside the cylinder, when the rest of the electrical system is in good order, is dirt and dust collecting on the porcelain at the top of the plug. If this porcelain has been a little oily and the air from the fan blows directly over it, a great deal of dust will stick to the oily surface. This dust may not cover the entire surface of the porcelain, but a narrow streak of dust from the tip of the plug to the metal base will short circuit a considerable part of the current and cause a weakened spark, the same as carbon on the inside of the plug.

There are so many possible causes of a weakened spark on different types of engines that it is impractical to undertake to mention all of them. Partial disconnection of the wiring due to vibration of the machine, worn breaker points on magnetos or vibrator points on coils and worn or broken insulation on the wires leading to the spark plugs are probably as common as any, but where the trouble cannot be traced to any of these sources and the ignition is suspected a careful examination should be made of the entire system.

#### FUEL SYSTEM SOMETIMES RESPONSIBLE.

The ignition system is not always to blame for loss of power. Irregularities in the supply of proper mixture to the engine will produce similar results. Sometimes a small amount of dirt in the fuel system may partially clog pipes or other small passages, interfering with the supply of fuel to the carburetor or mixer. A small bit of dirt on the needle valve will have the same result. A little water in the fuel will very often reduce the power considerably without stopping the motor. This water may not have been put into the tank with the fuel, but may have condensed on the walls of the partially-filled tank and run down into the fuel.

Too lean or too rich a mixture will prevent a machine developing its full power, and anything that tends to interfere with the proper mixture will bring about this result. Leaks sometimes develop at some of the joints around the intake manifold, permitting extra air

to enter, making the mixture too lean. Occasionally, with some machines, if the needle valve is loose the vibration of the engine may cause it to close gradually, cutting down the amount of fuel passing through, with a consequent loss of power.

If the intake valve does not open fully the engine cannot receive the proper amount of mixture and power is reduced. This will usually occur gradually due to wear in the push rod or other device which operates the valve, but on some engines the mechanism which permits adjustment of the length of this push rod may become loose due to vibration and allow the rod to shorten, preventing the full opening of the valve.

#### SOME PART OF THE ENGINE MAY BE AT FAULT.

In the motor itself there are also a number of things which may happen which will interfere with the development of full power. Overheating of pistons, cylinders and bearings is probably the most common cause. A poor quality of oil which gums or does not lubricate properly will reduce the power. An insufficient supply of good oil will have the same result. The governor may get out of adjustment, due to looseness or wear and partially close the throttle.

It is impossible for a motor to develop its full power without proper compression. The compression naturally decreases as the cylinder and piston rings wear and allow the mixture to escape past them during the compression stroke. This is usually a gradual occurrence, although occasionally a ring may break and score the cylinder walls badly within a few minutes, causing a sudden loss of compression and consequently decrease power. Most frequently a sudden loss of compression is due to a sticky or leaky valve. Oil may gum on the valve stem and prevent its seating or, as already mentioned, a piece of carbon or dirt may lodge under a valve and prevent its closing. A broken or weakened valve spring may fail to close the valve or, if it is the exhaust valve spring, it may allow the valve to open on the suction stroke, permitting burned gases to again enter the combustion chamber, reducing the amount of fuel mixture drawn in and lowering the power of the engine.

#### INVESTIGATION AND REASONING CURES THAT "TIRED FEELING."

All in all there are a great many little things which may happen while an engine is in operation which will reduce its power, but in almost every case the trouble can be located by a proficient operator after a few minutes' investigation and reasoning. It is ridiculous to sit back and allow an engine to operate inefficiently under the assumption that it is merely tired and will do better after a while, for a gas engine does not get tired.—"Tractor Farming."

## Twentieth Annual Meeting of the Fairs Association.

The twentieth annual convention of the Ontario Association of Fairs and Exhibitions opened at 2 p.m. on Tuesday, February 3, in the Forester's Hall, Toronto. President L. J. C. Bull presided over the convention and in delivering his presidential address said: "This Association is the great clearing house for the 360 societies in the Province, a veritable farmer's parliament where all questions that interest the farming community in so far as the production of live stock, dairying and agricultural products are concerned are discussed; and ways and means provided for the uplift of all its branches. There are still a few societies that have not even yet realized what your Association is doing for them. We have arranged with the Government that the northern farmers be put on a better basis than those of the older sections of Ontario by apportioning their grants on double their expenditure for agricultural purposes, and, on top of this, have secured an extra grant of \$5,000 to be distributed among these societies. The Standing Field Crop Competitions continue to prove of the greatest possible value in the improvement of field crops in Ontario. At a recent convention of field crop experts held in the Parliament Buildings, a speaker said that the field crop competitions in the 5 southwestern counties of Ontario had done more to develop and advertise the corn industry than anything done previously, and, after viewing the magnificent display of grain at the Canadian National Exhibition, he wondered why such an exhibit could not be made at the international shows of the world to prove what Ontario can produce in the line of field crops and pure seed.

"At the last convention held a year ago an important resolution was passed re the standardization of farm machinery which was unanimously supported by the farmers of Ontario and Manitoba as well. If the Union Government at Ottawa does not move more rapidly in enacting the necessary legislation in this regard it may be necessary to set up a farmers' government at Ottawa that will see that this forward movement in our interests is put into operation. The Short Courses for Departmental Judges have proved of inestimable benefit and each succeeding year a better system is being worked out and more uniformity of judgment arrived at. As the years go by the work of the lady judges at our fairs and exhibitions has required the greatest experts to make the awards. A number of our judges have been employed for some years and their work has been very satisfactory. Every society should avail itself of the services of departmental judges whether for ladies' work, live stock or other products. The day is past when a neighbor should be asked to judge a neighbor's products."

The discussion on the president's address was led by John Farrell, Forest, who recalled the large amount of work and money needed to bring the agricultural societies to the point where they are to-day. Gradually the societies become of importance in the community and the general agriculture of the province until Governments were willing to provide assistance. He thought that the effort to assist the societies in Northern Ontario was particularly praiseworthy, especially in view of the fact that the Northern country is an asset to Canada that will in the coming years play no mean part in lessening the national debt. The speaker said that \$75,000 had been given to the Association in the past by the Province. Every cent had been well spent, he said, and thought the Association would be justified in asking that this amount be increased to \$100,000.

#### REPORT OF THE SUPERINTENDENT.

The annual report of the Superintendent, J. Lockie Wilson, Parliament Buildings, Toronto, was replete, as usual, with suggestions for the improvement of agricultural societies. We quote as follows: "Our Societies received last year from the late Government an increase in the main grants of \$10,000. Though not nearly as much as was asked for and required to meet the changing circumstances, it helped for the time being to relieve the situation. Owing to the formation of new Societies, chiefly in Northern Ontario, the grant of \$75,000 which had not been increased since 1906, proved insufficient to enable societies, and more especially the smaller ones, to do as efficient work as they desired. The per diem services of departmental judges were increased last year from \$4 to \$5. This was necessary owing to the increased cost of labor required to replace those who were employed in the Department's work as judges, the field crop competitions and fall fairs coming at the busiest season of the year. The Canadian National Exhibition Directors have not yet seen fit to give our Association representation on their Board, notwithstanding the fact that an organization known as the Toronto Agricultural Society, which holds no annual meeting and makes no returns to the Department as required by the law and has been practically dead for twenty years, has been given representation. I would suggest that a deputation be appointed at this Convention to interview the Manager and Directors of the Canadian National and endeavor to have this grant increased. Last year this Convention in this province being open to exhibitors from any other sections and not restricted to this in the district where the fair was held. This seems a reasonable proposition.

If the society wished to confine special classes to their immediate district, that would be all right, but the majority of the classes should be open.

"This year the Department received another communication from the Dominion Seed Commissioner intimating that complaints had been made that the Standing Field Crop Competitions and grain exhibits had apparently not been achieving the results hoped for. This will, no doubt, surprise you, as the opinion has generally prevailed that the Standing Field Crop Competitions were one of the most important lines of work taken up by the Societies since their inception upwards of 100 years ago. There are eight other provinces in the Dominion that have been given the same opportunity to carry on these competitions as you have in Ontario. While they number their contestants by hundreds, ours, run into thousands. There may be room for radical changes in the other provinces, but, until they come within hailing distance of Ontario, we should be allowed to continue our onward march of progress, without too many experimental changes. We have 360 societies in Ontario, less than 200 have up to this time entered the competitions. Each year, however, the list is extending. In 1919 four new societies entered this work and new men are coming in each year to the societies, which are already in the competitions.

#### STANDARDIZATION OF VARIETIES.

"Complaints have been made to me that the report of the seed committee on standard varieties has not been altogether satisfactory, particularly in limiting oats to 2 varieties. It is claimed that in some sections one of these varieties does not give as good returns and is not so well suited to soil and climate as others which have been utilized for years and have proved their value in such localities. This is a matter which might receive your consideration. As the regulations stand now, competitors having any other variety are penalized two points on the whole score. In looking over the appendix for 1919, which gives all the particulars in connection with the field crop competitions, you will note that upwards of 60 different names of varieties of oats appear. You will agree with me that it is time that this number was greatly reduced. The total varieties in the year previous to 1919 was 90. While you may consider the reduction to two is too severe a cutting, I am of opinion that, in the initial stages, six of the outstanding varieties might be selected. Of the 72, 438 Banner and the following stand next in order—Abundance, Granary Filler, Mammoth Cluster, White Wyae and Yellow Russian.

CLEAN UP THE FAIRS.

"The fairs and exhibitions, on the whole, last fall were well conducted and successful, but the midway artist, thimble rigger and faker are again putting in an appearance at many of our fairs. I trust that the new Government will take steps to stamp out this evil. A number of years ago one or two officials of the police department were placed at my disposal and a clean up was made, but for several years this side of the fair work has been taken out of my hands and controlled by the provincial police and I might say in passing that some of the officials are not making a good job of it. Perhaps this convention might do well to take this matter up and make such representations to the Government as they may deem fit. I have made many appeals to the boards of directors of our 360 societies to make their fairs of educational value and avoid as they would a leper, blacklegs and gamblers within the enclosures of their fair grounds. But, still, in some cases the appeal has fallen on ears that will not hear. I have threatened to withhold the legislative grant, which it is in my power to do, if this state of affairs shall continue, but my effort in this regard along moderate lines are apparently not a success. Will I have the active support of the delegates here assembled if more strenuous means are adopted in 1920?"

JOINT SCHOOL AND FALL FAIRS.

"There is a movement on foot that, doubtless, had its origin in our previous conventions, to arrange where possible and feasible, to have the fall fairs and school fairs held simultaneously on agricultural societies' grounds. I was invited to attend a meeting of District Representatives called to discuss the matter and it was decided to have one of the members of this committee address the convention and endeavor to make satisfactory arrangements in this regard. In these strenuous days when time is the essence of every contract and work is at a premium, everything should be done that can be done to utilize to the best possible advantage the precious hours, so that our attempted reconstruction may not be in vain.

"Last year my report dealt with the standardization of farm machinery which is of such vital importance to the whole farming community and to a large extent to the implement manufacturers. A resolution was passed urging the Federal Government to take this important economic problem up. The case you made out was such a strong one that in June of last year the Select Committee on Agriculture at Ottawa fully discussed and unanimously endorsed the project of the standardization of farm machinery particularly of the breakable, wearable parts. All that is needed now is legislation to have this put into effect. When this is done there will be a lessening of the cost of manufacturing the parts and a great saving to the farmers, who will be enabled to secure their castings at a lesser rate and more conveniently. There has been great loss and waste in the past as the result of the lack of standardization in agricultural machinery and its essential parts. Standards are used by many manufacturers outside of agricultural implements. Among the latter, standardization is notoriously absent. One plow company alone has 37 different types of bolt heads none of which are interchangeable with the make of other manufacturers. The leading engineer of a large implement company states that standardization will mean millions of dollars saved every year. Will our Canadian Government rise to the occasion and do its part? I know I speak for you when I state that the farmers of Canada will do theirs."

DISCUSSION.

The discussion following was lead by J. L. F. Sproule, Westbrook who felt that the competitions held at the fairs should provide the ideals for the community. He thought the Standing Field Crop Competitions would year by year gradually succeed in eliminating many unprofitable varieties from among the fields entered. Last year a new scheme was inaugurated whereby the judge judged the field in company with the owner, pointing out the weak points and telling in each instance how seriously the score would be cut down. The speaker felt very optimistic as to the valuable work that would be done by the new Provincial Government. He felt that the standardization of farm implements should be followed up by the convention this year and heartily concurred in Mr. Wilson's plea for the elimination of fakers and cheap shows for local fairs. He thought everything possible should be done to make our fairs as fully educational as possible. A. R. G. Smith, New Hamburg, thought we should be optimistic in view of our splendid outlook. As regards increased production the farmers would do their part, said Mr. Smith. He thought that the grant to fall fairs must be still further increased to at least \$100,000. He also thought it a mistake to add two points to specially selected varieties. The Field Crop Competitions should be used to improve varieties suitable to the locality. He heartily approved the step taken by the Provincial

Government in carrying on the competitions in roots and corn. Regarding revision of prize lists, the speaker thought a place should be made for competitions between Women's Institutes. They tried it last year and were much pleased with the result. He felt strongly regarding the evil influence of fakers. Following Mr. Smith, W. J. Connelly, Cobden, introduced a resolution regarding the standardization of farm implements, strongly reaffirming their request of last year that legislation be enacted with as little delay as possible. This resolution was carried unanimously. The address of the President and the report of the Superintendent were heartily approved.

PRESIDENT OF THE AMERICAN FAIRS ASSOCIATION.

B. M. Davidson, President of the American Association of Fairs and Expositions brought fraternal greetings to the Convention and spoke briefly. He said that the difference between a farmer and an agriculturist is that the former makes his money on the farm and spends it in the city while the agriculturist makes his money in the city and spends it on a farm. He thought that the county fair comes closer to the people than any other fair. He himself is general manager of the Illinois State Fair that spends \$250,000 each year, of which \$125,000 goes in prize money, but he felt that the county fair really gets closer to the people. He was heartily in accord with the need for removing games of chance from the fall fairs. In Illinois they have inspectors who visit shows and close up any that they would not like members of their own families to see. He favored one manager running a fair and strongly advocated a budget system, appropriating so much money to each department of the fair. They have 69 fairs in Illinois, (population 500,000) receiving annually \$110,000 as a Government grant. Mr. Davidson superintends the division of this on the basis of paying 60 per cent. of the first \$1,000 spent by the local fair, 50 per cent. of the second \$1,000, 40 per cent. of the third \$1,000 and 30 per cent. of all over that. He advised taking a greater interest in boy's and girl's club work.

E. F. Stephenson, New Liskeard pointed out that unquestionably the fairs haven't done as well as they might in the past. Politics used to play a part and did play a part 60 or 70 years ago. Lack of proper judges has been a handicap also. Mrs. Laura Rose Stephen read a paper on the subject of "Lady Directors on Fall Fair Boards" in which she said in part:



A Good Attendance Watching the Judging at the C. N. E.

"It seems unnecessary for one to expostulate, even briefly, on the advisability of women acting with men for the furtherance of fair work. Women have made such advances into preserves held sacred for men, it would seem that no position is really now secure to men alone. Women have demonstrated that they have education, brains, nerve power and physical endurance sufficient to make them useful and needed in almost every sphere of world activity. Our first record of the human race fits beautifully into the setting of the Country Fair.—Adam and Eve in the Garden of Eden. Adam the first agriculturist and Eve, his helpmate. To place a woman on agricultural fair boards is not lifting her to a new and bewildering position, but to one into which she fits and can immediately do good work. There will be a few who have grown old and inactive on fair boards who will rise up and protest, asserting that fairs in all the years back have always been managed by men, and women will only make a muss of things. Men are apt to get into a rut along fair management. They are orderly and methodical, and when once a way of doing things is established, are more than likely to keep right along in the same old way. A woman is made in an entirely different mould. She just loves changes. Get a woman or two on the board and they will of a certainty try something, which if not entirely new, will at least be new in their locality, a baby show, cooking or nursing demonstrations, school children marching and drill competition, Women's Institutes, domestic or fine arts competition, boys and girls riding and driving contests, etc. A woman on the board should mean that every accommodation possible for women and children would be provided. The establishment of a nursery and a fenced-in play yard where little tots could be safely left in charge of a competent person, would be much appreciated by many a tired mother.

"The time is now here that on every fair board there should be women directors. Briefly let us sum up the reasons why:—Women are suggestive and progressive; Women are not fearful of innovations, but delight in changes and surprises; Women are quick to see defects,

love the artistic and are willing to take infinite pains to win success or add to the general comforts and pleasure. Women feel the importance of an office and are not afraid to work."

SEED SUPPLY DISCUSSED.

At the morning session on Wednesday, Geo. H. Clark, Seed Commissioner, Ottawa, discussed the question of increasing the available supply of good seed for farmers and speaking with particular reference to the part that can be played in this regard by the Standing Field Crop Competitions he spoke as follows:

"Field crop competitions were first conducted in the Provinces of Saskatchewan and Alberta in 1906. They were introduced in Ontario and ten were conducted in 1907, concurrently with all of the other Eastern Provinces. The Federal Government Seed Branch spends \$50,000 per year to support field crop competitions, leaving the working out of the details of plans to Provincial Departments of Agriculture. The primary purpose of field crop competitions is to create a substantial supply of seed grain of good quality in every county and township in Canada where agricultural crops are raised. It is desirable and intended that all crops entered for competition be produced from good reliable stock seed of approved varieties, and that the crops for which prize money is paid be retained for seed purposes on the farm where produced and for sale in the districts.

"Unfortunately the agricultural societies of Ontario have not proven to be the most efficient for field crop improvement work through field crop competitions. In some counties there are twenty or more agricultural societies, while in others only two or three. Last year more than one thousand dollars was spent in field crop competitions in Parry Sound County, and one hundred dollars in Peel County; nine hundred and seventy-five dollars in Grey County and one hundred dollars in Glengarry. It is recommended that a committee, formed by representatives from the agricultural societies in each county, co-operate with the district representative for each county in the organizing and conducting of field crop competitions, so that there may be one competition provided for each township with five acres of grain or comparable areas with other crops, for which competitions one hundred dollars may be provided; and further, that a larger competition for the whole county be arranged, to include all the prize winners in previous competitions and for larger acreages, the competition to include both field inspection and inspection of the threshed and cleaned grain ready for seed. Three hundred dollars would not be too much to provide for a county competition. The Federal and Provincial Governments may be depended upon to provide the funds for this excellent work on the fifty-fifty basis. There can be no doubt that these field crop competitions in all of the provinces have brought about substantial improvement in field crops. It is to be desired that their usefulness be extended, and that whatever elements of waste may exist in connection therewith be promptly eliminated."

Mr. Clark's address drew a storm of protest against anything tending to minimize the value of the work now being done through these competitions. This protest was led by Messrs. Connelly, Scharfe and Hixon who spoke very eulogistically of the good work being done but who did not devote much time to actual criticism of Mr. Clark's suggestion. Certain it is that if this discussion is any indication of the feeling entertained by the agricultural societies toward the Standing Field Crop Competitions, they are very highly regarded by those societies which have made them an important part of their work. Any tendency on the part of Governments to reduce grants is very strenuously opposed, although had there been more time available for discussion it would probably have been discovered to the satisfaction of everyone that the Seed Commissioner was not endeavoring to tear down but to build up. The all too common tendency of most large bodies to ride on the crest of an idea was fairly well illustrated here and a little more time in which to get down to cases would have been beneficial all round. The proposition of Seed Commissioner that grain from competing fields be held for a second inspection after threshing was not considered practical by those present who voiced their opinions.

PURPOSE OF THE AGRICULTURAL EXHIBITION.

The purpose of the Agricultural Exhibition was discussed by Professor H. Barton, Macdonald Agricultural College, Ste. Anne de Bellevue, Quebec. Fair boards, said the speaker, do not ask themselves often enough what the purpose of their exhibition is. The first and biggest purpose is educational. In the second place the fair ought to be an incentive and inspiration to those in the locality. In the third place the fair has a very decided social purpose to fulfil. The speaker wanted to suggest as strongly as possible that there has not been as much progress in some features of fair work. Small details in connection with the prize lists indicate that many fairs are unprogressive. This is illustrated by the appearance of such classes as "Durham Cattle" and "Thorough-bred Yorkshire Swine," indications of carelessness and ignorance. How often do our fairs really give any consideration to the importance of live stock at our fairs. Grain and seed are very very important but live stock is the ultimate end of our grain crops. The exhibition should be encouraged to fit and show well. The judging work is very important and our judges are not of sufficiently high standard. Just as soon as the patrons of a fair show improvement, just that soon do our judges need to be improved. Really constructive work means that as nearly as possible the same judge should judge year after

year. It is very desirable that the judge should give reasons but not many can do it. A judge can take one class and give reasons but as yet we should not ask it in all classes. Judging competitions, properly conducted, are one of the most important live-stock features of a fair and should be heartily encouraged. If a fair is to be educational the visitor must be catered to and not merely the exhibitor. Ample provision must be made for judging. The automobile will be a big factor from now on in the success of fairs and the fair can easily be made the biggest social factor in the community. Professor Barton's address was entirely constructive and well received although as usual there was not much time available for discussion of the various points brought out.

#### JOINT RURAL SCHOOL AND FALL FAIRS.

One of the topics on the program in which all delegates appeared to be most keenly interested was the oft discussed question of holding rural school fairs in conjunction with the regular fall fair conducted by the agricultural society. R. S. Duncan, Supervisor of Agricultural Representatives read a paper that was listened to very closely which read in part as follows: "The first rural school fair in Ontario, if not in the Dominion, was organized in Waterloo County in the year 1909 with three schools taking part and only 58 pupils making exhibits. In 1912, they were adopted as a general policy of the Department of Agriculture and have grown until in 1919 there were 357 rural school fairs, embracing 3,278 schools with 78,946 pupils taking part. It is estimated that in 1909 about 250 people saw the first fair whereas last year 92,600 pupils and 107,590 adults attended the fairs. This is truly a remarkable growth. All told sufficient seed of potatoes, oats, barley, wheat, corn, roots, vegetables and flowers were distributed in the spring of the year to plant 69,848 plots on the home farm and 11,045 pupils each received 1 dozen eggs of a bred-to-lay strain of Barred Plymouth Rocks. Each school fair comprising on the average nine schools is managed by a rural school fair association, which is composed of representatives from each school, who are elected by ballot from among the pupils. The accredited delegates from each school meet and elect their own officers consisting of a President, Vice-president, Secretary and a Treasurer and a board of directors. This general fair board under the supervision or guidance of the Agricultural Representative has charge of the management of the school fair of the district. Practically all the expenses in connection with school fair work, with the exception of the prize money, are paid by the Ontario Department of Agriculture. The amount required for prizes for each fair, varied from \$60 to \$125, the average being possibly \$75. This money must be raised locally. The secretary of the school fair association writes to all the trustee boards in the district asking for a grant from \$5 to \$10. A special committee is appointed to wait on the township council. These boys and girls submit their plans and ask for a grant from \$15 to \$30. The county council and public spirited persons also contribute towards the prize list.

The Department feels that the school fair and the agricultural society have each a separate and distinctive field of work and that the school fair can only accomplish its work in developing the young mind along agricultural lines by retaining a separate organization and individuality. At the same time, it is recognized there may be a number of cases where the school fair and the agricultural society could co-operate more than at present with advantage to themselves and the community. In order that rural school fairs and fall fairs held under the auspices of the agricultural societies may be conducted jointly this committee suggest that the following conditions be complied with: That the list of classes for the rural school fair, prepared by the Agricultural Representative and the Rural School Fair Association, be included in the regular prize list of the agricultural society. That one copy of this prize list be distributed to each pupil or one copy to each family or household in the Rural School Fair Association. That the prize list be issued not later than June 1st. That the agricultural society supply half the prize money, such sum not to exceed \$75, for these classes and that this sum be paid over to the manager or secretary of the Rural School Fair Association prior to the fair. That the agricultural society supply suitable buildings or tent accommodation for displaying the pupils exhibits, together with tables and poultry coops and have same in readiness on the morning of the fair. That suitable field accommodation properly enclosed be definitely assigned to the rural school fair for the purpose of holding sports, parades, judging of live stock, etc. That all the pupils and teachers in the schools taking part in the rural school fair be given free admission to the fair. That the agricultural society supply judges for exhibits such as poultry, live stock, vegetables, grains, etc., satisfactory to the Department. That the agricultural

society supply protection for rural school fair exhibits. It is not to be expected for one moment that all agricultural societies will unite with the rural school fairs in holding a joint fair. It is not feasible nor desirable in many instances and perhaps the plan will be opposed by a number of the representatives of agricultural societies present to-day. Furthermore, the conduct of joint fairs in some townships where the agricultural society fair is a large fair and where it has become well established would not be in the best interests of the school fair. Where, however, the agricultural society fair is a small one, perhaps a union of the two might be tried out with considerable success. The foregoing expresses the view of the Department of Agriculture and is merely a definite plan as to the conditions which must be complied with when school fairs and agricultural society fairs are conducted jointly."

The time was all too short for the number of delegates who wanted to take part in the discussion that followed. We believe, however, we are correct in saying that only one delegate from Dundas County believed the two fairs should be kept entirely separate and all were in entire agreement as far as could be ascertained, with the suggested conditions as given above. In many cases the two have been combined with the greatest degree of satisfaction and the heartiness with which some delegates endorsed joint fairs was sufficient evidence of the success which had attended their past experience in this connection. A resolution approving of joint fairs wherever satisfactory to both fairs carried easily.

#### VEGETABLE SECTION NEEDS REVISION.

The urgent need for revision of the vegetable section of the fall fair prize lists was strongly urged by A. H. MacLennan, Vegetable Specialist, Toronto. Because of the large number of practical pointers given by Mr. MacLennan and because space is limited we are reserving this address for later publication more in full.

#### IMPROVING FAIR BUILDINGS.

An interesting and instructive address in the improvement of fair buildings was given by A. P. McVannel, Agricultural Representative for Prince Edward County and Secretary of the Picton Fair. Mr. McVannel's principal suggestions are given below: "The improvement of fair buildings is a subject which is always be-

replacing glass and other repairs are concerned, but fair buildings should be regularly painted. Other features which add to the attractiveness of the buildings, especially to all the buildings where exhibits are in place is the placing of evergreens around the doors and the posts of the girders. The expense does not amount to a very great deal, and it adds considerably to the attractiveness. Improvements in fair buildings may be classified also as to conveniences for visitors. I do not know of any one feature in connection with the exhibits that will encourage progress for a society more than to have a large following of regular visitors and exhibitors. Suitable sleeping accommodation for stockmen and attendants, and a good dining-room service is especially desirable."

#### QUESTION DRAWER.

A question drawer was provided for on the program and the following is a condensed summary of some of the more important problems of delegates. 1. What age does a calf cease to be a calf? This depends upon the rules of your society. Usually a calf born in September is a calf for the purposes of the shows during the following year. 2. Can a society prohibit a person from exhibiting if he or she is suspected of violating one or more of the rules? Persons are not guilty until they are proven guilty. Suspicion is not sufficient to justify exclusion from the society. 3. Can a society raise its admission fee? Certainly. This is up to the board of directors of the local society.

#### LADIES' WORK.

A very creditable and useful demonstration was given in the basement of the building of how to arrange the displays of exhibits of ladies' work. This model lay-out was in charge of Miss M. V. Powell, Whitby, who has charge of the ladies' section of fall fair work under J. Lockie Wilson. A resolution was passed asking that this display be photographed and photographs sent along with descriptive material, to boards of directors of all agricultural societies. Miss Powell read a lengthy paper during the convention in which she advocated several radical reforms in the ladies' section of fair prize lists, basing her suggestions on her long experience as a judge and on opinions formed after examining several scores of prize lists sent in by fair boards for revision.

#### FIRST ANNUAL BANQUET.

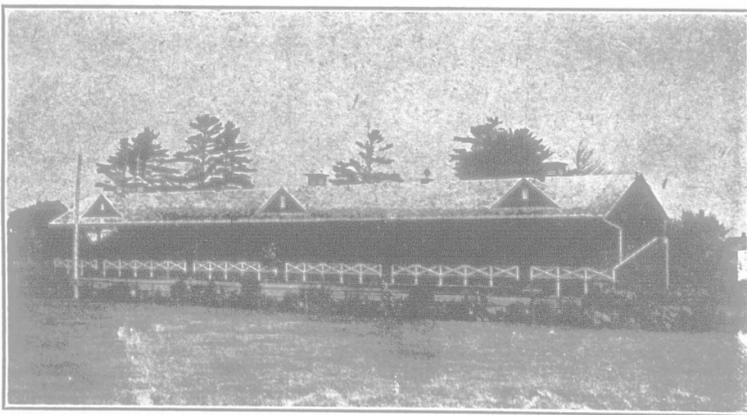
The first annual banquet of the Association was held on Tuesday evening, at the Carls-Rite Hotel. The hall was crowded and the speakers included at least four of the U. F. O. members of the Ontario Legislature. A rollicking good time was enjoyed by everyone. The speeches were all short and not necessarily serious but as a matter of general interest in connection with the Standing Field Crop Competitions which were more or less under fire during the convention we quote the following from the remarks of W. Bert Roadhouse, Deputy Minister of Agriculture: "During the years 1917, 1918 and 1919, inclusive, 203 societies entered the Standing Field Crop Competitions, 137 for 3 years, 42 for 2 years and 24 for 1 year. One hundred and twenty-seven of these held competitions in two crops during that time. Four societies entered in 1919 which had not previously competed. In the above mentioned years there were approximately 330 competitions per year. With 7 prize winners in each competition this means that the prize money was distributed among approximately 2,310 persons each year. Of these, 246 shared in the prize money in three consecutive years and 906 in two years out of the three. While these members participated, they took different relative prizes each year in most cases. In 7 cases the same man won first prize in three consecutive years, and in 88 cases the same men won first prizes in two out of three years. To get the relative significance of these figures it is necessary to keep in mind that there were 330 competitions and approximately 2,310 winners of prize money in each of these years."

#### RESOLUTIONS.

"Resolved, (1) That in the opinion of this Convention of Fairs and Exhibitions the proud position Ontario occupies to-day as an agricultural Province is principally owing to the good work which has been done through the instrumentality of our agricultural societies. (2) That while, four years ago, this Association had intended to make an appeal to the Government for an increased grant, this was not done owing to the war. (3) That while Ontario has a larger population than the other Provinces of the Dominion, yet the Government grants to Agricultural Societies are larger in these Provinces than in Ontario. (4) And also working expenses having more than doubled during the past three years. Therefore, taking the foregoing facts into consideration, and the importance of giving the utmost encouragement to those who are engaged in agricultural pursuits, this Association memorialize the Hon. the Minister of Agriculture to increase the annual grants to agricultural societies to \$125,000 and that the President and the 1st and 2nd Vice-Presidents be a committee to submit our request to the Minister of Agriculture."

"Resolved that the Federal grants to the Field Crop Competitions be continued and that the Dominion Minister of Agriculture be memorialized to increase the grants, therefore, and any reduction in such grants would meet with the disapproval of the Agricultural Societies of this Province."

"That whereas resolutions have been passed asking the Government of Ontario to adopt some system of rural credits for bona-fide farmers of Northern Ontario who are struggling with the privations and hardships



Grandstand at Oakville Exhibition Grounds.

for the directors of every agricultural society in Ontario, and the condition and adequacy of the buildings is an important factor in the success of any fair. Very few, if any, societies have more buildings than are required and the society which I represent is in the same position. Some of us have learned that you cannot have a successful fair without suitable buildings, and these must meet the requirements of the district. The main building, or palace, usually the largest and most generally visited by all who attend the fair, and usually including the largest number of exhibits of domestic science and art, flowers and school work, should have plenty of light and conveniently arranged tables and stands for exhibits. Especial attention should be devoted to the protection of perishable products, i.e., cooking, butter, cheese, dressed poultry. Visitors to the fair never complain that they see the same articles in these sections, though they are brought back year after year. These articles represent the best there is in genuine farm products. Why not make these sections stronger? We have found that, since the introduction of refrigerators with glass fronts for perishable articles such as butter and dressed poultry and glass show cases for cooking, competition has increased and it has added much to the attractiveness of the exhibits. A refrigerator is very simple to construct, and consists of an ice-box between attractively arranged shelves of glass, with provision made for the circulation of air. The front of the box is, of course, of glass, and section. This refrigerator is 12 feet long by 12 feet wide, and was built at a cost of around \$50. A few dollars will cover the cost of ice each season.

"The live-stock buildings include especially the horse barns and the cattle barns; should be large and roomy, with abundance of light and ventilation. For small district fairs a couple of sheds with open sides are possibly most suitable for hogs and sheep. The greatest improvement in buildings can be brought about by the attractiveness of the buildings. It is not sufficient to keep the buildings in good repair so far as roofing, siding,

of early settlement. Therefore, be it resolved that we the members of the Ontario Association of Fairs and Exhibitions place ourselves on record as being in sympathy with the pioneer farmers of Northern Ontario and are in accord with any reasonable support that would improve the well-being of the residents of Ontario's great Hinterland."

#### TREASURER'S REPORT.

The treasurer's report shows an increase in the balance on hand of from \$139.76 last year to \$346.91 this year. Receipts last year consisted of \$604 made up of \$2 membership fees from 302 societies.

#### DIRECTORS.

The directors elected by the district delegates present are as follows: District 1, James Ault, Winchester; 2, W. E. Smallfield, Renfrew; 3, W. J. Hill, Madoc; 4, J. N. McGill, Millbrook; 5, W. T. Scott, Milton; 6, G. C. Johnston, Ancaster; 7, F. G. Seaton, Lakeside; 8, R. W. McKellar, Glencoe; 9, Harry Smith, Kingsville; 10, W. Calder, Durham; 11, (No delegates present); 12, E. F. Stephenson, New Liskeard, James Tonkin, Fort William and A. R. Woods, Sault Ste. Marie. The officers were re-elected as follows: President, L. J. C. Bull, Brampton; First Vice-President, W. J. Connelly, Cobden; Second Vice-President, John Farrell, Forest; Secretary-Treasurer, Lockie J. Wilson, Toronto; Treasurer, J. E. Peart, Hamilton. Auditor, G. de W. Green. Representative to the Central Canada Exhibition, Fred Bell, Britannia Bay; to the Royal Agricultural Winter Fair, Wm. Scharfe, Toronto, Jas. McLean, Richmond Hill, and J. E. Peart, Hamilton; to the Western Fair, J. E. Johnson, Thorndale.

the best results, and by taking care of them is amply repaid by the increased flow of milk. Also, he will find he keeps the cow better and cleaner; then it suddenly occurs to him while he is cleaning the pure-bred with a curry-comb and brush that he might as well give the next cow a brush over, and very soon he finds he is keeping the whole herd better, and every dairyman knows how cows respond to care by giving more milk.

Perhaps one of the best examples of testing is the case of the well-known cow, Rolo Mercena De Kol, which soon after she was tested and made her wonderful record, was sold for \$26,000. Now, supposing her owner had started with only grades, what a difference it would have made to him! Yet the same applies to men starting in now. They start with all grades and finish up with them, selling their calves for a few dollars; not that grade cows produce less milk because they are grades—far from it—some of the best milkers I have seen are grades, yet because they are good milkers their calves do not fetch any more.

With regard to the kind of breed in which to start, this important matter requires much consideration, as, having once started with a breed, much time and money is lost by changing it. The right breed, or rather what the man considers the right breed, depends on various things, the principal of which is the man's own inclination. For example, a man who prefers the big-built Holstein would never make much success with the little Jersey. It also depends a great deal on the country. For instance, if it is rough country and the cow has to forage a lot for herself, the hardy Ayrshire would be the most useful; if cows are kept purely for the cream, given suitable conditions, the Jersey would be best; while if milk is the main consideration the Holstein would be

It is always best to order early because of the fact that stocks of the best strains of flower and vegetable seeds are usually comparatively small, and unless one orders early the result may be a disappointment. In connection with the selection of seeds for planting, we quote the following from W. T. Macoun, Dominion Horticulturist:

"There is a great difference between the best and the poorest strains. The stock of the best has been rigidly selected so that a large proportion will come true to type, whereas stock which has not been kept up by selection may have a bad mixture of types, and the resulting crop will be very unsatisfactory. This is of so much importance that, with a crop like the cauliflower, for instance, where a strain that will give a large proportion of good heads means much profit and a poor strain may mean very little, it pays the market gardener when he gets a good strain to hold over what seed he does not use until another year as he will thus be sure of having a good strain next year. This method would not, however, serve with the onion, which loses its germinating power very rapidly, hence should be purchased every year. There is a wonderful difference in onions. Sometimes from the seed of one stock a large proportion will be thicknecks while from another most of the plants make good bulbs. If one has had good success from a certain source one year, the safest plan will be to order from the same source another year.

"Sometimes novelties have not apparently been compared very carefully with the best of the older varieties before being offered for sale, as they do not prove superior, if as good. While it is interesting to test varieties, it is well not to spend much money on them until they have been tested at the experimental station. Another advantage of ordering early is that one can test the germinating power of a seed before spring so that there will be time to order again if the germination is poor. Often seed is ordered so late that when it is sown and the plants do not come up there is not time to order again, and one loses the crop. When there is a shortage of many kinds of supplies, as there is at present, it is very desirable to order early the material needed for next season's operations.

#### Control of Potato Diseases.

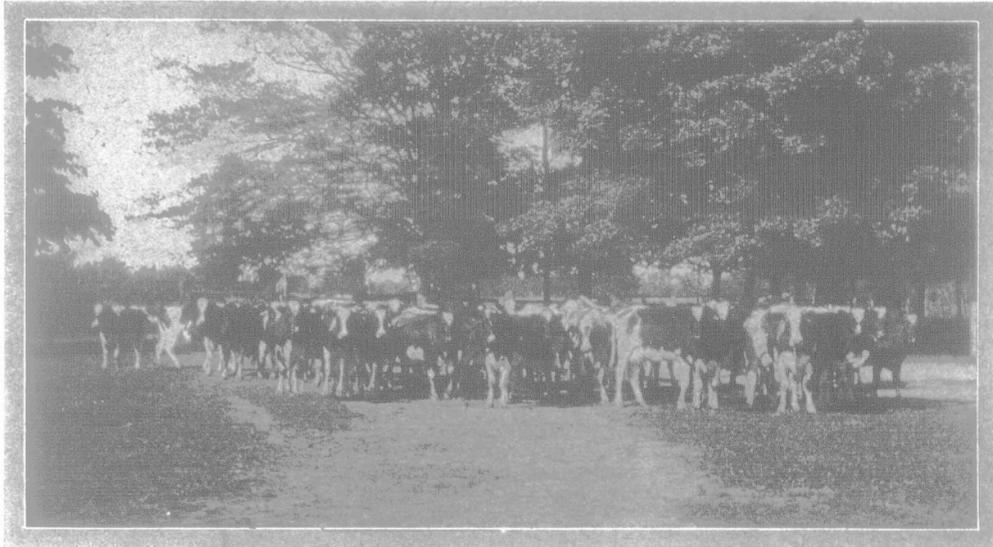
There are quite a number of diseases to which potatoes are subject, some of which can be noted when the tubers are dug, others develop after the potatoes have been in storage for some time, and others are only noted when the potatoes are cut or peeled. Common scab and Rhizoctonia are examples of the first-named diseases, while late blight and the Fusarium dry rot occur after the potatoes have been in storage. The latter disease is nearly always associated with a crack or bruise in the tuber, while the former is noticeable during the growing season, first making its appearance on the leaves as dead, weather-soaked areas. The fact of its occurrence at this time emphasizes the importance of spraying potatoes regularly during the growing season, particularly in warm and damp weather. Blackleg of potatoes is an example of diseases that are noticeable when the potatoes are cut or peeled. It is indicated by a dark discoloration extending from the skin inward. This disease attacks the growing plant also, but cannot be controlled by spraying. Black leg is transmitted to the plant by the tuber and is easily held in check by planting sound potatoes.

The Dominion Experimental Farm at Ottawa emphasizes the necessity of adopting careful selection and treatment of the seed tubers at planting time, and the wisdom also of providing the best possible conditions of storage. The treatment of the seed and of the stored tubers is briefly outlined as follows:

Seed Treatment: 1. Do not use seed from a field known to have been badly attacked by some disease. 2. Discard all cut, broken, or bruised tubers. 3. Before cutting, soak them in either: (a) Corrosive sublimate solution,—2 ounces in 25 gallons of water—for four hours. (N. B.—Corrosive sublimate is a deadly poison), or (b) formalin solution—1 pint in 30 gallons of water—for two hours. 4. When cutting tubers, keep a jar of formalin at hand with a spare knife in it, and, when a tuber is cut which shows any discoloration, discard it, drop the knife into the jar, and use the other one for the next tuber. 5. Do not plant potatoes in a wet, undrained soil, for such soil furnishes conditions favorable to many diseases.

Storage Conditions: 1. See that the potatoes are thoroughly ripened, and exercise the greatest care to avoid any injury to the tuber. 2. Keep the temperature of the store room about 36 degrees F. Potatoes freeze at 26-28 degrees, F., and freezing must be avoided. 3. There should be ample ventilation with sufficient moisture to prevent the potato drying, but not enough to cause water to condense on the surface of the tubers. 4. Direct sunlight should be excluded.

It is of the utmost importance to spray regularly during the growing season, since, more particularly in the case of late blight, mentioned above, there is a direct relationship between the diseased plant and the later rotting of the potato in storage. In this article, however, we have aimed at emphasizing (1) the planting of healthy tubers, disinfected so as to kill externally adhering diseases and (2) the providing of conditions in storage which will reduce the losses from rotting to a minimum.



Good Results in Dairying Only Come from Steady Improvement in Quality.

## THE DAIRY.

### Get Into Pure-Breds.

EDITOR "THE FARMER'S ADVOCATE":

While looking through the advertisements the other day, I noticed one by the Holstein-Friesian Association, which had at the bottom "If you can't buy a herd, buy a heifer." This little remark struck me at once as being very appropriate and excellent advice, especially at a time when so many returned soldiers are taking up land and going into dairying.

This sentence, was, of course, written with reference to the Holstein cow, but is just as true for any other breed, and several of the finest herds of pure-bred cattle have been practically built up from one good cow. For the average man starting in it costs too much to commence with a herd of pure-bred cows, and, he therefore, turns to grades, but, supposing with this herd of grades he were to buy one pure-bred cow of good pedigree and known record, in a very few years, with reasonable luck, he would have quite a valuable herd of pure-bred cows.

At this time it is hardly necessary to state the advantages of a pure-bred bull. Enough has been written on that subject to convince anyone about them, which can be best expressed in the sentence "A good bull is half the herd, but a scrub bull is the whole herd." If a grade cow is bred to a pure-bred bull, although there is a great possibility of the calf being better than its dam, one cannot say exactly what the calf will be like, but with a pure-bred cow one can depend on the kind of calf, as pure-breds usually breed true to type.

Another big advantage of the pure-bred cow is that it can be entered in the Record of Performance and enable the owner to know exactly what her yearly production is, what her value is; also, a calf from an R. O. P. tested cow will sell easier and for a higher price. There are also several minor advantages to the R. O. P. test, one being that most of the inspectors are able to give very useful advice on the care and feeding of the cows, and also the owner naturally takes more interest in his cows, studies them closer to find out which feeds produce

the most preferable. Another point to be considered is the most popular breed in the vicinity, as keeping a bull entirely for one's own use is a very expensive item for a beginner, whereas if several bulls of a particular breed are kept in the district, the danger of in-breeding can be eliminated easier and cheaper.

Another point in the starting of a pure-bred herd is the idea that a large majority of even some of the biggest breeders have, that to buy new stuff they must go to another part of the country. I suppose it is a case of "distant fields look green," yet in a large number of cases just as good stuff could be bought in the vicinity, and the money spent in travelling could be put into buying a better animal.

Whether you are just starting in, or whether you are an established farmer with a herd of grades, I can safely say that the sooner you start breeding pure-bred cows, of any breed, the better you will be pleased later on, and you will never regret it. This statement, I think, will be endorsed by all the pure-bred owners in the country, and remember, the financial difficulty can be largely overcome by taking the advice of the Holstein Association, "If you can't buy a herd, buy a heifer." E. C. C. Lambton Co.

## HORTICULTURE.

### Order Garden Seeds Now

Now is the time when new seed catalogues are coming in which are rich in novelties as well as old and standard varieties. Those who love ornamental plants, fruits and vegetables, and who annually make some purchases for the garden, the orchard, or the home surroundings, will be able to get much enjoyment from the new and attractive catalogues of the seedsmen and nurserymen. Many times, however, the overly attractive presentation of some variety of only moderate worth is apt to mislead the prospective purchaser, but careful study and some thought will soon enable one to get dependable varieties.

## THE APIARY.

### The Italian Bees.

EDITOR "THE FARMER'S ADVOCATE":

At present the Italian bees, and even hybrids, have shown themselves to be so far ahead of the common bee that I may safely consider all discussion of the matter at an end by the great majority of beekeepers. Many times I find colonies of hybrids that go ahead of pure stock, but as a general thing (taking one season with another) pure Italians, where they have not been enfeebled by choosing light-colored bees to breed from, are ahead of any admixture. There has been a great tendency with bees, as well as other stock, to pay more attention to looks than to intrinsic worth, such as a honey-gathering, prolificacy of the queens, hardness, etc.

Even if it were true that hybrids produce as much honey as pure Italians, each beekeeper would want at least one queen of absolute and known purity; for although a first cross might do very well, unless he had this one pure queen to furnish queen cells, he would soon have bees of every possible grade from the faintest trace of Italian blood all the way up. The objection to this course is that these blacks, with about one band (with the exception of the Eastern blood) are about the worst kind of bees to sting, being very much more vindictive than either race in its purity. They also have a very disagreeable way of tumbling off the combs in a perfectly demoralized state whenever the hive is opened. Neither will they repel bee disease like pure Italians. If for no other reason, one can well afford to Italianize because in no other way can European foul brood be controlled. This disease, in some sections of the country, is cleaning out the blacks and hybrids, while the Italians are nearly immune to it.

Our pure Italian stocks can be opened at any time and their queens removed, scarcely disturbing the cluster, and as is sometimes the case, without the use of any smoke, by one who is fully conversant with the habits of bees. A good many hybrids will not repel the moth as do the half-bloods and the pure Italians. For these reasons and several others, we would rear all queens from one of known purity.

The queens and drones from queens obtained direct from Italy vary greatly in their markings, but the normal worker-bee shows three yellow bands. Every worker-bee, whether common or Italian, has a body composed of six tubes, or segments, one sliding into the other, telescope fashion. When the bee is full of honey these segments slide out and the abdomen is elongated considerably beyond the tips of the wings, which are ordinarily about the length of the body. Sometimes

we see bees swollen with dysentery spreading the rings to their fullest extent, and in that condition they sometimes would be called queens by an inexperienced person.  
York Co. MAX BOAG.

## POULTRY.

### Egg Rations.

From certain standpoints feeding is the most important factor in egg production. Breeding is, of course, of fundamental importance but it is comparatively well known and becoming still more appreciated that a well-bred hen, ill-fed, will only do a comparatively small amount of the work she should and could do under proper conditions of feeding and care. We know something about the feeding of live stock, and yet there is much more to be learned than we already know. It is this fact which makes it seem so unreasonable and illogical to disregard, as many flock owners do, most of the little information we do know about feeding. We know something about a balanced ration, but the subject of feeding is so large and practices determined by so many varying conditions of age, feed, climate and circumstance that there is room for many years of careful work yet before we may say honestly that we understand the feeding of any class of live stock. Consequently, any examples of rations that are given must be limited in their usefulness by local conditions, but the following are some rations that have been used successfully and are recommended by the United States Department of Agriculture:

Mash	Scratch Mixture
	Ration No. 1.
16 pounds corn meal.	1 pound cracked corn.
6½ pounds meat-scrap.	1 pound wheat.
1 pound bran.	1 pound oats.
1 pound middlings.	
	Ration No. 2.
2 pounds cornmeal or barley meal.	2 pounds cracked corn.
1 pound bran.	1 pound oats.
1 pound middlings.	1 pound wheat or barley.
	1 pound meat or fish scrap.
	Ration No. 3.
3 pounds cornmeal.	2 pounds cracked corn.
1 pound meat scrap.	1 pound oats.
	Ration No. 4.
9 pounds cornmeal.	2 pounds cracked corn.
5 pounds middlings.	1 pound wheat.
4 pounds bran.	1 pound oats.
2 pounds cottonseed or gluten meal.	1 pound barley.
2 per cent. bone meal.	2 pounds meat scrap.

Ration No. 5.  
1 pound cornmeal. 2 pounds cracked corn.  
1 pound bran. 1 pound wheat.  
¾ pound meat scrap. 1 pound oats.  
1 pound middlings. 1 pound barley.  
1 pound ground oats.

Ration No. 6.  
3 pounds cornmeal. 2 pounds cracked corn.  
1 pound bran. 1 pound wheat.  
1 pound middlings. 1 pound oats.  
½ pound meat scrap.  
Feed with table scraps or cooked vegetables.

The scratch mixture we are told should be fed twice daily, preferably in litter from 3 to 5 inches deep on the floor of the henhouse. Feed about one-third of the mixture in the morning and two-thirds in the afternoon. In the morning give only what the fowls will eat up within half an hour and at night enough to fully satisfy them. Feed a mash either as a dry or moist feed in addition to the scratch grains. The dry mash is the more common method; it should be kept in a hopper before the fowls constantly. A moist (not sloppy) mash gives very good results when used by a careful feeder. It should be fed only once a day, preferably in the morning or at noon, and only as much should be fed as the fowls will clean up in from 15 to 30 minutes. A moist mash is very useful to use up table scraps and cooked vegetables and is greatly improved if mixed with milk. The quantity of meat scrap used in the mash can be reduced in proportion to the garbage and milk used. A light feed of moist mash sometimes may be fed to advantage to supplement the dry mash to pullets in the fall, if they do not eat the dry mash freely.

If hens show a tendency to become too fat, make them work longer for their feed by feeding the scratch grains in a deep litter; feed less scratch grain and reduce the quantity of meat scrap in the mash. It is sometimes necessary to close or hang up the dry-mash hopper until noon to make the hens work harder for their feed. Feed the same rations or combinations of feeds throughout the year and do not try to force the molt prematurely by special methods of feeding or by abnormal rations.

## FARM BULLETIN.

Departmental estimates and a considerable volume of immigration point to considerable growth in the population of Canada. It is expected that the next Census returns will reveal over nine million people in the Dominion of Canada.

## The Annual Session of the Canadian Live-stock Parliament.

Evidence was not lacking at the annual meeting of the various breed associations, held in Toronto last week, that the live-stock industry in Canada is in a technically sound condition.

Breeders attended in large numbers from Ontario, while other provinces both east and west sent good representations. There are determining factors which are at present influencing some classes of live stock but the breeders of pure-bred animals by their actions and spoken words, displayed a healthy confidence in the future of the animal industry. Matters were approached and dealt with usually in a businesslike way, with a view to fostering not only the pedigreed live-stock business, but encouraging animal husbandry throughout Canada. The high cost of conducting business now, compared with past years, showed its effect upon the finances of some associations and in this regard the Canadian Swine Breeders' Association and the Canadian Sheep Breeders' Association might be especially mentioned. The cost of printing the annual records has made inroads into the treasuries of these two associations and efforts will be made to reduce expenses in connection with the compilation and distribution of their herd and flock books. Several resolutions of considerable importance came before the majority of the meetings, and rather than deal lengthily with these resolutions in the reports of the various meetings, we are reproducing them here in full, and reference will be made to them, when occasion demands, in the reports of the meetings which follow. Several resolutions brought before the meetings had been prepared and adopted at the annual meeting of the Western Canada Live-Stock Union, held at Victoria, B. C., on Nov. 12-14, 1919. G. H. Hutton, Calgary, Alta., Geo. Hoadley, M.P.P., Okatoks, Alberta, and W. C. McKillican, Brandon, attended the meetings in Toronto and ably supported the resolutions when presented.

One resolution dealt with the quality and regulation of millfeeds for live stock, the text of which follows:

Whereas purchasers of bran, shorts, feed flour and other live stock feeds which are products or by-products of grain, have been adversely affected by a lowering of the quality of these feeds through their adulteration with useless and harmful weed seeds and other adulterants, and through the reduction of the proportion of the more digestible parts which gave these feeds their value;

And whereas the law governing the sale of such feeds is an inadequate protection, in that it is not sufficiently definite in many particulars, in that some feeds now commonly sold are not mentioned at all, in that it is based on chemical analysis only, while a microscopic

physical analysis is necessary to provide protection against the worst weed seeds and other adulterants; and in that its enforcement is left largely to the initiative of the aggrieved purchaser:

And whereas the above are matters which affect the farmers and live-stock producers much more closely than any other class;

And whereas all other questions concerning the health and welfare of live stock are under the jurisdiction of the Department of Agriculture, and the Department of Agriculture already has in its Seed Branch the necessary equipment for the desired analysis and inspection:

Therefore be it resolved, that the Western Canada Live-Stock Union do hereby petition the Government of Canada as follows:

That the administration of the law in regard to the inspection and sale of live stock feeds which are made from grain or its by-products be transferred from the Department which now handles it to the Department of Agriculture;

That a new Act be passed which shall set standards for all the commonly sold classes of feeds coming within the above-mentioned group, which shall describe in fuller detail the requirements for each feed; which shall provide for microscopic physical analysis in addition to chemical analysis as a means of detection, and prevention of adulteration; and which shall provide for adequate inspection of mills, elevators, storehouses and other places where such feeds are made and handled, and for the enforcement of the Act by the Department.

Another resolution which received considerable support dealt in the following manner with the salaries of Agricultural officials and Experts:

Whereas since it has been apparent for some time that the Federal Department of Agriculture and the Departments of Agriculture of the Western Provinces are unable to pay salaries in proportion to services rendered, owing to the classification ordered by the Civil Service Commission at Ottawa, in Federal affairs, and of efficiency officers or corresponding limiting factors in Provincial matters:

Be it resolved, by this meeting of the Western Canada Live-Stock Union that the various Departments of Agriculture should be withdrawn from the operations of the Civil Service Act, Acts or other controlling forces in respect to the primary engagement and continued employment of those whose work is other than clerical; that they be employed on the basis of merit only, be held responsible for results and that their salaries be based on efficiency of service.

A new live-stock contract is to be drawn up or more correctly speaking, the old contract is to be revised.

This matter comes before the Board of Railway Commissioners, and the following resolution emanating from the Western Canada Live-Stock Union was largely endorsed and furthermore dealt with by instructing the delegates from the various breed associations to the Eastern Canada Live-Stock Union to deal with the matter there.

Whereas there has been felt for a very long time considerable dissatisfaction on the part of the live-stock shippers with the Railroad Live-Stock Contract:

Therefore be it resolved, that in the opinion of this meeting the executive committee of the Western Canada Live-Stock Union should vigorously follow up the previous efforts to get redress on the two points still under dispute, viz., the valuation of stock and the compensation for possible injury of attendants.

Still another resolution of general importance emanated from the Canadian Ayrshire Breeders' Association, urging all fair boards to increase their prize list in harmony with the ever-increasing cost of fitting, transporting and exhibiting live stock at exhibitions.

### The Swine Registrations Increasing.

In the absence of President H. M. Vanderlip, J. E. Brethour, occupied the chair at the annual meeting of the Canadian Swine Breeders' Association, held in the Carls-Rite Hotel on Monday night, Feb. 2nd. Mr. Brethour prophesied that business would be good during the next few months, as everything pointed to a shortage of hogs throughout the country. It was claimed that artificial conditions existing in the English market was one reason why hogs were selling comparatively low with feed particularly high, and that the action of the Board of Commerce tended to create unrest among the farmers. A considerable amount of correspondence was read by Secretary R. W. Wade, and matters were discussed in the order in which they were brought up. W. C. McKillican reported on the work of the Western Live-Stock Union, and spent some time discussing how screenings and other feed products were handled. It was believed by those present that there should be direct control over the feeds sent out in order that the farmers might be protected from noxious weed seeds being brought to the farms in the various mixtures of feed. The grants to the different fairs were discussed, and the matter left for the consideration of the Directors. Under the heading of new business, G. G. Gould, made a motion to reduce the size of the herd book by omitting certain information, which he deemed unnecessary. J. O. Duke, made reference to the unusually high freight rates prevailing, and to the administration of the Animal Diseases' Act. It seems

that the cost of hauling feeds is working against the interests of increased hog production.

The following table shows the registration by Provinces for the past two years:

FOLLOWING IS A STATEMENT OF REGISTRATIONS BY PROVINCES.

Provinces	Registrations		Transfers
	1918	1919	
Ontario.....	4,828	5,503	4,642
Manitoba.....	1,529	1,736	1,298
Saskatchewan.....	1,999	2,387	1,632
Alberta.....	2,747	2,355	1,748
British Columbia.....	467	271	255
Quebec.....	2,807	2,463	1,861
New Brunswick.....	257	359	336
Nova Scotia.....	125	85	70
Prince Edward Island.....	86	128	102
United States.....	13		3
	14,858	15,287	11,927

It will be noticed that Ontario is considerably in the lead with Saskatchewan, Alberta and Quebec almost on a par. Taking the registrations by breeds for 1919 the Yorkshire led with 5,578, Berkshires 3,722, Duroc Jerseys 3,225, Chester Whites 1,877, Poland Chinas 1,009, Tamworths 727, and Hampshires 258. During the year two males were imported from Great Britain, and 36 males and 63 females from the United States.

The Secretary's report showed the Association to have cash on hand of \$2,042.69. This is less than a third of the cash on hand at the beginning of the year. The registrations brought in \$10,747.87, and memberships \$3,606. The printing of the records cost \$7,038.60. This item of expenditure has been gradually mounting up and the advisability of charging for the records was considered.

The following officers were elected: President, J. F. Roach; Vice-President, W. H. English, Harding, Man.; Secretary-Treasurer, R. W. Wade. Executive: J. E. Brethour and P. J. McEwen. Directors: Alberta, G. H. Hutton, Lacombe; B. C., A. G. Marshall, South Westminister; Manitoba, W. H. English, Harding; Maritime Provinces, J. F. Roach, Sussex, N.B.; Quebec, F. Byrne, Charlesbourg and M. Ste Marie, Compton; Saskatchewan, P. Leech, Baring; Ontario, J. E. Brethour, Burford; H. M. Vanderlip, Brantford, and P. J. McEwen, Wyoming.

### Ontario Swine Breeders Optimistic.

A representative gathering of Ontario swine breeders assembled to conduct the business incidental to the Ontario Swine Breeders' Association. Calling the meeting to order the President, Wm. Jones, Mount Elgin, referred briefly to existing conditions, and seemed inclined to look upon the action of the Board of Commerce and other determining factors, in a somewhat lenient manner and in a more charitable spirit than that which characterized the meeting on the previous evening, held under the auspices of the Dominion Swine Breeders' Association. Mr. Jones felt inclined not to censure the Board of Commerce, because he believed their intentions were good. Furthermore, for a period at least, producers of commercial hogs had a fairly good trade at remunerative prices, and he opined that breeders should show some inclination to take the bitter with the sweet, and carry on.

The Live-stock Commissioner, H. S. Arkell, in a brief yet interesting address, described the situation now existing, the causes for it, and the probable outcome. Dealing directly with the hog situation, he said that the feed shortage in Europe is one of the outstanding facts, and this applies to Britain, France and the hog producing countries. A shortage of seed, in the spring of 1919, coupled with a severe drought in the growing season, had a marked depreciating effect upon production. Holland, Denmark, Ireland and other countries, where hogs are produced in numbers, suffered and are still suffering. Hog production is held back and the tendency toward a normal output will only take place as feed becomes abundant.

Referring more particularly to price fixing and control he stated that production had increased enormously in United States and Canada, and that, had the British Ministry of Food not taken control last fall, there would have undoubtedly been a slump. Furthermore, Great Britain was able to buy her meat from Argentina and Australia at a price that would have lowered the market.

Dealing with the outlook for swine production and the market, the Live Stock Commissioner said that the tendency will not be towards stabilization, until Britain, Holland, Denmark can get plenty of feed from which to produce hogs. Prices for a time, will not be downward but rather up. In addition, when the product of Ireland, Denmark and Holland was decreased or diverted from England, the demand turned to North America, and the consumers of the United Kingdom had a splendid opportunity to compare United States and Canadian bacon. The result is the Canadian bacon has found a place in the British market that is exceptional, for the consumers got a splendid idea of the superiority of our product. Canada dominates the British market with the quality of her bacon to-day, as did Denmark before the war, and the prospects for the future are excellent, if we only take advantage of the opportunities that are ours.

A representative of the Merchant's Bank, A. A. Werlick explained to the Ontario Swine Breeders the rural service department of their Bank, and its purpose

in assisting financially in the development of Pig Clubs, Calf Clubs and the like.

The resolution regarding feeds mentioned in the introduction to this series of reports, was endorsed by the Ontario Swine Breeders.

The resolution coming from the Ayrshire Breeders asking that other associations request fair boards to increase their prize lists, was disposed of by instructing the Secretary to write the various fair boards, advising that no grant would be forthcoming from the Ontario Swine Breeders this year, and asking that the prize list be at least maintained.

The Ontario Swine Breeders will also recommend to the Dominion Swine Breeders Association, that the cost of compiling the annual records be reduced by decreasing the number of books turned out and sending them only to those who make application accompanied by a nominal fee.

The receipts for the year ending December 31, 1919, totaled \$1,707.02, and after the expenditures were considered a balance of only \$8.87 remained.

Officers.—The following officers were elected coming from the various breeds as follows: Yorkshires, Prof. A. Leitch, O. A. C., Guelph; J. K. Featherston, Streetsville; Wm. Jones, Mount Elgin; Russel Templar, Burford. Berkshires, H. A. Dolson, Alloa, and W. W. Brownridge, Georgetown; Tamworths, Geo. Douglas, Mitchell; Chester Whites, W.F. Wright, Glanworth; Duroc Jerseys, Cecil Stobbs, Leamington; Polands and Hampshires, Geo. Gould, Essex. Wm. Jones was elected President and Cecil Stobbs, Vice-President; the Secretary-Treasurer is L. E. O'Neil, Parliament Buildings, Toronto, while W. F. Wright and H. A. Dolson, with the President, Vice-President and Secretary, comprise the Executive Committee.

### Ontario Yorkshire Breeders.

With only an average attendance, the Ontario Yorkshire Club held their annual meeting on Monday, February 2, and aside from electing their board, and bringing in the Secretary's report there was very little new business to transact. The total receipts from various sources for the year amounted to \$473.02, while the expenditures ran to \$277, leaving them with a balance of \$196.02 on hand.

Owing to a considerable decrease in the cash receipts, there was some discussion as to the advisability of cutting off the usual grants to the fairs for the year 1920. This matter, however, was left over to the Executive to decide. The officers elected were as follows: Directors, J. K. Featherston, Streetsville; H. A. Dorance, Orangeville; G. Barbour, Crosshill; Wm. Jones, Mount Elgin; J. E. Brethour, Burford; R. Garbutt, Belleville; J. C. Stewart, Osgoode. President, R. Garbutt; Vice-President, G. Barbour; Secretary-Treasurer, L. E. O'Neil, Parliament Buildings, Toronto.

### Ontario Berkshire Club Meet.

The annual meeting of the Ontario Berkshire Club which was called for Monday, February 2, was one of the poorest attended meetings ever held by this Breed Association. The receipts too, showed, a slight falling off and for this reason it was decided to cancel for the year 1920 all grants to fairs and exhibitions. According to the Auditors' report, there was a balance of \$148.89 cash still on hand, while the expenditure for the year 1919 had been \$227. The officers for the ensuing year are as follows: President, H. A. Dolson, Cheltenham; Vice-President, H. B. Jeffs, Bond Head. Directors are W. W. Brownridge, Georgetown; Adam Thomson, Shakespeare; Charles Boyton, Dollar; P. J. McEwen, Wyoming; Secretary-Treasurer, L. E. O'Neil, Parliament Buildings, Toronto.

### Ontario Sheep Breeders Make Good.

The Ontario Sheep Breeders' meeting is always an interesting event, and on the recent occasion, the annual meeting was marked by considerable discussion, and the transaction of business which vitally concerns the producers of sheep in the Province of Ontario. The President, Geo. L. Telfer, outlined some of the work this comparatively young organization has been doing in the interest of shepherds, and spoke of the co-operative grading and selling of wool as the crowning achievement. This service was perhaps of most benefit and they had been able to handle the product in such a way that it was pleasing to the buyer and manufacturer, who in turn were willing to pay for the quality of wool and service.

Referring to the different grades of work, the President said that during the war, an abnormal demand existed for coarse or long wools. Since the cessation of war, however, the market had changed and now the fine wools were most keenly sought by the trade. This, he explained, was the reason for a difference in price between the two grades of wool, and he wanted the breeders to understand that the organization had no pets and that markets governed the prices that all received. The producer of long wool nevertheless, is compensated by the superior production in pounds of wool from the long wool breeds, for the fleeces run from one to one-and-a-half or two pounds more on the long wool breeds than on the short wool breeds.

In some cases, buyers pay a flat rate for coarse and fine grades, which means that the long wool will bring more than the market warrants and the short wool, less. The President was confident that wool growers will be satisfied when they receive the market value for the quality of wool they produce.

Mr. Telfer spoke rather vaguely of the future operations of the Ontario Sheep Breeders in the sphere of co-

operative effort, and said that the tendency might be more in the direction of education, with the object of increasing and improving the quality of our flocks. He urged everyone to be boosters for sheep and to spare no effort in making the Province of Ontario the breeding ground for good sheep, placing it in a position to contribute very abundantly to the wants of the whole continent in this line. He was of the opinion that improvement might be brought about and more enthusiasm created through the medium of ram sales.

The association had received a communication urging that the influence of the organization be used to have sheep dogs exempted from the tax. This application did not appeal to those who had struggled for many years to curb the dog nuisance, and no action was taken. The resolution urging that fair Boards increase their prize lists was endorsed, and the spirit of the resolution recommending that the Department of Agriculture be made responsible for the administration of the Act concerning feeds, was approved. The meeting also carried a resolution urging that veterinarians practicing in the Province of Ontario be licensed in such a way as to make it impossible for incompetents to practice. A letter was also read urging breeders in Canada who own stock in the Shropshire Breeders' Association in America, not to sell their stock at this time, as parties suspended from the Association in the United States and pending trial, are endeavoring to obtain undue control of their Association by the purchase of stock.

F. C. Patterson of Powassan brought the attention of the Association to the depredations caused by wolves in Northern Ontario and the fact that sheep raisers there are finding it difficult to carry on. The bounty on wolves he claimed, was not sufficient and that Algonquin Park and other reservations in the North were so controlled as to make them sanctuaries or breeding grounds for wolves. The Association approved of a resolution instructing the Executive Committee to deal very energetically with the matter.

The Secretary, R. W. Wade, gave a splendid report of the operations carried on by the Ontario Sheep Breeders' Association during 1919. The handling of wool co-operatively and the distribution of shepherd's supplies made a huge business. The receipts of the year total \$438,189.30, and after deducting the expenditures the cash on hand amounted to \$1,740.16. The actual business done in the handling of wool by the Association amounted to \$426,786.01.

Officers.—The following directors were chosen from the various breeds of sheep: Cotswolds, G. H. Mark, Little Britain; Leicesters, Jas. Douglas, Caledonia; Lincolns, E. Robson, Denfield; Oxford, J. E. Cousins, Harriston; Shropshires, W. H. Beatty, Wilton Grove; Dorsets, Cecil Stobbs, Leamington; Hampshires, Geo. L. Telfer, Paris; Suffolks, James Bowman, Guelph; South-downs, J. A. Calvert, Queenston. Directors at large, Wm. Whitelaw, Guelph and Herb. Lee, Highgate. President, Geo. L. Telfer; Vice-President, E. Robson; Secretary-Treasurer, L. E. O'Neil, Parliament Buildings, Toronto. Jas. Douglas and W. Whitelaw are the two Directors on the Executive.

### Canadian Sheep Breeders Endorse Reciprocity.

The Canadian sheep breeders held their annual meeting at the Carls-Rite Hotel on the evening of Tuesday, Feb. 3rd. There was a large turnout of the members from the various Provinces. President Wm. A. Dryden, called the meeting to order, and in his opening address, spoke about the high prices obtained for wool and mutton during the past four years, and prophesied that these products will remain high for the next few years, as it will take considerable time for the country to get back to normal. The President believed that there is important work for the Association to do, in the way of improving the quality in the flocks and in demonstrating that there is a place for a larger number of sheep on our mixed farms. It is important in the opinion of the President that an effort be made to stop the trade in grade rams, and that steps be taken to promote more interprovincial trade with pure-bred breeding stock. Mr. Dryden could see no reason for the restriction in freedom of action, in trade in pure-breds between Canada and the United States. He spoke about what had been done in the way of obtaining reciprocity in registration with the Shropshire breed. This should materially improve the trade, and would be a good thing if similar arrangements could be made for all breeds. The following are the rules agreed upon with the Shropshire Association:

1. Animals from the United States, American-bred or imported from Great Britain, sold to a resident of Canada must be recorded in the American Shropshire Records in the name of the Canadian purchaser. American certificate of registration must give date of sale and delivery, and, in the case of females, service certificates, if bred. It is understood that animals, on entering Canada, must be recorded in the Canadian Sheep Breeders' Record.

2. Animals from Canada, Canadian-bred or imported from Great Britain, sold to a resident of the United States must be recorded in the Canadian Sheep Breeders' Records in the name of the American purchaser. Canadian certificates of registration must give date of sale and delivery and, in the case of females, service certificates if bred. It is understood that animals on entering the United States must be recorded in the American Shropshire Records.

3. It is understood that the recording of ancestors to complete pedigrees is to be discontinued immediately by the American Shropshire Registry Association and the Canadian Sheep Breeders' Association, respectively.

4. It is further agreed that the Canadian Sheep

Breeders' Association will not accept for record animals lambing in the United States unless such animals are first recorded in the American Shropshire Records.

5. It is further agreed that the American Shropshire Registry Association will not accept for record animals lambing in Canada, unless such animals are first recorded in the Canadian Sheep Breeders' Association Records.

A resolution was later passed in the meeting to the effect that the Sheep Breeders' Association endeavor to get reciprocity in pedigrees with other breeds, on a similar basis as the Shropshire breed.

President W. A. Dryden had another appointment for the evening, and requested Col. Robt. McEwen to occupy the chair in the absence of the Vice-President. Col. McEwen made reference to the work of the Association, and then called upon the Secretary, R. W. Wade, for his report. During the past year there were 10,118 registrations from the different Provinces, and 6,150 transfers. This was a slight decrease from 1918. Ontario led in registrations, with Quebec second and Alberta third. The following table gives the registration by Provinces:

Provinces	Registrations		Transfers
	1918	1919	
Ontario.....	4,454	3,441	2,220
Manitoba.....	817	709	406
Saskatchewan.....	799	1,061	559
Alberta.....	1,160	1,941	1,036
British Columbia.....	200	150	79
Quebec.....	2,282	2,098	1,403
New Brunswick.....	221	326	160
Nova Scotia.....	145	185	79
Prince Edward Island.....	144	180	138
United States.....	33	27	77
	10,255	10,118	6,157

From January 1 to December 31, 1919, the receipts from registrations and memberships amounted to \$9,301.95, and there was cash on hand at the beginning of the year, \$5,424.81. The expenditures during the year were heavy, owing to large grants being made to the Provincial Associations and the increased cost of printing records, office expenses, etc. This left the Association with \$2,575.17 at December 31, 1919. The Secretary reported that there was outstanding accounts in the neighborhood of \$1,500, thus leaving the Association with a very small balance on hand.

Correspondence was read and dealt with in order. The resolution passed by the Western Canadian Live-stock Union regarding millfeeds was adopted by the Sheep Breeders' Association. This resolution is referred to in the introductory remarks to the reports of these meetings. Geo. Hoadley, Vice-President of the Western Live-stock Union, spoke in favor of action being taken to protect stockmen against fraudulent practice in the mixing of millfeeds. R. Knights, of Calgary, requested that the Association take action in regard to securing better judging at some of the fairs. It was believed that where the classes were large enough to warrant it, a man familiar with the breed should be secured as judge. The meeting recommended that, where possible, the Society recommend judges where the class would justify same.

Mr. Gorden, of the Western Provinces, brought in a resolution to the effect that the Association use its influence to provide that pure-bred sheep sold as bred in Canada, be registered in the Canadian Live-stock Records, and that Certificate of Registration be furnished. This question together with that of reciprocity in pedigrees was freely discussed by the meeting. G. H. Hutton strongly favored breeders patronizing Canadian records. "We want Canadian records for Canadian sheep," said the speaker. E. De Gex, of Middlesex County, objected to the Association compelling pure-breds bred in Canada, but sold in the States to be recorded in the Canadian register. The idea was supported by T. Patrick. The fact that breeders are not compelled to register in our Canadian records is possibly responsible for the poor showing made by some of the breeds in the following statement of registration by Provinces:

The number of each breed of sheep recorded in 1913 to 1919, inclusive, is shown in the following statement:

	1913	1914	1915	1916	1917	1918	1919
Shropshires.....	1,535	1,954	2,234	2,967	3,151	3,410	3,370
Leicesters.....	981	1,012	1,074	1,594	1,595	1,859	1,593
Oxford Downs.....	510	808	1,439	1,701	2,023	2,478	2,771
South Downs.....	164	179	195	260	278	263	271
Cotswolds.....	49	232	297	399	336	499	400
Lincolns.....	44	85	138	122	164	225	161
Suffolks.....	228	260	247	297	397	429	425
Hampshires.....	219	215	289	340	339	453	421
Cheviots.....	74	57	119	81	144	80	254
Dorset Horn.....	130	109	233	291	294	323	378
Romney Marsh.....				41	26	319	136
Rambouillet.....						23	263
	3,934	4,911	6,265	8,093	8,747	10,361	10,343

Owing to the fact that the printing of flock books is expensive, and that many of the breeders do not value these books enough to keep them, it was moved by James Douglas, of Caledonia, that the flock book be supplied to members requesting it at \$1.00, and to non-members at \$2.00. In regard to grants to Provincial Associations it was decided to return to the

Provinces \$1.00 per member, as owing to the financial position of the Association, it was impossible to give grants equal to that of last year. Dr. Hoaden, of Ottawa, gave a short address on parasites in sheep, pointing out that much of the loss entailed from lung worms, liver parasites and nodular worms of the intestines is largely preventive. Parasites of the liver were causing a very heavy loss, and the blue-stone treatment, as drenching with 1 per cent. solution, using 3 ounces per ewe, was recommended. The following officers were elected:

President, W. A. Dryden, Brooklin; Vice-President, Jas. Bryson, Brysonville, Que.; Secretary-Treasurer, R. W. Wade, Toronto. Directors: Ontario, Col. R. McEwen, London; Jas. Snell, Clinton; J. D. Brien, Ridgetown; W. A. Dryden, Brooklin; Executive: Lt.-Col. McEwen and J. D. Brien.

### A Record Shorthorn Breeders' Meeting.

The Dominion Shorthorn Breeders' Association had a record attendance at their thirty-fourth annual meeting. A large number of breeders were present from the Western Provinces, and there was a fair representation from the Maritime Provinces. The Association had a membership last year of 3,830, made up as follows: Ontario, 216; Manitoba, 497; Saskatchewan, 455; Alberta, 493; British Columbia, 31; Quebec, 113; New Brunswick, 25; Nova Scotia, 46; Prince Edward Island, 27, and United States, 7. The registration and transfers by Provinces are given in the accompanying table:

REGISTRATIONS, ETC., BY PROVINCES.

Province	Registrations	Transfers	Dup. and New Certificates
Ontario.....	13,902	7,157	95
Manitoba.....	2,604	1,169	24
Saskatchewan.....	2,757	1,709	33
Alberta.....	3,482	2,252	44
British Columbia.....	82	75	—
Quebec.....	1,101	545	3
New Brunswick.....	160	64	2
Nova Scotia.....	201	102	—
Prince Edward Island.....	207	84	2
United States.....	4	28	3
Total.....	24,500	13,185	206

The total registration for the year was 24,500, with 13,185 transfers. Thus it will be seen that a good deal of business has been done by the breeders. President W. A. Dryden, in the opening address, made reference to the record crowd at the annual meeting, and also intimated that the year just closed had been a record one in the interest of the breed. It was pointed out that the total registration of Shorthorns in Canada leads all other breeds combined. The breeders were advised to keep in mind the interests of the men on the small farms. The scrub-bull campaign, which has recently been inaugurated, was referred to by the President and breeders were advised to do all in their power to get rid of the scrubs.

The Secretary's report gave a resume of the work which had been done during the past year. About eleven weeks were spent by Prof. Day in the West and three in Quebec and the Maritime Provinces, attending the shows, sales, etc., and looking after the interests of the breed in general. So far as possible, the Secretary was working through Shorthorn Clubs and was doing what he could to push the sale of Shorthorns in the frontier districts. Besides the members of the Association, there are now the names of 2,000 other men on the mailing list who are receiving literature setting forth the good points of the Shorthorns. The efforts of the Secretary are bearing fruit, and the inquiries about Shorthorns are gradually increasing. A number of concrete instances were given to show that the publicity work is bearing results. A large number of Shorthorn Annuals were distributed, and some 10,000 calendars have been placed. From all accounts the Western Provinces present an excellent field for extension work.

ever, the excess of assets over liabilities on Dec. 31, 1919, was \$61,851.75.

A communication was read in regard to the Memorial Hall to be erected at Guelph. This building is to be erected on the College Campus in memory of the boys who fell in the Great War. The Government are making a substantial grant, but some \$60,000 are to be raised by public subscription. The meeting favored the idea and made a grant of \$200.

The Secretary presented a new classification for a prize-list at exhibitions. The idea is to increase the prize money won by the exhibitors in specified sections by 50 per cent., under conditions approved by the Association. Under this plan the shows giving the most money would get the most assistance from the Association. Robert Miller, speaking in support of the proposed classification, pointed out that Fair Boards must use all breeds alike; thus, if money is granted promiscuously by any Association, it is difficult to have members of that Association reap the full benefit. The proposed classification should overcome these difficulties, and any money granted by the Association would go to Shorthorn exhibitors. H. Smith and H. Lee favored lessening the prizes to herds, and increasing the prizes to young stuff, in order to give the small exhibitor an opportunity. J. G. Barron believed that the herd and group classes could be encouraged, as they showed to the advantage of the breed. Hon. Duncan Marshall believed that it was important to any breed of cattle that a good showing be made at every exhibition. The senior and junior herds usually make a spectacular showing, and indicate the breeder's ability to breed and select animals of a uniform type.

In regard to the new Royal Agricultural Winter Fair, it was believed that it afforded a great opportunity for breeders to demonstrate the quality of their cattle. The President requested that breeders give this show their active support. Appropriations for winter fairs was left to the incoming Board of Directors, as the classification submitted by the Secretary did not apply to these fairs. The matter of publicity work for the coming year and appropriations for the same, were also left to the new directors. It was felt by many of those present that there should be a man in the West devoting his entire attention to the furthering of the interests of the breed; this man to work under the Secretary.

There was considerable complaint about the size of type used in the last herd book. Owing to the large number of registrations, the book is unwieldy in size, although certain information such as the breeder's address, and prize winners at fairs were omitted. It was recommended that the herd book in the future be improved, as to printing and matter, and that some history of the breed and a list of the winners at leading exhibitions be incorporated. Hon. Duncan Marshall strongly favored having the herd book illustrated with a number of the outstanding males and females of the breed. It is believed that many of the breeders do not appreciate the herd book, and it was suggested that those wanting the herd book should make application for it, and be charged the nominal sum of \$1.00. Dr. Hilton, representing the Health of Animals Branch, Ottawa, explained fully the Accredited Herd System, which is being inaugurated by the Department of Agriculture. This work is being pushed aggressively in the States, and the need of some system to, in so far as possible, eradicate tuberculosis from our herds is necessary in Canada. There are certain rules and regulations which must be adhered to when the Department takes the herd in charge for testing. The herd that secures a Certificate from the Department will be in a favorable position as regards interprovincial trade and in exporting to the United States.

The retiring President, W. A. Dryden, was extended a life membership by the Association. The following officers were elected for the ensuing year: President, J. G. Barron, Carberry, Man.; 1st Vice-President, H. M. Pettit, Freeman; 2nd Vice-President, Hon. Duncan Marshall, Edmonton, Alta.; Secretary-Treasurer, G. E. Day, Guelph. Directors: Ontario—Hon. W. C. Sutherland, Galt; J. A. Watt, Elora; A. G. Farrow, Oakwood; James Douglas, Caledonia; John Gardhouse, Weston; R. T. Amos, Moffat; J. D. Brien, Ridgetown; James Kyle, Drumbo; Manitoba—J. G. Washington, Ninga; J. B. Davison, Carmen; Saskatchewan—R. M. Douglas, Tantallon; R. A. Wright, Drinkwater; Alberta and British Columbia—Hon. Duncan Marshall, Edmonton, and Wm. Sharpe, Lacombe; Quebec—J. A. McClary, Lennoxville; Maritime Provinces—A. M. Griffin, New Minas, N.S.

### Dual-Purpose Shorthorn Breeders' Club.

The first annual meeting of the Dual-purpose Shorthorn Club of Canada was held on Feb. 2nd, with about thirty members present. This Club was organized in December for the purpose of encouraging breeders of Shorthorn cattle to pay attention to the milking qualities, to establish, if possible, a definite type for the dual-purpose animal, by arranging classes at our larger exhibitions, publishing literature setting forth the qualities of the breed, and to promote and advance the interests of the breeders of Dual-purpose Shorthorn cattle generally. There is the tendency on the part of some to make a dairy animal out of the Shorthorn, this the members of the Club wish to guard against and, in so far as possible, breed an animal of dual-purpose qualities. There are many small herds throughout the country where the owners endeavor to obtain the double revenue. Professor Barton, of Macdonald College, who addressed the meeting, stated that the dual-purpose cow is a reality, and that there is great

abilities on Dec. 31, ...ard to the Memorial ...is building is to be ...memory of the boys ...e Government are ...ome \$60,000 are to ...The meeting favored

classification for a ...is to increase the ...in specified sections ...is approved by the ...e shows giving the ...assistance from the ...king in support of ...out that Fair Boards ...f money is granted ...t is difficult to have ...up the full benefit. ...overcome these diffi- ...by the Association ...H. Smith and H. Lee ...s, and increasing the ...e the small exhibitor ...eived that the herd ...ged, as they showed ...n. Duncan Marshall ...ny breed of cattle ...t every exhibition. ...y make a spectacular ...ability to breed and

Agricultural Winter ...a great opportunity ...ality of their cattle. ...ders give this show ...ons for winter fairs ...of Directors, as the ...retary did not apply ...blicity work for the ...for the same, were ...was felt by many of ...a man in the West ...the furthering of the ...to work under the

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Dryden, was extended ...ation. The following ...ing year: President, ...st Vice-President, ...ice-President, Hon. ...lta.; Secretary— ...irectors: Ontario— ...A. Watt, Elora; A. G. ...las, Caledonia; John ...Moffat; J. D. Brien, ...bo; Manitoba—J. G. ...vison, Carmen; Sas- ...tallon; R. A. Wright, ...ish Columbia—Hon. ...and Wm. Sharpe, ...y, Lennoxville; Mari- ...ew Minas, N.S.

**Shire Breeders'**

the Dual-purpose Short- ...Feb. 2nd, with about ...lub was organized in ...ouraging breeders of ...to the milking quali- ...definite type for the ...g classes at our larger ...e setting forth the ...romote and advance ...ual-purpose Shorthorn ...endency on the part ...out of the Shorthorn, ...ish to guard against ...d an animal of dual- ...small herds through- ...endeavor to obtain ...Barton, of Macdonald ...ting, stated that the ...d that there is great

need for an organization such as has recently been effected. The speaker believed that it was quite possible to develop and breed dual-purpose Shorthorns. There were numbers of cattle coming under this specification in the hands of small farmers, who wanted cows that would do two jobs—namely, produce milk and a calf that would fatten up in the feed lot. The speaker advised against wasting time chasing phenomenal records. It is business records that are wanted, and it is essential that type be established. Prof. Barton intimated that we do not want the extreme beef nor the extreme dairy type. The speaker characterized the "weed" Shorthorns as the stumbling block in the promotion of this class of cattle. The dual-purpose Shorthorn cow was spoken of as an attractive, utility animal, and breeders were advised to lay emphasis upon the under development. In the show-ring it was important that the judge be not carried away with one or two details. Shorthorn character was mentioned as being one of the best keys we have to breeding qualities. In selecting animals the following three points were emphasized—character, substance and general type and quality.

Geo. E. Day, in a few timely remarks, intimated that he is not in sympathy with those who pass off any old skate of an animal as a dual-purpose Shorthorn. The difference between straight beef and dual-purpose Shorthorn was thought to be largely a matter of condition.

The meeting sent in a recommendation to the Dominion Shorthorn Breeders' Association for classes at the Canadian National and Royal Shows, with certain rules of entry for the different classes. It was also suggested that where classes for dual-purpose or Shorthorn cows in milk was put on at any show, that the judge be requested to consider 50 per cent. for confirmation and 50 per cent. for indications of milk production.

The following Officers were elected: Hon. President, Hon. E. C. Drury, Toronto; Hon. Duncan Marshall, Edmonton; Prof. E. S. Archibald, Ottawa; Prof. M. Cumming, Truro, N. S.; President, G. L. Smith, Meadowdale; Vice-President, H. A. Scott, Caledonia; Secretary, I. B. Whale, London. Executive: R. R. Wheaton, G. E. Day and John Weld. Directors: F. Cockshutt, S. W. Jackson, Alexander McLaren, J. M. McCallum, Prof. H. Barton, G. Carter, E. R. Wood, L. H. Hanlan, and Ross Martindale.

**Hereford Breeders Plan on Increased Receipts.**

The Canadian Hereford Breeders' Association called their annual meeting for three o'clock on Thursday, February 5, and there was a goodly number of Ontario breeders present. Breeders from Western Canada, however, where the breed predominates, were few in number, owing to geographical conditions, this fact brought on a discussion as to the advisability of holding the annual meeting, alternate years, between Eastern and Western Canada. It was finally decided, however that it would serve the Association better to continue with the meetings at Toronto, the same week as held by the other breed associations, and to pay the travelling expenses, etc., of a representative from each of the three Western Provincial Associations, that of Alberta, Saskatchewan and Manitoba.

L. O. Clifford, in his presidential address, was very optimistic as to the future success of the Hereford in both Eastern and Western Canada, and called the attention of the Ontario members to the fact that the breed in numbers exhibited at the Eastern exhibitions, was very much in the minority, while at the Western exhibitions, Herefords outnumbered all other breeds. He strongly advised the small Ontario breeders to fit something, even if it be only a few animals, to bring out to Toronto and London to help make the Hereford exhibit more deserving in comparison with the other breeds. He also mentioned a few of the high averages made by the breed during the past year at various public sales throughout both United States and Canada, and prophesied good prices at all times for the good stuff.

H. D. Smith, the Secretary, in the financial statement, pointed out to the members that the Association, while having the good substantial balance of \$4,622.48 cash on hand Dec. 31, 1919, expenses were gradually going up, and in view of the fact that the Association was considering the advisability of putting on a permanent field man in the course of the next year or so, as well as doing considerably more in the way of publicity work than they did in the past, that he thought it advisable for the members to consider the notice of motion of increase in fees favorably; a suggestion which was carried out unanimously. The increase is to take effect immediately, the membership fee being raised from \$2.00 to \$3.00, with transfers and registrations increased 100 per cent. The latter, of course, to be doubled to non-members. Receipts from transfers, memberships and registrations for the year 1919, totalled \$1,302, with Alberta leading in registrations and transfers, and Ontario following second. The transfers for the year totalled 3,401, and the registrations 4,144.

W. H. Harrison, Mont Martre, Sask., delegate from the Provincial Association, in asking for increased financial assistance, for all of the Western Provincial Associations, requested that an appropriation be made to provide for the expenses and salary of a temporary field man for the months of July and August to cover the Western Fair Circuit, but this, as well as all monies to be expended in fair grants, etc., was left to the Executive. It was the feeling of the meeting that the appropriation for this purpose in both Eastern and Western Canada should be increased considerably.

The officers elected for the ensuing year were as

follows: Directors: John Davidson, Cold Dale, Alta.; John Wilson, Innisfail, Alta.; W. H. Harrison, Mont Martre, Sask.; J. E. Harris, Kingsville, Ont.; Arthur O'Neil, Denfield, Ont.; J. A. Chapman, Hayfield, Man.; F. Collicutt, Calgary, Alta.; James Page, Wallace-town, Ont.; W. H. Hunter, Orangeville, Ont.; L. O. Clifford, Oshawa, Ont.; E. A. Rosevear, Cobourg, Ont.; and Walter Readhead, Milton, Ont. President, L. O. Clifford; Vice-Pres., W. H. Hunter; Sec.-Treas., H. D. Smith. The Executive to be composed of the President, Vice-President, the Secretary and W. Readhead, Milton.

**Clydesdale Breeders See Good Times Ahead.**

The Clydesdale breeders of Canada assembled on February 5, and conducted one of the most largely attended meetings of the whole series. William Graham Claremont, Ont., who had been President of the Association for the past three years, spoke very briefly, and drew attention to several facts dealt with more fully in the Directors' report. In retiring from the presidency, Mr. Graham thanked the members of the Association and all the officers for their co-operation and support in carrying on the good work, and said that the business of the year had been conducted with the one aim of promoting the best interests of the Clydesdale breed in Canada.

The Directors' report, presented by the Secretary, J. W. Wheaton, was carefully prepared and very replete with information concerning Clydesdales and the horse industry in general. A review of the year 1919 revealed very little change in the horse situation of this country, and the directors admitted that perhaps too much was expected a year ago. The year 1919 was not, however, without its encouraging features. Last summer a shipment of forty Clydesdale geldings was made from Western Canada to Scotland, where they were sold at profitable prices. The report made it plain an exceptional demand exists in Europe for work horses, but animals of anything but first-class quality cannot be shipped because of the high ocean freight rates, which amount to approximately \$125 per head. There is a probability, though, that the situation may shortly improve and an outlet be found for a number of horses not needed in this country. The directors were not in a position to state what the wastage of horses, due to the war, really amounted to, but the fact was evident that Europe is much in need of horses. The whole European situation affords every encouragement for the horse breeder, and especially the breeder of good draft horses of weight and quality.

In dealing with the Canadian outlook, the Directors' report included a table showing the number of horses in Canada in 1918 and 1919. In 1918 there were 3,609,257 horses and in 1919 there were 3,667,369, showing an increase of about 60,000 horses. Ontario, however, has fewer horses than in 1918; the total in 1919 being 719,569 as compared with 732,977 in 1918.

The report commented very encouragingly on the sale of high-class geldings from \$300 to \$350, and a feature of the situation which might still further have a good effect was the need of horses for soldiers settling on the land.

Several importations of Clydesdales, mostly stallions and young colts, were made during the latter part of the year. The quality of these importations was up to the standard of former years, and the very fact that Clydesdale men would pay high prices for horses in Scotland, and convey them to Canada at enormous expense, was evidence enough that these men had faith in the industry and the Clydesdale breed. The directors furthermore were of the opinion that the service fees at which stallions were held in this country were too low. Cost of feed, cost of help, and everything else that goes with putting a stallion on the road, had advanced fully one hundred per cent. since pre-war days. These things should be taken into account by farmers when breeding their mares; and more particularly if they desire the services of high-class stallions. A few dollars' increase in the service fee does not mean much to the individual breeder, but it means a whole lot to the stallion owner, who is under a greatly increased expense as compared with former years. The report also brought out the fact that a fee of \$25 at time of service, and \$25 when mare proves to be in foal, is quite a common occurrence in Scotland.

Horse breeding has fallen off considerably during the past season, and especially is this true of Ontario. Ontario farmers bred fewer mares in 1919 than in 1918, but in the West a better situation prevails. Farmers, perhaps, have turned to cattle, sheep and swine rather than horses, and the view was expressed that a falling-off in breeding operations may not be felt for a few years but its effect will be none the less startling when the real shortage is revealed. Farmers were urged to breed all suitable mares in 1920.

Clydesdales maintained their high place on the 1919 show circuit, particularly in the harness classes, and in this regard the report says: "In this particular line the Clydesdale is still pre-eminent, outdistancing all competitors in the showing of heavy draft horses in harness."

At the last annual meeting the directors were empowered to purchase a six-horse team of Clydesdales and equip them for the show circuit. When the committee began to work on this scheme it was found that insufficient money had been appropriated. They furthermore were convinced that a large expense in this connection was not warranted, and that better results would accrue from the exhibition of good teams by individual owners.

Twenty thousand copies of a booklet entitled "Canada's National Draft Horse" were published and distributed last year. Grants to exhibitions during the year totalled \$7,150, while several medals and ribbons were given at thirty fairs for stallions and mares.

Negotiations are under way to have Canadian-bred Clydesdale horses, of the short-pedigreed kind, admitted to the United States duty free, and the prospects for a favorable settlement in this regard are bright. The American Association have made representation to Washington to permit five-cross stallions and four-cross females admitted to the United States free of duty. It was thought that such a regulation would extend the market for Canadian-bred Clydesdales.

In regard to finances, the report showed a smaller balance on hand than for the previous year, and commented on the situation thus: "This is due to a shrinkage in receipts from registrations of \$1,141.57, as compared with 1918. There is an increase in membership fees; the total for 1919 being \$4,154, as against \$3,534 in 1918, making a net shrinkage in total receipts from these two sources of \$521.67. There was a total shrinkage in receipts, as compared with 1918, of \$2,833.45. The financial report showed a balance on hand of \$5,943.89. The cash assets amounted to \$11,593.59, and the excess of assets over liabilities was \$21,796.76.

Intense interest was taken in the election for Vice-President for which office Dr. T. H. Hassard and Fred Richardson were proposed. Considerable argument took place as to how the election should be conducted and it was evident that the members present were strongly in favor of their respective candidates. A count of the ballots showed Mr. Richardson elected.

Life memberships were conferred upon Wm. Graham, the retiring President, John A. Boag, Queensville, and T. D. Elliott, Bolton.

A resolution urging that the annual meetings be held at the time of the Royal Agricultural Winter Fair was rejected, and the Association could not see its way clear to make a grant to the Memorial Hall at the O. A. C., Guelph, because it was a Provincial matter. Geo. Hoadley, M. P. P., Alberta, asked that the grant to his Province be placed in the hands of the Clydesdale Association of Alberta, and that they be given, for one year, the power to distribute it according to their own discretion. This request was granted.

C. M. McRae, Chief of the Horse Division, Live-Stock Branch, Ottawa, spoke briefly concerning the Federal Assistance to Horse Breeding and expressed the opinion that in the interests of horse breeding it would not be wise to exceed the maximum of \$25 as a service fee. He appreciated the position that stallion owners are in and the greatly enhanced values of everything but considered that too high a fee would have a detrimental effect at this time.

The officers for 1920 were elected as follows: President, Jas. Torrance, Markham, Ont.; Vice-President, Fred Richardson, Columbus, Ont.; Secretary-Treasurer, J. W. Wheaton, Toronto. Directors: Wm. Graham, Claremont, Ont.; John A. Boag, Queensville, Ont.; W. L. Scott, Sulton West, Ont.; Wm. McKirdy, Napinka, Man.; W. E. Jewell, Bowmanville, Ont.; J. M. MacCallum, Shakespeare, Ont.; T. H. Hassard, Markham, Ont.; Vice-Presidents for Provinces: Ontario, Peter Christie, Manchester; Maritime Provinces, S. A. Logan, Amherst, N. S.; Quebec, Robt. Ness, Howick; Manitoba, John Graham, Carberry; Saskatchewan, T. S. Sanderson, Turtleford; Alberta, E. D. Adams, Calgary; British Columbia, Duncan Montgomery, Ladner.

**Shire Association Will Ask For Demonstration Horses.**

The annual meeting of the Shire Horse Association was held on Thursday morning, February 5. A small number of Ontario breeders were present to conduct the business. George Hoadley, of Alberta, presented a resolution embodying a proposition which the meeting endorsed. The scheme presented by Mr. Hoadley suggested making representation to the Shire Horse Society of Great Britain and Ireland to donate a number of good Shire stallions (ten were suggested) to the Canadian Association. These to be distributed throughout Canada and stood at a service fee of five dollars. These stallions could be shown wherever thought wise. In the opinion of the meeting, good Shire stallions and their get would do much to demonstrate the good qualities of the Shire horse and popularize it.

It was also suggested by Mr. Hoadley that the Association go on record as not in sympathy with the regulations that permit settlers from U. S. A. to bring non-pedigreed stallions into Canada. The meeting expressed itself as opposed to importation of such horses, and will make representation to Ottawa.

The Secretary, G. de W. Green, Toronto, said that the financial position of the Association had been well maintained. Alberta stands an easy first as regards membership fees and registrations. The Secretary also announced that the English Shire Horse Society has apportioned the sum of a hundred pounds to the Canadian Association to assist in advertising, on condition that a like amount be appropriated by the Canadian Association. The Secretary reported a balance on hand of \$1,227.43, and an excess of assets over liabilities of \$1,518.55.

The officers elected for the ensuing year are: President, J. Bovaird, Brampton; Vice-President, G. D. Morden, Oakville. Directors: Amos Agar, Nashville; T. Rawlinson, Innisfail, Alta.; W. J. Gardhouse, Weston; J. M. Gardhouse, Weston; Andrew A. Miller, Middlemarch; J. B. Clark, Ravenshoe; J. W. Forster, Nateby, Alta.; Secretary-Treasurer, G. de W. Green, Toronto.

### Ontario Horse Breeders Convene.

A good attendance was on hand for the annual meeting of the Ontario Horse Breeders' Association, held on the evening of February 4. The President, Wm. Smith, spoke briefly on general topics of the day, and admitted that owing to the lack of funds the Association had not been able to accomplish as much work as it desired to in the past year.

A proposed constitution was accepted by the meeting, which satisfied it as it came from the Directors.

The Secretary, R. W. Wade, commented on the Ontario Specials given by the Association at the Ontario Provincial Winter Fair. It developed that between \$350 and \$400 had been paid in specials, which money goes to the breeders of Ontario-bred horses winning first and second prizes at the Winter Fair.

Considerable discussion arose regarding premium horses and the grants to them. The Ontario Association undertook to bonus certain horses which pass inspection and qualify for a premium certificate. The number of these horses has grown to such proportions that the funds must be increased in order to comply with the demands, but the Provincial Government has the matter under consideration and will, no doubt, make a decision soon. A bonus amounting to 20 per cent. of the fee charged was viewed as satisfactory, but, of course, the actual amount of the premium must depend on the number of horses qualifying and the appropriation made by the Government.

The officers for the ensuing year are: President, John A. Boag, Queensville; Vice-President, John Gardhouse, Weston; Secretary-Treasurer, L. E. O'Neil, Toronto. Directors from the various breeds were chosen as follows: Clydesdales, Wm. Smith, Fred Richardson, T. H. Hassard, Peter Christie, Jas. Torrance, W. L. Mossip, Wm. Graham, J. Moore, John Boag, W. L. Scott, J. Henderson, Robt. Graham, J. Gould; Standard-Breds, J. Moore and Geo. Pepper; Hackneys, J. M. Gardhouse and H. M. Robinson; Belgians, C. W. Gurney; Percherons, E. C. H. Tisdale and W. G. Hill; Shires, John Gardhouse and Wm. Agar; Ponies, John Miller Jr., and Jno. Creech.

### Canadian Thoroughbred Horse Society.

The annual meeting of the Canadian Thoroughbred Horse Society was held on February 2, with the President, J. J. Dixon, presiding, and also acting for Secretary-Treasurer, Macabe, who was prevented through illness from being present. The Secretary's report, as brought down, showed the Association to be in an excellent position financially, with a balance on hand of \$3,374 for the year ending 1919. The officers elected for the ensuing year are as follows: Hon. President, Col. Wm. Hendrie, Hamilton; President, John J. Dixon, Toronto; Vice-President, A. E. Dymont, Toronto; 2nd Vice-President, R. W. Davies, Toronto; Secretary-Treasurer, T. A. Macabe, Toronto. Directors are: J. K. L. Ross, Montreal; A. E. Adams, Calgary; Jas. Boviard, Brampton; T. A. Crow, Toronto; Col. D. King Smith, Toronto; Raymond M. Dale, Newtonbrook.

### Hackney Breeders are Optimistic.

Only a few breeders were present at the annual meeting of the Canadian Hackney Horse Society. W. E. Jewell, the Vice-President, occupied the chair, and outlined the position the Hackney occupied to-day, and reviewed the work of the Society during the year. The Society has a membership of 121, and during 1919, 80 registrations and 112 transfers were made. Financially the Society is not so favorably situated as some of the other breed organizations; while the assets over liabilities amount to considerable it is largely made up of stud books on hand.

Robt. Graham was made Hon. President and W. E. Jewell, Bowmanville, was elected President; Dr. W. J. R. Fowler, Toronto, Vice-President, and H. W. Robinson, Toronto, is Secretary. Directors: Ontario, Dr. G. McPherson, P. Boag, T. A. Crow, T. A. Graham, Dr. Hassard, J. J. Tilt and H. A. Mason, B. C., W. C. Renfrew; Sask., W. Grant; Alberta, W. J. Stark; Man., J. Lemon; Quebec, F. E. Carne; N.B., R. A. Snowball; N.S., Dr. C. A. Webster. Members of Executive: P. Boag, T. A. Graham and H. A. Mason.

### Ontario Ranchers' Association.

About a dozen men principally from Northern Ontario, met at the Carls-Rite Hotel during the week of breeders' meetings and discussed the problems affecting the men engaged in ranching in the various parts of the Province not suited to agriculture. There was a good deal of interest taken in the meeting and from the discussion one would gather that the men, who are making use of what would otherwise be waste land, are scarcely being given due consideration by the Department. While there may be a considerable area of arable land in certain sections, there are many times the amount that is rock, lake and bog. This land is rented by the Department at a nominal charge, which when extended over a considerable area amounts to a good deal. The rancher will possibly rent several thousand acres in order that he may have one or two hundred acres which it would be possible to cultivate to produce crops for winter feeding. The leases are made for a term of years, but there are certain restrictions in these leases which the ranchers claim are a physical impossibility to live up to. This refers particularly in regard to the number of stock kept, either sheep or cattle. A number of speakers referred to the prevailing lease being unsatisfactory, due largely to

the fact that the matter was not in the hands of agricultural authorities who could most sympathetically administer the act governing ranch leases. It was generally believed that the basic necessity of the lease was to have the option of purchase and also a reasonable guarantee of tenure. The following officers were elected: President, F. C. Patterson, Powasson; Vice-President, J. Fenness, Renfrew; Secretary-Treasurer, C. M. Laidlaw, Burwash. Directors: R. H. Fenson, Nairn; W. W. Shields, Powasson.

### Ayrshire Breeders Decide on 305-Day Test.

The forty-ninth annual meeting of the Canadian Ayrshire Breeders' Association was held in the Carls-Rite Hotel, Toronto, on Thursday, Feb. 5. A. S. Turner presided at the meeting, and in his opening address pointed out the importance of live stock to a permanent agriculture, and recommended that the Association adopt a more aggressive policy in the future, in order that the merits of the Ayrshire breed might be spread broadcast throughout the Dominion. The chairman believed that the Ayrshire interests in Canada would receive a great impetus were a good live field man appointed. Regret was expressed that more of the breeders were not entering their cows and heifers in the R.O.P. list. It is believed that the future of the Ayrshire breed depends a good deal upon the aggressiveness of the breeders in this particular line.

Secretary W. F. Stephen, gave a very extensive report of the work of the Association during the year. The membership now totals 1,754, an increase of 217 over the past year. Quebec leads the other Provinces in number of members. The registrations for the year total 4,843 with 3,920 transfers. In the record of performance work 776 applications were received, which was an increase of 177. There are now 1,445 registered in this test. The Secretary believes that the future of the breed must be built on an intelligent use of the R.O.P., as yearly records determine the productive value of the cow or breed. The breeders were advised to get busy in this test and make bigger records. Testing was believed to be one of the best means of discovering the boarder cow. The Association offered silver cups for the cows heading the list in the various classes of the R.O.P. This year J. A. Morrison of Mount Elgin won the cup in the mature class on Whitney's Lassie. She gave 16,081 lbs. of milk and 659 lbs. of fat in 360 days. A. S. Turner & Son won the cup for the four-year-old class with Briery of Springbank 3rd. The three-year-old class was headed by Dairy Queen of Orkney the 2nd, owned by H. McPherson. In the two-year-old class Wooddise Bros. were first on Tanglewyld Princess 4th.

At the present time there are nine breeders' clubs, and each are doing a good deal of good for the Association, in the way of promoting sales, forming bull exchanges and increasing the interests of the breed generally. Breeders were advised to be missionaries in their own community to get rid of both the scrub bull and the boarder cow. These two animals are considered a menace to successful dairying. The Secretary set forth the following objectives, and if each member would strive to follow them it would certainly mean a very progressive association. The objectives are as follows:

1. Get one new member or interest one dairy farmer in Ayrshires.
2. Replace at least one scrub bull in the community with an Ayrshire.
3. Enter one or more cows in the R.O.P. Feed them well and make bigger records.
4. Feed the young stock better and grow them larger.
5. Exhibit at the local fairs, the larger exhibition or the dairy test.
6. Spend some money in advertising your herd.
7. Further club work in your district.
8. Talk Ayrshires whenever the occasion warrants.
9. Send the Secretary items of interest about Ayrshires.

H. S. Arkell, Live-stock Commissioner for the Dominion, gave a brief address intimating to the breeders that we are approaching a critical time in the development of the live-stock industry in Canada. Abnormal industrial relationships were characterized as causing much of the unrest and labor disturbance. Breeders were advised to consider what the future holds in store for the industry, and to begin a reconstructive policy with the future in view. The speaker believed that we would have to contend with severe competition in the markets of the world, and that quality of products would count for much towards gaining a favorable position.

Dr. Hilton, of the Health of Animals Branch, fully explained the accredited herd system. At the close of his address S. H. Shannon, of B.C., moved that the Association express appreciation of the action taken by the Veterinary Director-General in establishing the accredited herd system, and that all the members be recommended to enter their herds. The Association went on record to the effect that all fair boards should be asked to provide separate barns for accredited herds. There was considerable discussion when deciding on a basis for securing proportionate representation by Provinces on the Directorate. The Dominion was divided into zones, and the following are the number of directors allotted to the zones. The Maritime Provinces 1, Quebec 6, Ontario 5, Manitoba and Saskatchewan 1, and Alberta and British Columbia 1. The meeting decided that the Association suspend members that are unduly tardy in the handing over of transfers.

Considerable discussion took place relative to the rules of the R.O.P. test, and the meeting decided to eliminate the 15-months' freshening requirement, and to establish a 305 day test with 400 day freshening. A resolution was passed protesting against any effort on the part of legislation or labor unions towards interfering with hours of work on the farm or enforcing

daylight saving. The publication of an Ayrshire Monthly was authorized and a committee appointed to take care of publicity work. It was recommended that fair boards be asked to raise their prizes in keeping with the present cost of showing. In order to stimulate interest in testing, it was decided to offer a special prize of \$50 for every cow breaking a previous record in the R.O.P., and to give \$100 to the owner of the first Ayrshire cow to make 20,000 lbs. of milk in a year. A notice of motion, which was to the effect that article 16, Section 2, of the Constitution be changed to read: "The fee for registration of pedigrees shall be as follows," was discussed at some length. To members, females under one year \$2.00, males under one year \$3.00, males or females over one year and under two \$5.00, males over two years \$10.00. Transfers made within 60 days of sale 50 cents, and transfers made over 60 days of sale \$2.00. The price for registering to non-members was a \$1.00 higher in the first two sections, and was raised to \$8.00 for male or female over one year and under two. In case of transfer made within 60 days of sale, it was \$2.00, and over 60 days \$3.00.

The following officers were elected: President, Gilbert McMillan, Huntingdon, Que.; Vice-President, W. Hunter, Freeman, Ont.; Secretary-Treasurer, W. F. Stephen, Huntingdon, Que. Directors: R. R. Ness, M. Ste. Marie, F. Byrne, H. Gordon, J. H. Black, G. McMillan, D. R. Brown, W. W. Ballantyne, G. Gillespie, J. McKee, W. Hunter, A. Hume, A. S. Turner and S. H. Shannon.

### Canadian Jersey Cattle Club.

Annual meeting of the Canadian Jersey Cattle Club, held on Feb. 4, was easily one of the most interesting, as well as the best-attended meetings, ever held by this breed Association.

The financial statement presented by the Secretary for the year ending Dec. 31, 1919, showed a substantial balance of \$4,774.77 cash on hand. The receipts for the year, including registration fees, membership fees, etc., totalled \$4,179.45, while the expenditures were \$771.64. Following the reading of the Secretary's report, there was considerable discussion over the proposed increase in registrations and transfers, as per notice of motion which had been sent out some time previous to the meeting. Many of the breeders were of the opinion that the splendid financial standing of the Association warranted no increase, although there was a recommendation from their Executive that the Association should be spending annually for publicity almost as much as they now had cash on hand. After considerable debate on the question, the motion was finally carried and the increase on registrations and transfers will be an even 100 per cent., beginning 1920, with the fee for registering imported cattle advanced to \$10.00. The meeting also voted \$1,000 for publicity work during 1920, it being left to the Executive to appoint a committee to look after this expenditure.

The grant to fairs and exhibitions was increased considerably, with \$300 going to British Columbia exhibitions, \$420 to Quebec exhibitions, of which Sherbrooke gets \$300, \$100 to Toronto and London each, \$25 to Central Canada, Ottawa, and \$60 to Guelph, the latter is for dairy tests awards, and \$100 was to be added to the amount in case a Jersey cow should win the championship. In addition to these prizes, several breeders present voluntarily offered assistance to the Jersey exhibit at the Toronto Exhibition by cash offerings totalling in all to \$275. This amount to be added to the prize-list in the regular classes.

The money devoted to R.O.P. prizes for 1920 is to remain the same as was paid in 1919. In this connection it was interesting to note that of the four classes in 1919, three of the championships or all those under the mature class, went to the Province of British Columbia, the winners in the four classes being as follows: Alfred Bagg, Edgeley, Ont.; four-year-old class, George Hornby, Sandwich, B.C.; three-year-old class, Mrs. A. H. Street, Sardis, B.C.; and the two-year-old class, L. F. Solly, Westholme, B.C. Vera Lenore, the winner of the three-year-old class is perhaps the outstanding champion of the four, in that she has 700 lbs. of fat for the year, while the winner in the mature and the four-year-old classes produced 679 and 602 lbs., respectively. Sunbeam of Edgeley still remains the R.O.P. champion of the breed in Canada with 18,744 lbs. of milk and 926 lbs. of fat.

Outside speakers at the meeting included H. S. Arkell, Live-stock Commissioner, and Dr. Hilton, of the Health of Animals Branch, Ottawa. Mr. Arkell complimented the Jersey breeders on their high standing in the official reports of economic production, and impressed upon them the fact that dairymen must be encouraged toward greater production, as recent investigations he had made in this and other countries proved, conclusively, that there existed to-day a greater shortage in dairy products than in any other one line of foodstuffs.

Dr. Hilton in addressing the meeting on the accredited herd system, brought forth considerable discussion when advising breeders to enter their herds in the accredited list. Speaking in favor of this, he pointed out there were now over 800 accredited herds in the U.S.A., and thought it only a matter of time when American breeders would make their purchases from accredited herds only. After going into the rules governing the test quite fully, several breeders present expressed their belief that they were so stringent as to be almost prohibitive, although D. O. Bull, speaking in favor of the system gave them a number of instances to show that it did not cause nearly the inconvenience as many would have you believe. Mr. Bull also thought that for the protection of exhibitors that all fairs and exhibitions should demand that each entry should be

ion of an Ayrshire committee appointed. It was recommended their prizes in keeping. In order to stimulate to offer a special to the owner of the first of milk in a year. The effect that article be changed to read: "Prizes shall be as follows: To members, females under one year \$3.00, and under two \$5.00. Transfers made within transfers made over 60 for registering to non- the first two sections, male or female over one of transfer made within over 60 days \$3.00. elected: President, Que.; Vice-President, etary-Treasurer, W. F. Directors: R. R. Ness, Gordon, J. H. Black, G. Ballantyne, G. Gillespie, A. S. Turner and S. H.

### Cattle Club.

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accompanied with a tuberculin certificate before being allowed to enter the stables.

The Club adopted resolutions in favor of sending a delegation to interview the Minister of Agriculture with regard to putting the Dairy Standards' Act in force, and of changing the date of the annual meeting to comply with the dates of the new Royal Agricultural Show to be held annually in November. The officers elected for the ensuing year were as follows:

President, J. L. Alexander, Hillhears, Que.; Vice-President., George Bagg, Edgeley, Ont. Directors: R. J. Fleming, Toronto; John Pringle, London; Gordon D. Duncan, Todmorden; J. M. Dolson, Brampton; E. W. Papple, Brantford, and R. P. McClennan, Vancouver, B.C.

### 37th Holstein-Friesian Meeting.

The Holstein-Friesian Association of Canada held their thirty-seventh annual meeting at the Prince George Hotel, on Thursday, February 5, with about a hundred or more breeders present. At the joint banquet held the evening previous by the Holstein and Ayrshire breeders, there were one hundred and one Holstein breeders present and seventy-seven Ayrshire men. The President, Neil Sangster, Ormstown, Que., in his presidential address, described the year just closed as the most prosperous in the history of the Association. "Practically 500 new names have been added to our roll during 1919," said Mr. Sangster, "bringing the total membership to 3,200. Our registrations reached 14,284, a gain of more than 1,200 over last year." Transfers numbered 15,354, or 3,000 above last year's figures. After dealing with the question of increased office accommodation, the President referred to the acquisition of another man on the staff to ensure that Canadian records should be found above suspicion. He also thought the time had come when the Association should add an extension service, and recommended the addition to the staff of someone familiar with Holsteins, and a good talker and writer, to take up the work of popularizing the Holstein. Pleasure was expressed at the completion of arrangements for reciprocity in registrations between the Canadian and American Associations, which, together with the establishment of accredited herds in Canada, will do much to further trade between Canada and the United States. The European trade in Holsteins also bears considerable promise.

The report of the directors said that 1919 may be fairly claimed as the best year experienced by the Association. The total number of animals recorded up to the end of 1919 was 115,000. "Undoubtedly," the report says, "the demand for good Holsteins is greater, and prevailing prices higher than at any previous time in the history of the breed in America. We are really just awakening to the realization that America has a shortage of good dairy cattle. With our great prairie provinces just nicely started in dairying and the Southern States in the same transition stage, the demand in North America is sure to increase. Great Britain, South Africa and New Zealand are clamoring for Holsteins and fabulous prices are being paid for the best specimens. South American countries are taking hold of dairying in earnest, and thousands of cattle will be needed during the next few years to supply their demands. Our British Columbia breeders have recently been making shipments to Australia and Hawaii, while between four hundred and five hundred head of pure-bred Holsteins have been sold from Eastern Canada to the United States during the last four months of the year. Our Record of Merit and Record of Performance work has developed very materially during the year, the sensational records of such cows as Rollo Mercena De Kol (51.93 lbs. butter); Elva Spofford (37.86 lbs. as a senior three-year-old); Jemima Johanna of Riverside (1,280 lbs. butter); and Zarilda Clothilde 3rd De Kol (33,153.6 lbs. milk and 1,193.75 lbs. butter) having added lustre to the names of Canadian Holsteins in every country where dairy cattle are bred." There are now 4,902 cows in the Record of Merit, and 1,640 in the Record of Performance, while there are 72 R.O.P. bulls. The report of the publicity committee recalled the need for further extension work, and the fact that public-spirited breeders who decided to exhibit at the National Dairy Show, at Chicago, last fall were granted forty per cent. of the amount of the prize money to assist them in meeting the expenses of the trip, and to encourage recognition of Canadian Holsteins. A detailed report of the registrations follows: Total number of animals registered in 1919, 14,284; registrations of animals under a year, 12,048; registrations of animals over a year, 2,223; re-registration of Canadian-bred animals from American Association Herd Book, 13; import certificates (bulls), 18; import certificates (cows), 15; transfers (members), 10,863; transfers (non-members), 2,093; transfers (penalty), 2,398; registration of farm names, 33.

The Auditors' report showed a balance on hand of \$7,260, as compared with \$4,731 last year. Receipts included \$25,334 from registrations and transfers, \$2,495 from memberships, \$2,603 for annual dues, \$496 from books sold, and \$1,109 interest on loans and bonds. Disbursements included \$8,421 for printing, \$3,217 for R.O.M. prizes, \$560 for R.O.P. prizes, \$4,853 for grants to fairs, \$1,192 for advertising, \$304 for re-tests, and \$150 for testing outfits. The assets include \$12,000 in bonds, \$5,000 in Canadian war loan, \$2,000 in equipment, \$4,000 in herd books and year books, in addition to the balance on hand of \$7,260, making the total assets of \$30,260. There are no liabilities. After the minutes of the previous meetings had been read, the recommendations of the Board of Directors were taken up in order. It was decided to continue the grants for R.O.M. and R.O.P. prizes as last year. With regard

to fair grants, it was decided to put up one-third of the prize money given for Holsteins. F. R. Mallory, who stood sponsor for this innovation, thought that in Ontario it would make practically no difference, and not much difference generally in the East, although in the West there were seven fairs providing about \$6,000 prize money. It was pointed out that the Shorthorn men had adopted such a method of granting money to fairs, and after several members had expressed themselves one way or another the recommendation of the Board of Directors was accepted by the Association. The usual grant to the dairy test at the Guelph Winter Fair was approved. In connection with Record of Performance work, it was decided to recommend to the Live-Stock Commissioner that twelve tests by supervisors be made during the year, and that a 305-day class be established, this class to have a 400-day calving requirement, in which case the calving requirement in connection with the 365-day test would be dropped. This recommendation passed with little discussion.

The notice of motion made by M. H. Haley was also carried with little discussion. This reads as follows: "That Article 6, Section 10, and Article 8 of the constitution and by-laws, be amended by raising the fee for transfer to 50 cents for members and \$1.00 for non-members in case application for transfer is filed with the Secretary within six months of date of sale; after that period the fee to be \$2.00 to members and non-members alike; this amendment to take effect March 1st, 1920." It was pointed out on the basis of last year's business that this should bring in about \$6,700 additional revenue. Two thousand dollars was granted to the publicity committee, but the management committee was empowered to add to this amount if necessary. The question of increased office accommodation was introduced by R. W. E. Burnaby, who said that the committee appointed last year had been unable to find suitable quarters that they could rent. They were not empowered to buy, but recommended that the Association build or buy a suitable two-storey building at an approximate cost of about \$30,000. This was concurred in without discussion, but some discussion did arise as to where the office should be located. Some members felt that the committee should be allowed to use their full discretion. This, however, the committee did not like to do, although they were agreed that Brantford was the proper place. The committee was finally authorized to build or buy, preferably in Brantford, with power to change the location if circumstances made it necessary.

Mr. Burnaby's notice of motion to amend the rules of the Record of Merit was most largely discussed of any business brought before the annual meeting. Some of those present thought the resolution should be so strict that a supervisor could not milk or feed a cow in test, even in an emergency. Others thought that the motion was entirely improper and would only serve to throw suspicion on past records of the Holstein breed. Notwithstanding the seriousness of the subject, humor and frank discussion was maintained throughout. It was pointed out that one man had already been debarred from acting as supervisor. The resolution as presented was passed, but the subject was immediately re-opened. Some of those present were in favor of deferring consideration of the subject for one year, but the resolution was finally passed as follows: "It shall not be allowable for the supervisor to either milk or feed any cow in test, unless in an emergency where the milk may be taken suddenly ill or called away; and then he may only milk until a milk can be provided. Under no circumstances shall any gift or payment to a supervisor be made by, or be permitted from, the owner of the cow or any one interested in her, except the regular rate of wages for supervisors fixed by the Agricultural College or Department of Agriculture which appoints them, and any such gift or payment will invalidate the test. It shall not be allowable for any supervisor appointed to conduct an official test in any herd to have any business dealings whatever with the owner of the herd, with any intent of gain or advantage; nor shall he have any such business dealings with the owner's employees, or with any person or persons financially interested in the herd, inclusive of owners of any near relatives to cows tested. Should any owner of a Holstein-Friesian cow that has been tested under the supervision of any Agricultural College, or Department of Agriculture fail to pay the bill for the conduct of the test of that cow, or for the expenses of the supervisor when called to supervise a test that is not made, the Secretary shall give said owner thirty days to pay the bill. If at the expiration of the time allowed the amount due has not been paid, the Secretary shall pay same, and such payment shall work out an automatic suspension of the delinquent owner from all privileges of the Association, until such time as his indebtedness is paid."

Among other matters taken up at odd intervals during the day was a brief discussion on the subject of a joint banquet. The opinion seemed to be that members desired a Holstein banquet in the future and not a joint banquet. Before the election of officers was held, it was decided to require that every ballot must contain the names of eight candidates or be declared spoiled, and that a ballot with only two or three names on it would not count in the election. The question that was held over from last year of changing the name of the Association was definitely dropped at this year's convention. Before the meeting adjourned, Dr. Hilton, of the Health of Animals Branch, Ottawa, made a rather full and explicit statement with regard to the accredited herd system for the eradication of tuberculosis. Some discussion followed that served to throw light on the question for all concerned. Nine representatives were appointed to the Ontario Cattle Breeders' Associa-

tion, as follows: W. H. Cherry, C. N. Hilliker, D. Arbogast, J. W. Richardson, Fred Lee, W. E. Thompson, J. E. Brethour, R. S. Stevenson and Ben. Leavens. The officers and directors of the Association elected for the ensuing year are: President, Neil Sangster, Ormstown, Que.; First Vice-President, F. R. Mallory, Brantford; Second Vice-President, A. E. Hulet, Norwich; Third Vice-President, R. W. E. Burnaby, Jefferson, Ont.; Fourth Vice-President, R. F. Hicks, Newtonbrook; Secretary, W. A. Clemons, St. George; Auditors, B. Mallory and J. W. Richardson. Directors for Ontario: F. R. Mallory, Brantford; N. P. Sager, St. George; R. M. Holtby, Ft. Perry; G. H. Gooderham, Clarkson; W. R. Cumming, Cumming's Bridge; A. E. Hulet, Norwich; R. W. E. Burnaby, Jefferson, and R. F. Hicks, Newtonbrook.

### Aberdeen-Angus Association Makes Rapid Growth.

A special meeting of the Aberdeen-Angus Association was held at the Carls-Rite Hotel, when a number of the Eastern and Western breeders discussed ways and means of furthering the interests of the breed. The President of the Association is J. D. McGregor, Brandon, and W. I. Smale, of Brandon, is the Secretary-Treasurer. The Association has 456 members, which is an increase of 150 this year. The membership has quadrupled in six years, and the registrations have increased nine times. During 1919 there were 4,642 registrations and 2,412 transfers. The greatest increase has been in the West, where the breed appears to be forging ahead very rapidly. The holding of sales is considered a splendid way of advancing the breed. Several very successful sales have been held in Manitoba, at which a large percentage of the cattle were purchased by beginners in the pure-bred business. The Ontario breeders contemplate holding a consignment sale during the spring or early summer. A committee was appointed to decide on the best place to hold the sale. Guelph, Toronto and London were centres spoken of as being advantageous for the holding of an Angus sale. The election of officers for the ensuing year will take place at the annual meeting to be held in March.

### Canadian Co-Operative Wool Growers Do Big Business.

The annual meeting of the Canadian Co-operative Wool Growers, Limited, was held in the office of the Company, on Simcoe Street, Toronto, on February 5 and 6. The Company handles the bulk of the wool from the various provincial associations. This year the wool handled totalled 4,095,874 pounds, and the price at which it was sold was satisfactory to the many consignors. There has been a particularly heavy demand for fine grade wool, and some who marketed the coarser grades were a little dissatisfied. However, an entirely different attitude was shown when A. Akyarod, the agent for the Co-operative in Boston, explained market conditions. Just recently, South-American coarse wool was selling in Boston at 45 cents a pound, while fine Australian wool was selling at \$2.83 per pound. These prices are on a scoured basis, and show an unprecedented difference in price, and also indicate that the present demand is for the fine wools. It has been almost impossible to sell the low grades, and on January 1 there was in the hands of dealers and Governments at Boston 100,000,000 pounds of low and medium wool. It appears that the mills have adapted their machinery for the manufacture of the finer wools which are in demand. It was prophesied that while the demand would be high for fine wools this year, the difference in price would soon cause a switching to the handling of the lower grades, with the result that there will be greater equalization in price. Already an effort is being made by many of the mills to use the coarser grades, according to Mr. Akyarod. It was intimated at the meeting that dealers had paid as much or more than the Co-operative was paying for coarse wool, and had paid spot cash, while the Co-operative had not yet made all its returns. It was explained that this was a gamble on the part of the dealers, and that much of this wool was still on their hands, and they were selling what they could at a sacrifice. Had it not been for the Co-operative it was believed that dealers would not have paid the high price which they did.

H. S. Arkell, Live-Stock Commissioner for the Dominion, made a few timely remarks, pointing out that the Department was prepared to continue its assistance to co-operative marketing of wool, as he believed that Canada now has the best and soundest system of sales of this product of any country in the world. The speaker emphasized the fact that there must be careful supervision of the grading in order that the grades will be commercially satisfactory. The Department also purpose encouraging the co-operative marketing of lambs, mutton, etc., and to inform breeders of market requirements.

President Colonel R. McEwen, of London, gave a detailed resume of the work of the Co-operative during the past year. Conditions of marketing were considerably changed from those of 1918, and it necessitated more work in the way of effecting sales. The success of the Company was, according to the President, to a large degree brought about by the active support of the Dominion Live-Stock Branch through its educative work. The Co-operative principles under which the organization is carried on have appealed to the Provincial Departments of Agriculture, and the whole-hearted manner in which their officers have worked in obtaining a better preparation and assembling of wool has, in the opinion of the President, been a very important factor in the development of what is looked upon as the most complete and far-reaching co-operative

company in America. While it has as yet only gone through its initial trial stages, it has been so favorably received that expansion of business far beyond the hopes or anticipation of the most optimistic was predicted. The President believed that the only thing that can now interfere with a bright future is want of loyalty to the Company by shareholders, or a gross mis-management in operation. During 1919 attention was directed to our home market, and it was pleasing to note that the efforts of the management were well received by manufacturers, who acknowledge the improved market preparation brought about by the organization. In order to meet changed conditions, it was deemed necessary to erect a large warehouse at Weston, as it was found that more wool had to be stored, awaiting a favorable market, than was anticipated when the Company was organized. To provide funds for erecting this building it was deemed advisable to make a call on unpaid-up shares of stock.

The warehouse cost \$73,143.60, according to the financial statement rendered, and it was proposed to add another story to this building before the 1920 wool clip arrives. The foundation for a warehouse at Lennoxville, Que., has already been laid to accommodate the Quebec wool.

The following are the approximate number of pounds of wool received from the different provinces: Ontario, 780,379; Quebec, 185,383; Saskatchewan, 749,463; Alberta, 1,463,858; Manitoba, 258,563; British Columbia, 96,769; Nova Scotia, 110,377; Prince Edward Island, 63,656; New Brunswick, 55,840. The immense business done during the year was on a paid-up capital of \$31,855.

A notice of motion to amend by-law 38 of the constitution so as to provide more substantial financial stability to the Company was discussed at some length and finally passed. The shareholders decided that the auditors' report should be printed and sent out to the contributors of wool. Numerous resolutions relative to the interests of the Association were discussed and carried. Among these were the publicity campaign, the selling of more stock and greater centralization of wool. Grading in Toronto or other centre was recommended in order to secure greater uniformity of grade. The Government will be petitioned to pass legislation to standardize the grades of wool. The following directors were elected for the ensuing year: Ontario, Col. R. McEwen, G. L. Telfer and W. A. Dryden; Saskatchewan, J. D. Wilson and D. B. Howell; Manitoba, W. I. Smale and Geo. Gordon; Quebec, J. R. McDowell and J. A. McClary; Alberta, Bishop Levi Harker and J. W. Renton; Nova Scotia, S. A. Logan; British Columbia, Geo. C. Hay; Prince Edward Island, Wm. McGregor; New Brunswick, A. E. Tritis. The directors met and elected Col. McEwen as President, with the Ontario directors as a working executive. An executive with representatives from the different provinces was also appointed to deal with matters of vital importance to the Company.

**Dairy Standards Act.**

At several of the dairy meetings the Dairy Standards Act, which was placed on the statute books in 1916, was discussed, and many thought the opportune time had arrived to have the Act, which has been lying dormant, enforced. Three years ago considerable opposition developed to the enforcement of the Act, although it is generally admitted that in the interests of dairying it is important that the various clauses pertaining to the sale of milk and cream should be followed. One clause relates to the selling of milk to cheese factories on a quality basis. Experiments have proven that the quantity of cheese manufactured from 100 pounds of milk bears a definite ratio to the percentage of fat of that milk. In justice to all, it was felt that the producer should be paid all his milk was worth in the manufacturing of cheese. Some factories have been paying by test for a score or more of years, with the greatest satisfaction. In regard to another clause relating to the grading of cream and butter, it was generally felt that this must be done if Ontario butter is to take its proper place on the world's market. One other clause of the Act which is important relates to pasteurizing by-products of the cheese factory and creamery in order to avoid the spread of tuberculosis. A deputation of representatives from the various dairy associations waited on the Premier, Hon. E. C. Drury, and the Minister of Agriculture, Hon. Manning W. Doherty, requesting that the Act be enforced at the earliest opportunity. The deputation was introduced by John McKee, of Norwich, and the matter was clearly laid before the Premier and the Minister. Thoughtful consideration of the views expressed was promised, and the impression was left that so soon as the proper machinery necessary for the enforcement of the Act could be arranged the matter would receive direct attention.

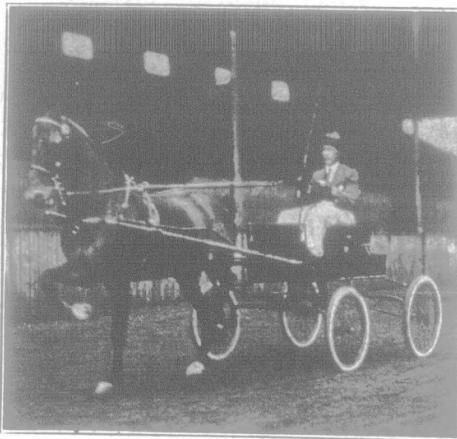
**Eastern Canada Live-Stock Union.**

The annual meeting of the Eastern Canada Live-Stock Union was held in the Carls-Rite Hotel some time Friday forenoon. The meeting was to have been begun at ten a.m., but about an hour was occupied in discussion as to whether the notices read 10 a.m. or 1 p.m. As a result, it was about eleven o'clock when the minutes of the last annual meeting were read. These minutes occupied about nine printed pages, and, for fear that the few who were in attendance would all go away before the Secretary could read them, he was stopped about half way through and the minutes were approved. John Gardhouse, Weston, in his presidential address spoke mainly with regard to certain unfortunate occurrences which he said had taken place at the Ontario Horse Breeders' meeting, and which he said were out of place there. This matter had reference to the dis-

cussion on live-stock freight rates, wherein it was mentioned that two unknown men without money or influence had come down from the West to take up the matter with the Railway Commission. Mr. Gardhouse's statement was more or less apologetic, since both these men referred to, namely, G. H. Hutton, in charge of C.P.R. extension work and President of the Western Canada Live-Stock Union, and George Hoadley, Vice-President of the Western Canada Live-Stock Union, and leader of the Opposition in the Alberta Legislature, were in both meetings. After a great deal of discussion, much of which was not pertinent to the progress of the Eastern Canada Live-Stock Union, it was decided that the Executive should appoint two representatives to co-operate with the two gentlemen just named in taking up the matter of live-stock contracts at the sitting of the Railway Commission, called for February 10. By this time it was considerably after lunch time, and after ten or fifteen minutes' discussion it was decided to adjourn the meeting, to meet again at the call of the Executive on some occasion when there would be no other meetings to conflict with the business of the Eastern Canada Live-Stock Union. Some resolutions passed by the Western Canada Live-Stock Union at their meeting last November were endorsed without discussion.

**Standard-Bred Horse Society.**

On Tuesday, February 3, the Canadian Standard-Bred Horse Society held their annual meeting in the Carls-Rite Hotel, when matters of importance to the breed were discussed. The Society has a membership of 162, and to December 31, 1919, there had been 3,258 pedigrees recorded. During the past year there were 282 registrations and 214 transfers. One important item of business was the taking of the grant of \$200 away from the breeding classes at the Canadian National and devoting it to the encouragement of the three-year-old colt race. It was decided by ballot that the amount owing the Society by the Canadian Trotting and Pacing Society be taken off the books, as the race-horse men had done much for the benefit of the breed. George Pepper was made a life member of the Society. The officers elected were: President, Sam McBride, Toronto; Vice-President, F. S. Scott, Galt; Secretary-Treasurer, John W. Brant, Ottawa.



Stockmen are Still Loyal to the Horse.

**A New Canadian Record Set in Shorthorn Prices.**

In referring to the Dryden-Miller Sale of Shorthorns, some weeks ago in these columns, we prophesied a record sale for the breed in Canada. That this prophesy was justified, was evident by the appreciation shown, at Toronto, on February 4, when all of the sixty-eight lots listed passed through the sale-ring in just a little over three hours' time, for the splendid figure of \$112,750, making a general average of \$1,660 throughout or the greatest average for 68 head of cattle ever made in a Canadian sale-ring of any breed. The sixty-one females made an average of \$1,707, and the seven young bulls an average of \$1,285. There were many interesting features of the sale which should be pleasing to Messrs. Dryden & Miller, the most outstanding being the appreciation shown the cattle by Canadian breeders. At previous sales of this breed, the American breeders have been in the habit of taking many of the best things across the line, but on this occasion it will be noted, that of the 68 head selling, 40 head stayed in Canada, for which Canadian breeders paid an average of \$1,798 against 28 head going to their American cousins at an average of \$1,409. Thus it will be noted that not only did the Canadian breeders hold the cattle in larger numbers than has been their habit in the past, but also exceeded the American average by \$389 per head. Sixteen cows with calves by their side, sold for \$29,200, an average of \$1,825, a figure which is only a very little above the general average of the sale. The cattle, as mentioned in the catalogue announcement, were not in high fit but evidently this was not expected of newly imported cattle by any of the breeders who were at the ring side. The real out-standing feature of the cattle was perhaps that in every case, they showed every evidence of being breeding cattle and selling in breeding condition. The highest price for the day was paid by Harry McGee of Harnabell Farms, Islington, Ont.,

for the four-year-old Campbell-bred Claret cow, Newton Claret 2nd, (Imp.) got by the good breeding bull, Grand Champion. This was a big, well-proportioned cow, carrying plenty of the correct Shorthorn characters and was due in March to a son of the noted Canadian sire, Archer's Hope. Mr. McGee was probably, one of the largest purchasers for the day. He also paid \$3,000 for a three-year-old imported Orange Blossom cow, bred by Lady Cathcart and due in February also to the services of the son of Archer's Hope. The second largest Canadian buyer was the Experimental Farms, Indian Head, Sask., although McMillan Bros., of Winnipeg, paid \$6,800 for three cows and George Gier of Waldemar, paid \$5,400 for Gartly Proud Princess (Imp.) a five-year-old Princess Royal cow and Butterfly Belle (Imp.) a three-year-old Cruickshank Butterfly heifer. T. A. Russell of Downsview Ont., purchased the Rosewood year-old heifer, Rosewood 41st, junior champion female at Toronto last September for which he paid \$3,200. Augusta Emblem; the highest priced bull also went to a Canadian breeder, and it will be noted that this was a Canadian-bred animal, he being a, straight-bred Augusta got by the Princess Royal Sire, Royalist. This young bull was easily one of the best bulls of the year, and went to S. Dymont of Barrie, Ont., at \$3,100. Of these 61 females, it will be noted that each went at or above the four figures. The sales in detail follow:—

Golden Blossom (Imp.) W. C. Rosenberg, Tiffin, Ohio.....	\$1,750
Lily 20th (Imp.) Experimental Farm, Indian Head, Sask.....	1,850
Daisy 14th (Imp.), Harry McGee, Islington, Ont.....	2,400
Millcraig Costly Belle 2nd (Imp.), Experimental Farm, Sask.....	1,100
Floradora 14th (Imp.), Experimental Farm, Sask.....	2,000
Braelangwell Lady Violet 7th (Imp.), Brennan Bros., Ind.....	1,750
Clunes Lavinia (Imp.), W. W. Rose, Ind.....	1,050
Lawton Rosamond (Imp.), Griswold Bros., Wis.....	1,000
Nita 14th (Imp.), Joseph White, St. Mary's.....	2,000
Millcraig Janette 2nd, (Imp.), Experimental Farm Sask.....	1,600
Lawton Annabella (Imp.), Chandler Bros., Iowa.....	1,300
Augusta Queen 14th, Experimental Farm, Sask.....	2,150
Lawton Snowball 2nd (Imp.), Griswold Bros., Wis.....	1,050
Towie Ruby (Imp.), W. W. Rose.....	1,050
Lawton Beauty (Imp.), E. H. Jackson, Okla.....	1,650
Violet 6th (Imp.), A. W. Etherington, Hensall.....	1,800
Daisy 15th (Imp.), A. W. Etherington.....	1,400
Miss Ramsden 14th (Imp.), Griswold Bros.....	1,400
Lean 3rd (Imp.), Brennan Bros.....	1,100
Jilt Countess 2nd (Imp.), A. G. Auld, Guelph.....	1,250
Honey Bee (Imp.), Frank Wood, Bradford.....	1,050
Duchess Julia 4th (Imp.), Chandler Bros., Iowa.....	1,450
Lawton Snowdrift 3rd (Imp.), A. T. Reid, Orilla.....	1,050
Standard Roan Mary (Imp.), Brennan Bros.....	1,050
Viola 10th (Imp.), Paul Silverthorn, Ind.....	1,350
Roan Bess 9th (Imp.), Brennan Bros.....	1,250
Highland Maid (Imp.), Griswold Bros.....	1,050
Rosewood 41st, T. A. Russel, Downsview.....	3,200
Millcraig Molly (Imp.), W. W. Rose.....	1,050
Goldie's Fancy (Imp.), McMillan Bros., Winnipeg.....	3,100
Countess Campania (Imp.), Harry McGee.....	2,000
Millcraig Lustre (Imp.), Carpenter & Ross, Mansfield, Ohio.....	1,700
Betty (Imp.), E. Robson, Denfield.....	1,350
Millcraig Marigold 7th (Imp.), Chandler Bros.....	1,450
Bertha 16th (Imp.), Experimental Farms, Sask.....	1,850
Millcraig Marquisa 2nd (Imp.) Harry McGee.....	1,850
Boyndie Fancy 2nd (Imp.) R. A. Smith, Toronto.....	1,800
Millcraig Lady Mary 3rd (Imp.) Upton Kenney, Ohio.....	1,300
Lauretta's Dream (Imp.), Pine Run Farms, Penn.....	2,300
Abbeymains' Grace (Imp.), Upton Kenney.....	1,650
Millcraig Butterfly (Imp.), John Barron, Carberry, Man.....	1,300
Daisy Daffodil (Imp.), W. T. Thomson, Ohio.....	1,750
Rosaline (Imp.), A. W. Etherington.....	1,900
Boyndie Missie (Imp.), McMillan Bros., Winnipeg.....	1,500
Cherry Ripe (Imp.), J. A. Watt, Elora.....	1,800
Inschfield Red Beauty (Imp.), George Bender & Son, Alma.....	2,550
Rosebud 4th (Imp.), Wm. Thomson, Ohio.....	2,500
County Queen (Imp.), Archie McLean, Paisley.....	1,650
Newton Claret 2nd (Imp.), Harry McGee.....	4,000
Cluny Orange Blossom (Imp.), Harry McGee.....	3,000
Boyndie Gem (Imp.), Brennan Bros.....	1,600
Gartly Proud Princess (Imp.), Geo. Gier & Son, Waldemar.....	2,100
Miss Belladrum 13th (Imp.), A. S. Auld, Guelph.....	1,300
Tarrel Empress (Imp.), F. J. Currie, Markdale.....	1,400
Village Princess 3rd, Brennan Bros.....	1,700
Faicholds Butterfly (Imp.), McMillan Bros.....	2,150
Broadhooks Queen, Percy DeKay, Elmira.....	2,900
Butterfly Belle (Imp.), Geo. Gier & Son.....	3,300
Lily 23rd (Imp.), Brennan Bros.....	1,000
Ruby 3rd (Imp.), Chandler Bros.....	1,000
Marchioness (Imp.), W. T. Thomson.....	1,000

**MALES.**

Augusta Emblem, S. Dymont, Barrie.....	3,100
Butterfly Barron (Imp.), Wm. Percy, Aylmer.....	800
Rosewood Chief (Imp.), Geo. Kerr, Henfryn.....	1,200
Merry Man (Imp.), Experimental Farm, Sask.....	1,500
Orange Mate, R. M. Douglas, Sask.....	550
Secret Laird (Imp.), Pine Run Farm.....	1,450
Loyalist, J. B. Davidson, Myrtle, Man.....	300
Lavender Hero, F. McKillican, Galt.....	500

# Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending February 5.

## Receipts and Market Tops.

Dominion Department of Agriculture, Live Stock Branch, Markets Intelligence Division

CATTLE						CALVES						
Receipts			Top Price Good Steers (1,000-1,200)			Receipts			Top Price Good Calves			
Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending		
Feb. 5	1919	Jan. 29	Feb. 5	1919	Jan. 29	Feb. 5	1919	Jan. 29	Feb. 5	1919		
Toronto (U. S. Y.)	4,859	5,246	6,903	\$13.75	\$15.00	\$14.25	666	537	787	\$23.00	\$17.25	\$25.00
Montreal (Pt. St. Chas.)	652	376	769	13.00		13.50	195	298	226	14.00	15.50	19.00
Montreal (East End)	1,275	612	1,040	13.00		13.50	240	134	362	17.00	15.50	19.00
Winnipeg	2,483	3,282	3,175	13.00	14.75	13.00	96	132	116	17.00	11.00	13.00
Calgary	1,440	2,200	1,517	11.75	15.00	11.85	56		72	10.00		10.00
Edmonton	1,094	1,276	678	11.50	13.00	11.50	80	56	60	12.00		10.00

HOGS						SHEEP						
Receipts			Top Price Selects			Receipts			Top Price Good Lambs			
Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending		
Feb. 5	1919	Jan. 29	Feb. 5	1919	Jan. 29	Feb. 5	1919	Jan. 29	Feb. 5	1919		
Toronto (U. S. Y.)	8,620	5,652	10,753	\$19.50	\$17.00	\$19.25	1,298	1,633	1,629	\$20.00	\$16.25	\$20.00
Montreal (Pt. St. Chas.)	913	1,655	1,167	20.50	16.75	19.75	195	210	297	16.00	14.00	16.75
Montreal (East End)	584	526	593	20.65	16.75	19.75	231	297	359	16.50	14.00	16.75
Winnipeg	4,266	9,149	3,065	20.65	15.75	19.00	749	122	1,194	16.50	15.25	15.50
Calgary	831	2,480	609	21.00	14.75	18.35	1,415		161	15.50	13.00	
Edmonton	817	1,192	523	20.25	14.25	18.75					13.00	

### Market Comments

#### Toronto (Union Stock Yards.)

Cattle which totalled about five thousand head showed a decrease of two thousand head from the previous week. Trading on the whole was very dull and further recessions in prices occurred during the week. Cattle trading on the American markets has been very quiet of late and prices weaker; this has reacted unfavorably on the Canadian trade and in spite of an advancing rate of exchange, speculators catering to the Buffalo market bought sparingly during the week, while local abattoirs had only limited orders. Owing to the fluctuations in money values there is some uncertainty as to the immediate future of the beef trade. A few loads of good cattle were offered, but a good proportion were rough and unfinished. On Monday with trading slow, prices appeared generally steady and in some instances higher; the following day trading was weaker, became very dull and slow on Wednesday and Thursday values were \$1 to \$1.50 lower. A load of cattle for which the owner refused the price bid Monday, sold on Thursday at \$1.50 per hundred below Monday's bid and in order to effect a clearance drovers and feeders were forced, in many cases, to make similar sacrifices. A good many cattle were unsold at the close of the week's trading. A few cattle were on sale and on Monday a load weighing over twelve hundred pounds each, sold at \$14.75, and five steers averaging twelve hundred and forty pounds sold at \$14.35 per hundred, while on Tuesday a load of similar weight sold at \$13.75. Of steers between the weights of ten hundred and twelve hundred pounds, one load weighing eleven hundred pounds was sold at \$13.50, a number of sales were made at \$12.75 to \$13.25, while medium quality stock sold from \$11 to \$12. A pair of fat weighty heifers were weighed early in the week at \$13.25 per hundred, numerous sales of steers and heifers were made at \$12 to \$12.75 on Monday's and Tuesday's markets, but on Thursday's market \$12 per hundred was about the top price paid for that class of stock. Medium quality heifers changed hands from \$8.50 to \$10 per hundred. Cows and bulls sold as high as \$11.25, but prices declined during the week and \$10.75 eventually became the high figure, with medium quality moving from \$8 to \$9.50 and common from \$7 to \$8. Canners and cutters had a steady trade within a range of \$5.25 to \$6.25 per hundred. The stocker and feeder market was quiet with good feeders being quoted from \$10 to \$11. There was little activity in the milk cow trade, and fresh cows and choice springers ranged in price from \$125 to \$165 each, and medium quality cows and backward springers from \$80 to \$125. The calf trade was slow and prices were off \$3 per hundred from the high point of the previous week, choice veal calves selling on the closing market at \$19 to \$22 per hundred, with medium quality from \$14 to \$17. The trade developed at steadier undertone on Tuesday.

Trading in lambs was active but heavy sheep were hard to move. Lambs sold generally from \$17.50 to \$19.50 per hundred, while on Thursday a hundred

### TORONTO

CLASSIFICATION	No.	Avg. Price	Price Range Bulk Sales	Top Price
STEERS heavy finished	22	\$13.00	\$12.50-\$13.50	\$14.00
STEERS good	118	12.50	11.50-13.00	13.75
STEERS 1,000-1,200 common	4			12.00
STEERS good	1,250	11.81	10.75-12.50	13.50
STEERS 700-1,000 common	449	8.68	7.50-10.00	11.00
HEIFERS good	1,080	11.91	10.75-12.50	13.50
HEIFERS fair	203	9.87	8.75-11.00	11.00
HEIFERS common	62	8.38	7.50-9.00	9.00
COWS good	119	10.12	9.50-11.00	11.50
COWS common	562	8.38	7.75-9.50	9.50
BULLS good	71	10.29	9.75-11.00	11.50
BULLS common	42	8.05	7.00-8.50	10.00
CANNERS & CUTTERS	266	5.86	5.25-6.00	6.50
OXEN				
CALVES veal	617	18.47	16.00-22.00	23.00
CALVES grass	49	7.72	6.00-9.00	9.00
STOCKERS good	363	9.47	8.75-10.25	10.50
STOCKERS 450-800 fair	128	7.67	7.00-9.50	9.50
FEEDERS good	120	10.94	10.50-11.50	12.00
FEEDERS 800-1,100 fair				
HOGS selects	7,876	19.32	19.25-19.50	19.50
HOGS (fed and watered) heavies	7	18.25		16.50
HOGS lights	552	17.38	17.25-17.50	17.50
HOGS sows	182	15.34	14.25-16.50	16.50
HOGS stags	3			
LAMBS good	827	18.88	17.00-20.00	20.00
LAMBS common	82	15.46	13.00-17.00	17.00
SHEEP heavy				
SHEEP light	343	10.40	8.00-12.00	14.00
SHEEP common	46	6.34	5.00-7.00	7.50

### MONTREAL (Pt. St. Charles)

No.	Avg. Price	Price Range Bulk Sales	Top Price
46	\$13.00	\$12.50-\$13.25	\$13.25
12			
84	12.25	11.75-12.50	12.50
119	10.75	10.00-11.50	11.75
30	11.50	10.75-12.50	12.50
14	10.00	9.25-10.50	10.50
75	8.50	8.00-9.00	9.00
43	10.50	10.00-11.00	12.00
109	8.50	7.00-9.50	9.75
9	10.25	10.00-10.50	11.00
48	8.75	8.00-9.50	9.50
49	6.00	5.50-6.50	6.50
6	10.00	10.00	10.00
141	17.00	15.00-18.00	19.00
54			
680	20.65	20.25-20.75	20.75
23			
196	20.50	20.75	20.75
12	16.65	16.25-16.75	16.75
2			
21	16.50	16.50	16.50
85	16.00	15.00-16.50	16.50
17	10.50		12.00
72	9.50	9.00-10.00	10.00

choice lambs sold at \$20 per hundred. Heavy sheep were quoted from \$7 to \$9, light sheep generally from \$9 to \$11, extra quality as high as \$13 per hundred.

The hog market was strong during the forepart of the week, but became weaker on Thursday. On Monday hogs sold at \$19.25 per hundred, and on Tuesday and Wednesday prices were firmer at \$19.50, a decline of 25 cents was, however noted on some of Thursday's transactions. Owing to a break in prices on the American markets, packers were predicting further weakness at the local market.

Of the disposition from the Yards for the week ending January 29, Canadian packing houses purchased 326 calves, 4,315 butcher cattle, 12,892 hogs and 842 lambs. Local butchers purchased 371 calves, 392 butcher cattle and 605 lambs. Canadian shipments were made up of 425 stockers, 175 feeders and 100 hogs. Shipments to United States points consisted of 219 calves, 348 butcher cattle, 84 stockers, 422 feeders and 406 lambs.

The total receipts from January 1 to January 29, inclusive, were: 26,600 cattle, 3,139 calves, 33,294 hogs and 9,750 sheep; compared with 27,250 cattle, 2,595 calves, 34,428 hogs and 15,208

sheep, received during the corresponding period of 1919.

#### Montreal.

During the week nineteen hundred and twenty-seven cattle were offered for sale on the two markets. Included in these were two loads of milch cows and two loads of beef cattle from Toronto, also fifteen loads of beef cattle from the Winnipeg market. Of the latter, seven loads that arrived on Tuesday and Thursday were unsold. The prices for good cattle were lower by from 50 cents to 75 cents than those paid two weeks ago. The top figures were \$13 and \$13.25 for two loads of Winnipeg cattle averaging about eleven hundred and fifty pounds per head, and estimated to dress between fifty-three and fifty-four per cent. Good steers and fat heifers in the ten hundred pounds class were sold for \$12.50. Medium good steers were slow sellers, while common steers sold down to \$8. One choice young heifer of baby beef—weight and quality, weighing seven hundred and thirty-five pounds and dressing sixty per cent. after allowing two per cent. for cooling, was sold for \$14. Nearly all heifers were weighed up with other stock and brought from \$7 to \$12.50 per hundred. Fat dairy cows sold

generally around \$10.50 and good strong strippers in fair flesh from \$9 to \$9.50. Canners and cutters sold from \$5.50 to \$6.50, with a few sales of very thin canners of doubtful health at \$5 and \$5.25. The most common prices for good bulls were \$10 and \$10.50, while canner bulls were moved from \$7 to \$8.50. Good milk-fed calves of dairy breeding were in demand at \$18 and \$19 per hundred; the majority of sales of calves were, however, made around \$17 to \$18. Grass calves ranged from \$7.50 to \$8.50.

There were only a few sheep and lambs for sale. Lambs sold at \$16.50 per hundred. A couple of very small lots of selected sheep were sold for \$12, while regular sales were made at \$9 and \$10 per hundred.

Hogs sold for \$20.50, \$20.75 and \$21 per hundred on Monday, off car weights and for \$21 on Tuesday and Wednesday. A weaker feeling developed on Thursday when some lots were contracted for at \$20.50. The market closed uncertain in tone.

Pt. St. Charles.—Of the disposition from the Yards for the week ending January 29, Canadian packing houses and local butchers purchased 226 calves, 93 bulls, 557 butcher cattle, 1,167 hogs and 297 lambs. Canadian shipments

were made up of 23 milch cows. There were no shipments made to United States points during the week.

The total receipts from January 1 to January 29, inclusive, were: 3,031 cattle, 939 calves, 4,383 hogs and 4,017 sheep; compared with 6,856 cattle, 2,830 calves, 10,328 hogs and 4,720 sheep, received during the corresponding period of 1919.

**EAST END.**—Of the disposition from the Yards for the week ending January 29, Canadian packing houses and local butchers purchased 352 calves, 1,025 butcher cattle, 593 hogs and 98 lambs. Shipments to United States points consisted of 10 calves and 261 lambs.

The total receipts from January 1 to January 29, inclusive, were: 4,357 cattle, 1,147 calves, 3,124 hogs and 2,800 sheep; compared with 5,318 cattle, 696 calves, 3,368 hogs and 4,220 sheep, received during the corresponding period of 1919.

### Buffalo

**Cattle.**—Cattle trade was weak all round at Buffalo last week, the result of heavy runs in the west and prices breaking heavily. Shipping steers sold a full quarter to a half lower than for the previous week, placing the best native shipping steers at \$14.50 to \$15, with the best Canadians offered around \$12.25 to \$12.75. In the butchering line the fair to choice grades of handy cattle sold a full quarter lower and it was only the medium and common butchering cow stuff that sold anything like satisfactorily, these bringing from steady to a dime to fifteen cents lower prices. Heavy bulls sold a full half dollar off, with the sausage and light grades around a quarter. Stocker and feeder supply was light, some sales being made at from \$9.25 to \$10, but most of this stuff went for kill. Milk cow and springer market was slow and dull, only the better kinds being wanted. There were around thirty cars of Canadians offered for the week.

**Shipping Steers**—Natives—Very choice heavy, \$14 to \$15; best heavy, over 1,300, \$13.25 to \$13.65; fair over 1,300, \$12.50 to \$13; best, 1,200 to 1,300, \$14 to \$14.50; good, 1,200 to 1,300, \$13 to \$14; plain, \$11.50 to \$12.

**Shipping Steers**—Canadians—Best heavy, \$12.50 to \$13; fair to good, \$12 to \$12.25; medium weight, \$12 to \$12.50; common and plain, \$11 to \$11.50.

**Butchering Steers**—Yearlings, fair to prime, \$13 to \$14; choice heavy, \$12.50 to \$12.75; best handy, \$11.50 to \$12.50; fair to good, \$10.50 to \$11; light and common, \$9 to \$10.

**Cows and Heifers.**—Best heavy heifers, \$10.50 to \$11; good butcher heifers, \$10.50 to \$11; fair butchering heifers, \$9.25 to \$9.75; light, common, \$6 to \$7; very fancy fat cows, \$10.25 to \$10.75; best heavy fat cows, \$9.50 to \$10; medium to good, \$7.50 to \$9; cutters, \$6 to \$6.50; canners, good, \$5.50 to \$6.

**Bulls.**—Best heavy, \$10.50 to \$11; good butchering, \$9.50 to \$10; sausage, \$8 to \$9; light bulls, \$7 to \$8.

**Stockers and Feeders.**—Best feeders \$9.75 to \$10.25; common to fair, \$8 to \$9; best stockers, \$8 to \$8.50; fair to good, \$7.75 to \$8.25; common, \$6 to \$7.

**Milkers and Springers.**—Good to best, small lots, \$125 to \$160; in car-loads, \$90 to \$100; medium to fair, small lots, \$80 to \$85; in carloads, \$70 to \$75; common, \$50 to \$55.

**Hogs.**—Market held up pretty well the first half of last week but after Wednesday prices, as a result of the big crash in foreign exchange, showed a sharp decline. On the opening day several decks of heavies sold at \$16, but the bulk of the packers' grades moved at \$16.25 and several decks of light hogs moved at \$16.35 and \$16.40. On pigs the range was from \$16 to \$16.25. Tuesday values dropped 10 to 15 cents and Wednesday's market was strong to a dime higher. Thursday prices went off 50 to 75 cents, top being \$15.60, bulk sold at \$15.50 and some heavies went at \$15.25, while on pigs sales ranged from \$15.25 to \$15.50. Friday the supply was light and market was somewhat improved. Light hogs brought from \$15.75 to \$15.90 and the better weights, which were slow, ranged from \$15.50 to \$15.75. Pigs also sold from \$15.50 to \$15.75. Good roughs went as low as \$13.25 and \$13.50 and few stags brought about \$10. Receipts for the past week were 27,200 head, as compared with 25,139 head for the week before and 20,300 head for the same week a year ago.

**Sheep and Lambs.**—Market on lambs was very erratic last week. Monday choice lots sold at \$20.50 and the next two days few reached above \$20.25, with culls selling from \$17.75 down. Thursday prices showed a sharp advance, tops selling up to \$21 and Friday the best reached \$21.75 and \$21.85, with culls up to \$18.50. Sheep were higher the past week. Top for yearlings was \$19, wether sheep were quoted up to \$15 and ewes reached up to \$14. Receipts the past week totaled 22,800 head, being against 18,491 head for the week previous and 26,200 head for the same week a year ago.

**Calves.**—Prices were on the decline last week. Monday tops sold at \$22.50 and by Thursday buyers got best lots down to \$21. Friday the market was stronger, bulk selling at \$21.50. Cull grades were slow all week, selling from \$16 down, few selling the latter part of the week above \$15. Weighty fed calves dropped as low as \$7, and buyers bought good heavy fat calves around \$13. Receipts for the week were 4,150 head, being against 3,558 head for the week before and 2,800 head for the same week a year ago.

### Toronto Produce.

**Live-stock receipts at the Union Stock Yards, West Toronto, on Monday, February 9, were the lightest for regular Monday market for many months, and only totalled 121 cars, 1,514 cattle, 208 calves, 2,385 hogs, 295 sheep and lambs. Slow trade, prices barely steady. Top for steers \$13.50, butchers \$12.50; cows and bulls draggy and steady. Lambs and calves were active and firm; top veals were \$21, best lambs \$19 to \$19.50. Light sheep were active and steady; heavy sheep slow. Packers bid \$17.25 f.o.b. for hogs.**

#### Breadstuffs.

**Manitoba Wheat**—(In store Ft. William).—No. 1 northern, \$2.80; No. 2 northern, \$2.77; No. 3 northern, \$2.73.

**Manitoba Oats**—(In store Ft. William).—No. 2, C. W., 91 $\frac{1}{2}$ ¢; No. 3 C. W., 89 $\frac{1}{2}$ ¢; Extra No. 1 feed, 89 $\frac{1}{2}$ ¢; No. 1 feed, 85 $\frac{1}{2}$ ¢; No. 2 feed, 83 $\frac{1}{2}$ ¢.

**Manitoba Barley**—(In store Fort William). No. 3 C. W., \$1.65; No. 4 C. W., \$1.37 $\frac{1}{2}$ .

**Ontario Wheat**—(f.o.b. shipping points according to freights)—No. 1 winter, per car lot, \$2.25 to \$2.26; No. 2 winter, per car lot, \$2.23 to \$2.28; No. 3 winter, per car lot, \$2.18 to \$2.19; No. 1 spring, per car lot, \$2.27 to \$2.28; No. 2 spring, per car lot, \$2.23 to \$2.32; No. 3 winter, per car lot, \$2.20 to \$2.26.

**American Corn**—(Track, Toronto, prompt shipment).—No. 3 yellow, \$1.89; No. 4 yellow, \$1.86.

**Ontario Oats**—(According to freights outside).—No. 3 white, 98¢ to \$1.

**Peas**—(According to freights outside). No. 2, \$3.

**Barley**—(According to freights outside)—Malting, \$1.75 to \$1.77.

**Buckwheat**—(According to freights outside)—\$1.45 to \$1.48.

**Rye**—(According to freights outside)—No. 3, \$1.85 to \$1.88.

**Manitoba Flour**—(Toronto)—Government standard, \$13.25.

**Ontario Flour**—(In jute bags, prompt shipment)—Government standard, \$10.80 to \$11 Montreal; \$11 Toronto.

**Millfeed**—(Car lots, delivered, Montreal freights, bags included)—Bran, per ton, \$45; shorts, per ton, \$52; good feed flour, per bag, \$3.60 to \$3.75.

**Hay**—(Track, Toronto)—No. 1, per ton, \$27 to \$28; mixed, per ton, \$25.

**Straw**—(Track, Toronto)—Car lots, per ton, \$16 to \$17.

#### Hides and Skins.

**Hides f. o. b. country points**—Beef hides 28c. to 29c., flat cured; 26c. to 28c. part cured; green or frozen hides; 24c. to 26c.; deacon or bob calf, \$2.50 to \$3; hides, country take-off, \$10 to \$12; No. 2, \$7 to \$9; No. 1 sheep skins, \$2.50 to \$4; yearling lamb, \$1.75 to \$2.50; horse-hair, farmers' stock, 38c. to 40c.

**City Hides**—City butcher hides, green, flats, 30c.; calf skins, green, flats, 60c.; veal kip, 35c.; horsehides, city take-off, \$11 to \$13.

**Tallow**—City rendered, solids in barrels 13c. to 15c.; country solids in barrels, No. 1, 12c. to 15c.; cakes, No. 1, 12c. to 15c.

#### Farm Produce.

**Butter**—There was practically no change in the butter market during the

past week,—though it showed a weaker tendency. Fresh-made creamery squares selling at 68c. to 70c. per lb.; creamery solids at 65c. to 67c. per lb., and choice dairy at 63c. per lb.

**Eggs**—New-laid eggs were slightly lower owing to the American variety being shipped here in very large quantities, new-laid sold at 75c. to 80c. per doz.; cold-storage No. 1's at 61c. to 62c. per doz.

**Poultry**—Receipts were light, and prices firm on poultry during the past week: The following prices being quoted for liveweight and dressed varieties to the producer. Liveweight prices.—Chickens, spring, 30c. per lb.; ducklings, 30c. per lb.; hens, under 4 lbs., 25c. per lb.; hens, 4 to 5 lbs., 28c. per lb.; hens, over 5 lbs., 33c. per lb.; roosters, 19c. per lb.; geese, 18c. per lb.; turkeys, 35c. per lb. Guinea hens, per pair, \$1.25.

**Dressed**—Chickens, spring, 32c. per lb.; chickens, milk-fed, 36c. per lb. ducklings, 35c. per lb.; hens, under 5 lbs., 28c. to 30c. per lb.; hens, over 5 lbs., 42c. per lb.; geese, 26c. per lb.; turkeys, 35c. per lb.; roosters, 25c. per lb.

**Guinea hens**, \$1.50 per pair.

**Cheese**—Prices kept stationary on both new and old cheese, selling at 32c. and 34c. per lb., respectively, wholesale.

**Honey**—There are only very light offerings in honey; the strained selling at 25c. to 26c. per pound, wholesale: while some extra choice brought as high as \$7 per dozen.

**Seeds**—Following are the prices that wholesalers were paying for Alsike and clover at country points: Alsike, No. 1 fancy, bushel, \$33 to \$34; No. 1, \$32 to \$33; No. 2 choice, bushel, \$31 to \$32; No. 3, bushel, \$29 to \$30.

**Red clover**, No. 1 fancy, bushel, \$34 to \$35; No. 1 bushel, \$33 to \$34; No. 2, bushel, \$31 to \$32; No. 3, bushel, \$29 to \$30.

**Sweet Clover export bushel**, \$18 to \$19; Canadian No. 1, bushel, \$19 to \$20; Canadian choice, bushel, \$15 to \$18.

#### Wholesale Fruits and Vegetables.

**Potatoes** were slightly easier, the bulk selling at \$4.25 per bag, with some being quoted at \$4 per bag.

**Apples**—Western boxed, \$3.50 to \$4 per box; Ontario's and Nova Scotia's, \$5.50 to \$6.00 per barrel; Ontario boxed, \$1.60 to \$2.50 per box; fancy Spys, (Ontario's), \$12 per barrel.

**Grapefruit**—Florida, \$4.50 to \$5.50 per case; Cuban, \$4 to \$4.50 per case.

**Lemons**—Cal. \$6 to \$8 per case; Messinas, \$4.50 to \$7 per case.

**Oranges**—Cal Navel, \$5 to \$7.50 per case; Floridas, \$6 per case.

**Beans**—Dried white, \$4.50, \$4.75 and \$5.50 per bushel.

**Beets**—\$2 to \$2.50 per bag.

**Cabbage**—\$5 to \$6 per bbl.; Cal. new, \$6 to \$7 per case.

**Cauliflower**—California, \$5.50 to \$6 per standard, and \$2.75 to \$3 per pony crate.

**Carrots**—\$2 to \$2.25 per bag.

**Celery**—Cal. \$1.25 to \$1.50 per doz.; \$12 to \$15 per case.

**Lettuce**—California Iceberg, \$5.50 to \$6 per case; Florida, \$3 per short hamper; leaf, 30c. to 35c. per dozen.

**Onions**—\$7.50 to \$8.50 per cwt., small sized, \$5 per cwt., Spanish, \$7.50 to \$8 per case.

**Parsnips**—\$2.50 to \$3 per bag.

**Potatoes**—\$4 to \$4.25 per bag.

**Turnips**—\$1.25 per bag.

### Montreal

**Horses**—Dealers report an exceedingly dull demand. The supply of horses is not large, and very few enquiries are being received. Owners of horses are demanding a good figure for them, and prices held firm. Heavy draft horses, weighing from 1,500 to 1,600 lbs. were \$250 to \$300 each; light draft weighing from 1,400 to 1,500 lbs., \$200 to \$250 each; light horses, \$125 to \$175 each; culls, \$75 to \$100 each, and choice saddle and carriage horses, \$200 to \$250 each.

**Dressed Hogs**—Supplies of dressed hogs are fairly heavy, the weather being favorable for receipts from the country. Country-dressed hogs were selling at around 25 $\frac{1}{2}$ ¢ per lb., and abattoir-dressed at 29¢, these prices being about 1c. above those of the previous week.

**Poultry**—The market has been fairly active though supplies have not been particularly liberal. Prices, however, continued steady, with choice turkeys selling at 47c. to 48c. per lb., good to common being 44c. to 46c. Chickens were

30c. to 32c. per lb. for choice, and from that to about 3c. higher. Common chickens were 25c. to 27c. per lb. Ducks sold at 38c. to 40c. per lb., and geese at 38c. to 40c.

**Potatoes**—No advances of consequence took place in potatoes during the week. Receipts have not been large, but it is thought now that the weather had moderated, supplies may increase. Prices were \$4.25 to \$4.50 per bag of 90 lbs.; for Quebec white potatoes, ex-store, car lots being quoted at \$3.50 to \$3.75, ex-track.

**Honey and Maple Syrup**—It is still some time till the new crop of syrup will begin to arrive, yet supplies are growing very light and almost no trading is taking place. Quotations were around \$1.50 per gallon tin, while sugar was quoted at 35¢. Some trading goes on from time to time in honey, but quotations are nominal, being 25c. per lb. for white clover comb, and 22c. for strained in pails of 30 lbs. Dark strained was about 20c. per lb.

**Eggs**—There is no doubt that the price of eggs is on the decline. New-laid stock was quoted at about 75c. per dozen, while selected eggs were 60c. to 62c., and No. 1 stock 50c. to 52c. Receipts are not increasing much as yet.

**Butter**—Very little change took place in the market for creamery during the past week. Finest grass creamery was quoted about steady, being 65c. to 65 $\frac{1}{2}$ ¢ per lb., while current receipts, the quality of which was not extra, were 59c. to 60c. per lb. Dairy butter was 56c. to 57c. per lb.

**Cheese**—Merchants quoted finest colored at 30 $\frac{1}{2}$ ¢, white being 30c. to 30 $\frac{1}{4}$ ¢, and tail ends 27c.

**Grains**—Car lots of No. 2 Canadian Western oats were selling at \$1.14 $\frac{1}{2}$ ¢, tough No. 3 Canadian Western oats being \$1.08 $\frac{1}{2}$ ¢.

**Flour**—Standard Manitoba grade flour was unchanged in price, being \$13.25 per bbl., in jute bags, ex-track, Montreal freights, or to city bakers, car lots, with 10c. off for spot cash. White corn flour was practically unchanged, being \$10 to \$10.10 per bbl., rye flour being \$9.50 in jute, delivered.

**Millfeed**—Bran continued to be quoted at \$45.25 per ton, and shorts at \$52.25 per ton. Pure barley meal was steady at \$75 to \$76 per ton, while mixed grain mouille was \$73 to \$75 per ton, including bags, delivered.

**Baled Hay**—Good No. 2 timothy hay was in demand. No change of consequence occurred, the price being \$25 to \$26 per ton, though the tone of the market was firm and some quoted advances. No. 3 was quoted at \$23 to \$24 per ton, and clover and clover mixed at \$22 to \$22.50 per ton.

**Seeds**—The rate of exchange between here and the United States is having an effect on the market for grass seed, as probably 90 per cent. of timothy comes from there, as well as 25 per cent. of red clover and almost all the alfalfa, while a large quantity of alsike is exported to the U. S. Timothy was steady at 17c. to 20c. per lb., alsike was higher at 63c. to 68c., red clover higher at 65c. to 75c., alfalfa 55c. to 60c., and sweet clover 35c. to 40c., f.o.b. Montreal.

**Hides**—Steer and cow hides were 35c. per lb., bulls 27c., calves 85c., kips 45c., lambs \$4.10 each, and horses \$11 each.

### Chicago

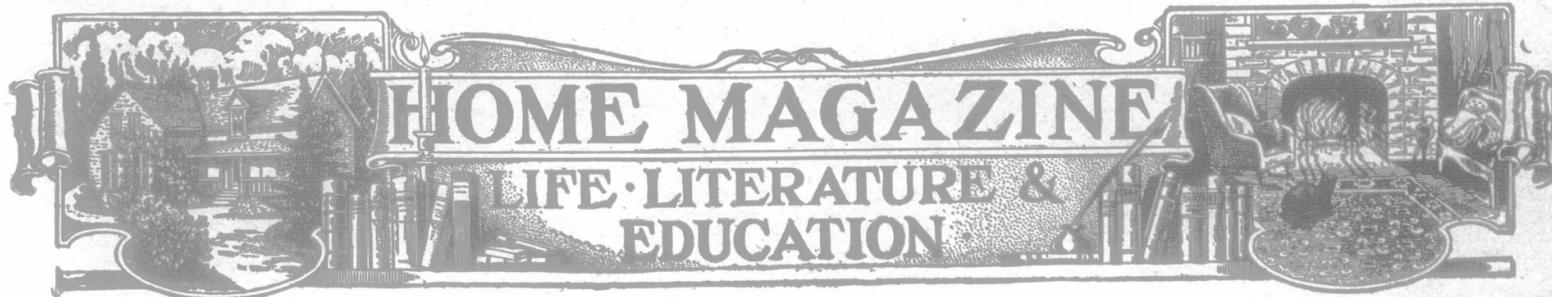
**Hogs**—Heavy, \$14.50 to \$14.75; medium, \$14.35 to \$15; light, \$14.40 to \$14.90; light lights, \$14 to \$14.60; heavy packing sows, smooth, \$13.50 to \$14; packing sows, rough, \$13 to \$13.50; pigs, \$13 to \$13.90.

**Cattle**—Compared with a week ago, best beef steers weak to 25c. lower; others 50c. to 75c. lower. Best she stock \$1 to \$1.25 lower; others 25c. to 75c. lower. Canners 25c. to 50c. lower. Calves, \$1.50 to \$2 lower. Feeders 50c. to 75c. lower.

**Sheep**—Compared with a week ago, lambs and yearlings 75c. to \$1 lower. Best ewes 25c. higher; others steady to 25c. lower. Wethers mostly steady.

### Victory Bonds

Following were the values of Victory Bonds on the Toronto market, Saturday, February 7: Victory Bonds maturing 1922, 99 $\frac{7}{8}$ ¢ to 100 $\frac{1}{8}$ ¢; Victory Bonds maturing 1923, 99 $\frac{1}{8}$ ¢ to 100 $\frac{1}{8}$ ¢; Victory Bonds maturing 1927, 101 $\frac{1}{8}$ ¢ to 101 $\frac{3}{8}$ ¢; Victory Bonds maturing 1933, 102 $\frac{1}{8}$ ¢ to 102 $\frac{3}{8}$ ¢; Victory Bonds maturing 1937, 104 $\frac{1}{8}$ ¢ to 104 $\frac{3}{8}$ ¢.



Rosyland: A Valentine.

BY MARGUERITE OGDEN BIGELOW.  
 Come away to Rosyland,  
 To Posyland with me,  
 There to pick the happy thoughts  
 From every blossoming tree,  
 There to gather sunny smiles,  
 And laughter all the day,  
 And big bouquets of loving words  
 That will not fade away.  
 Be my little Valentine,  
 And, like the fairies, free,  
 Come away to Rosyland,  
 To Posyland, with me!

Diabetes

BY "MEDICUS."

Reply to "Yokel-ess," Wentworth Co., Ont.

DIABETES is a disease in which the patient fails to get the full benefit of the carbohydrates (sugar and starch) eaten. It is usually considered to be due to a disease of the pancreas (often called sweetbread). This gland is also of importance in the digestion and assimilation of fats and proteins (meat, eggs, fish, etc.) although this function is not interfered with in diabetes.

No drug known has any beneficial effect in diabetes and the only cure lies in the dietetic treatment, which must be strictly and conscientiously carried out by the patient. Early recognition of the disease is most important because severe cases if seen early are cured more readily than milder cases seen late in the disease, who only half-heartedly adhere to the treatment. If sugar is entirely removed from the urine, the pancreas regains the power to assimilate carbohydrates. This is best accomplished by giving the pancreas less work to do, that is by giving the patient less carbohydrates to eat.

The diet best for the patient is most readily determined by the patient himself. He must, should know approximately how much carbohydrate, protein and fat there is in his diet. At first he should use scales and weigh the different articles of the diet. Then later he can estimate accurately enough the amounts and so the number of ounces of carbohydrate, protein and fat in each meal. In that way he can save much annoyance and not make himself conspicuous at the table. Then he should test out his tolerance for certain foods. He adds an extra potato to his diet and notes the effect on his urine. If sugar appears, he can not tolerate that extra amount of carbohydrate in the potato. If no sugar results, he knows that it is safe for him to increase his diet by that much.

The amount of food necessary for a patient is determined by his weight, which should be less than his former greatest weight. Then he knows that he is not eating too much. It is often desirable for a patient to lose weight, but this should only be undertaken under the guidance of the family doctor. It is often by losing weight that the patient regains the power to tolerate carbohydrates. It takes time and experience to learn to live successfully upon a diabetic diet. It is only with time that the body adjusts itself to a diet with marked reduction of carbohydrates and a marked increase of fats. The Eskimo does it every day of his life. They have few vegetables if any. If the Eskimo can do it, so can you.

The patient is expected to become sugar-free during the early part of the treatment. He should observe and record how this is done, so that if sugar later reappears in the urine, he can follow the same method by himself and again become sugar-free. A fast of 24 hours will almost invariably render the urine sugar-free. The diet then may be resumed except that the carbohydrates should be reduced. "Five per cent. vegetables" should be taken at each meal. The composition of the meals depends on the diet ordered but usually they are arranged best as follows:—breakfast, coffee, cream, bacon and egg; if fruit is allowed, a portion of the 24-hour quantity can be taken; dinner, clear soup, meat or fish, vegetables; supper, tea and a small portion of cooked vegetable salad, meat or fish. The patient should be familiar with "5% vegetables" and "thrice-boiled vegetables" so that they can be added to the diet from time to time in order to relieve the monotony of his strict dietary.

Moderate exercise has a very beneficial effect in this disease. The patient should exercise freely 3 to 6 times a day, in the open for short periods, preferably right after eating, but should never get overtired. If no exercise is taken it will mean that he will have to cut down his diet. He will find that the exercise will increase his tolerance for carbohydrates. Outdoor walking will also help him to forget that he is an invalid and this is most essential. Mental diversion is desirable, e.g. reading aloud, games, or better yet an interest in chickens and flowers. Absolutely allow no one not even the patient to mention diabetes or the diet after the noon meal.

The patient should be trained to examine his own urine for sugar and possibly diacetic acid. To 5 c. c. (one large teaspoonful) of Benedict's solution (to be obtained in a drug store), add 8 drops of urine from a 24-hour sample; place in boiling water for 5 minutes and allow to cool. A yellow or red deposit means sugar. A 10-year-old child can learn to do that very readily.

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SUMMARY.

1. Diabetes is curable. The patient can cure himself if he is willing to follow the instructions of his doctor.
2. Drugs will not cure him but diet will.
3. He must be taught by his doctor "the why" of the treatment. There must always be the closest co-operation between the doctor and the patient.
4. He must keep in a notebook an accurate record of his weight, diet, urinalysis, etc., not only for his own benefit but as a guide to his doctor.
5. Sugar-free urine is the only test of success.
6. He should eat slowly and too little rather than too much. Clean the teeth after each meal. If you have any crowns, it is important to have an X-ray taken. You may have an abscess and not know it.
7. Sleep 9 hours or more and get another hour of rest in the day.
8. Exercise freely 3-6 times a day in the open; you must keep mentally indolent and physically active. Don't forget the chickens and the flowers.
9. Remember it is possible to keep sugar-free and maintain strength by means of fasting days and a diet with or without carbohydrates but with a moderate amount of protein and fat.
10. Avoid "retiring from the farm." A man of middle life who gives up the hard physical work of the farm and is promoted to an office chair in the city with increased mental worry is very liable to develop diabetes. (To the U. F. O. members of parliament, avoid too many banquets by POLITICIANS).
11. Be a "peptomist," full of pep and optimism.
12. Buy Joslin's book on the treatment of diabetes and learn for yourself about your disease.

Among the Books.

"Winter Studies and Summer Rambles."

By Mrs. JAMESON. (Continued)

St. Thomas and Port Talbot 1837.  
 AFTER leaving the "Hill of Bears" above London the way led over a comparatively good road as far as a place called Five Stakes, where were two or three tidy cottages, and where Mrs. Jameson and her driver procured some bread and milk. "About five o'clock" runs the narrative, "we reached St. Thomas, one of the prettiest places I had yet seen. Here I found two or three inns, and at one of them styled the 'Mansion House Hotel,' I ordered tea for myself and good entertainment for my young driver and his horses, and then walked out. St. Thomas is situated on a high eminence, to which the ascent is rather abrupt. The view from it, over a fertile, well-settled country, is very beautiful and cheering. The place bears the Christian name of Colonel Talbot, who styles it his 'capital.'" "Two newspapers are published here," she notes, "one violently tory, the other as violently radical. I found several houses building, and in those I entered a general air of cheerfulness and well-being very pleasing to contemplate. There is here an excellent manufacture of cabinet ware and furniture; some articles of the black walnut, a tree abounding here, appeared to me more beautiful in color and grain than the finest mahogany; and the elegant viewing of the maple-wood cannot be surpassed. I wish they were sufficiently the fashion in England to make the transport worth while. Here I have seen whole piles, nay, whole forests of such trees, burning together."

At nearly seven o'clock, though in the face of a turbulent sky, a start was made for Port Talbot, 12 miles away, the road here being good and flanked by comfortable farms. "The goodness of the roads," remarks Mrs. Jameson, is owing to the systematic regulations of Colonel Talbot. Throughout the whole 'country' none can obtain land without first applying to him, and the price and conditions are uniform and absolute. The lands are divided into lots of 200 acres, and to each settler 50 acres are given gratis, and 150 acres at \$3.00 an acre. Each settler must clear and sow 10 acres of land, build a house (a log hut of 18 feet in length) and construct one chain of road in front of his house, within 3 years; failing in this, he forfeits his deed. . . . Colonel Talbot. . . . Never associates with the people except on one grand occasion, the anniversary of the foundation of his settlement. This is celebrated at St. Thomas by a festive meeting of the most respectable settlers, and the Colonel himself opens the ball with one of the ladies, generally showing his taste by selecting the youngest and prettiest."

Night fell, and still the woman and the boy driver made on. "Suddenly," she says, "we came upon a thick wood, through which the road ran due west, in a straight line. The shadows fell deeper and deeper from the depth of foliage on either side, and I could not see a yard around, but exactly before me the last gleams of twilight lingered where the moon was setting. Once or twice I was startled by seeing a deer bound across the path, his large antlers being for one instant defined, pencilled, as it were, against the sky, then lost. The whip-poor-will began his melancholy cry, and an owl sent forth a prolonged



Getting Ready for the Dive.

There are some jobs colder than getting wood from the bush in winter. The winter inspection of the source of Toronto's water supply provides Mr. Charles Margerison, Marine Superintendent of that City, with one of the chilliest jobs on record. Once a month the little tug, "G. R. Geary," smashes its way through the ice of the bay and lake, and carries Mr. Margerison, with his crew, out to the mouth of the intake pipe, where Mr. Margerison dons his diving suit and descends to depths varying from 75 to 128 feet in the icy water. If the mouth of the pipe became blocked with sand or debris, it would mean that half a million people would suffer for want of water. At the present time the lake is frozen far out beyond the end of the pipe, and the tug has to break her way through six inches of ice in spots. While under water Mr. Margerison's safety depends upon his attendant, R. J. Dilworth, who, on the tug above, watches for signals.

choice, and from higher. Common 27c. per lb. Ducks per lb., and geese at prices of consequence during the week. When large, but it is the weather had increase. Prices for bag of 90 lbs.; for ex-store, car lots to \$3.75, ex-track. Syrup.—It is still crop of syrup will supplies are growing no trading is taking around \$1.50 per was quoted at 35c. from time to time tions are nominal, white clover comb, in pails of 30 lbs. out 20c. per lb. o doubt that the decline. New-laid about 75c. per dozen, are 60c. to 62c., and c. Receipts are not t. change took place creamery during the grass creamery was being 65c. to 65 1/2 c. receipts, the quality a, were 59c. to 60c. was 56c. to 57c. per ts quoted finest white being 30c. to 27c. of No. 2 Canadian selling at \$1.14 1/2 c. Western oats being Manitoba grade n price, being \$13.25 ex-track, Montreal akers, car lots, with . White corn flour anged, being \$10 to flour being \$9.50 in ntinued to be quoted and shorts at \$52.25 meal was steady l, while mixed grain 75 per ton, including No. 2 timothy hay o change of conse- price being \$25 to e tone of the market e quoted advances. \$23 to \$24 per ton, er mixed at \$22 to of exchange between States is having an t for grass seed, as t. of timothy comes s 25 per cent. of red the alfalfa, while a sike is exported to was steady at 17c. e was higher at 63c. gher at 65c. to 75c., nd sweet clover 35c. eal. cow hides were 35c. alves 85c., kips 45c., d horses \$11 each. ago \$14.50 to \$14.75; \$15; light, \$14.40 to \$14 to \$14.60; heavy both, \$13.50 to \$14; \$13 to \$13.50; pigs, d with a week ago, eak to 25c. lower; nder. Best she stock ers 25c. to 75c. lower. lower. Calves, \$1.50 rs 50c. to 75c. lower. l with a week ago, s 75c. to \$1 lower; r; others steady to s mostly steady. Bonds he values of Victory to market, Saturday, ry Bonds maturing 1/4; Victory Bonds 3, 99 1/8 to 100 1/8; maturing 1927, 101 1/8 onds maturing 1933, ctory Bonds maturing 1/8.

shriek, which, if I had not heard it before, would have frightened me. After a while my driver stopped and listened, and I could plainly hear the tinkling of cowbells."

This proved an auspicious sign, for in a few minutes a solitary horseman was encountered, who gave the information that Colonel Talbot had been expecting the traveller for a week.

After still following a countless number of bends and sweeps in the road, uphill and downhill, the object of the journey was reached:

"On ascending some high ground, a group of buildings was dimly described. And after oversetting part of a snake-fence before we found an entrance, we drove up to the door. Lights were gleaming in the windows, and the Colonel sallied forth with prompt gallantry to receive me.

"My welcome was not only cordial, but courtly. The Colonel, taking me under his arm, and ordering the boy and his horses to be well taken care of, handed me into the hall or vestibule, where sacks of wheat and piles of sheep-skins lay heaped in primitive fashion; thence into a room, the walls of which were formed of naked logs. Here no fauteuil, spring-cushioned, extended its comfortable arms—no sofa here 'insidiously stretched out its lazy length;' Colonel Talbot held all such luxuries in sovereign contempt. In front of a capacious chimney stood a long wooden table, flanked with two wooden chairs, cut from the forest in the midst of which they now stood. To one of these the Colonel handed me, with the air of a courtier, and took the other himself. Like all men who live out of the world, he retained a lively curiosity as to what was passing in it, and I was pressed with a profusion of questions as well as hospitable attentions; but wearied, exhausted, aching in every nerve, the spirit with which I had at first met him in his own style, was fast ebbing. I could neither speak nor eat, and was soon dismissed to repose.

"With courteous solicitude, he ushered me himself to the door of a comfortable well-furnished bedroom, where a fire blazed cheerfully, where female hands had evidently presided to arrange my toilet, and where female aid awaited me;—so much had the good Colonel been calumniated!"

The owner of the "female hands" proved to be the wife of a servant of Colonel Talbot, and had, indeed, been married and brought in before the Colonel was aware of it. He, however, had accepted the situation with good grace, and the "female servant" had become as much a part of the estate as her husband.

Mrs. Jameson stayed several days at Port Talbot, of which she gives the following interesting account:

"He (Col. Talbot) has built his house, like the eagle his eyry, on a bold high cliff overhanging the lake. On the east there is a precipitous descent into a wild woody ravine, along the bottom of which winds a gentle stream, till it steals into the lake; this stream is in winter a raging torrent. The storms and the gradual action of the waves have detached large portions of the cliff in front of the house, and with them huge trees. Along the lake-shore I found trunks and roots of trees half buried in the sand, or half over-flowed with water, which I often mistook for rocks.

"The chateau is a long, wooden building, chiefly of rough logs, with a covered porch running along the south side. Here I found, suspended among sundry implements of husbandry, one of those ferocious animals of the feline kind, called here the cat-a-mountain, and by some the American tiger, or panther, which it resembles. This one, which had been killed in its attack on the fold or poultry-yard, was at least four feet in length, and glared on me from the rafters above, ghastly and horrible. The interior of the house contains several comfortable lodging-rooms, and one really handsome one, the dining-room. There is a large kitchen with a tremendously hospitable chimney, and underground are cellars for storing wine, milk and provisions. Around the house stands a variety of out-buildings of all imaginable shapes and sizes, and disposed without the slightest regard to order or symmetry. One of these is the very log hut which the Colonel erected for shelter when he first 'sat down in the

bush' four-and-thirty years ago, and which he is naturally unwilling to remove. Many of these outbuildings are to shelter the geese and poultry, of which he rears an innumerable quantity. Beyond these is the cliff, looking over the wide blue lake, on which I have counted six schooners at a time, with their white sails; on the left is Port Stanley. Behind the house lies an open tract of land, prettily broken and varied, where large flocks of sheep and cattle were feeding,—the whole enclosed by beautiful and luxuriant woods, through which runs the little creek or river above mentioned."

Jennings. We then sat down on a pretty seat under a tree, where he told me he often came to meditate. He described the appearance of the spot when he first came here; as contrasted with its present appearance, or we discussed the exploits of some of his celebrated and gallant ancestors, with whom my acquaintance was (luckily) almost as intimate as his own. Family and aristocratic pride I found a prominent feature in the character of this remarkable man. A Talbot of Malahide, of a family representing the same barony from father to son for 600 years, he set, not

to paradise by hook or by crook, and so I came here."

"He added, more seriously, 'I have accomplished what I resolved to do—it is done. But I would not, if any one was to offer me the universe, go through again the horrors I have undergone in forming this settlement. But do not imagine I repent it; I like my retirement.'

"He then broke out against the follies and falsehoods and restrictions of artificial life, in bitter and scornful terms; no ascetic monk or radical philosopher could have been more eloquently indignant.

"I said it was granted to few to live a life of such complete retirement, and at the same time such general utility; in flying from the world he had benefitted it; and I added that I was glad to see him so happy.

"Why, yes, I'm very happy here,—and then the old man sighed.

"I understood that sigh, and my heart echoed it. No, 'it is not good for man to be alone; and this law, which the Father of all life pronounced at man's creation was never yet violated with impunity. Never yet was the human being withdrawn from, or elevated above, the social wants and sympathies of his human nature without paying a tremendous price for such isolated independence."

Elsewhere Mrs. Jameson records that this remarkable man was at that time 65 years of age, and bore even at that age a most remarkable resemblance to the royal family of England, especially to the King at that time, William IV.

A little incident which she tells gives an especial sidelight on the character of the "big chief" of the "Talbot Country."—After his first 15 years of effort, during which farms were hewn out of the woods and passable roads made to an extent found almost nowhere else in Upper Canada, the executive Government at Toronto endeavored to obtain estates for "their whole kith, kin, and allies" in the settlement. "I'll be d—d if you get one foot of land here," was Colonel Talbot's reply, whereupon the emissary departed. "On this war was declared against him by his Excellency in council and every means were used to annoy him and misrepresent his proceedings at home; but he stood firm, and by an occasional visit to the colonial office in England, he opened the eyes of ministers to the proceedings of both parties, and for a while averted the danger. At length, finding the enemy was getting too strong for him, he repaired once more to England, and returned in triumph with an order from the Colonial Office that nobody was in anyway to interfere with his proceedings." (This last quotation is from Dr. Dunlop.)

After six days at Port Talbot, Mrs. Jameson took her departure, going by way of Chatham, which she reached in due time, having passed over the excellent roads of the Talbot settlement, and then over others worse than any she had yet encountered. "I set my teeth," she records, "screwed myself to the seat, and commended myself to heaven,—but I was well nigh dislocated. At length I abandoned my seat altogether, and made an attempt to recline on the straw at the bottom of the cart, disposing my cloaks, carpet-bags, and pillow, so as to afford some support—but all in vain; myself and all my well-contrived edifices of comfort were pitched hither and thither, and I expected at every movement to be thrown over headlong; while to walk, or to escape by any means from my disagreeable situation, was as impossible as if I had been in a ship's cabin in the midst of a rolling sea."

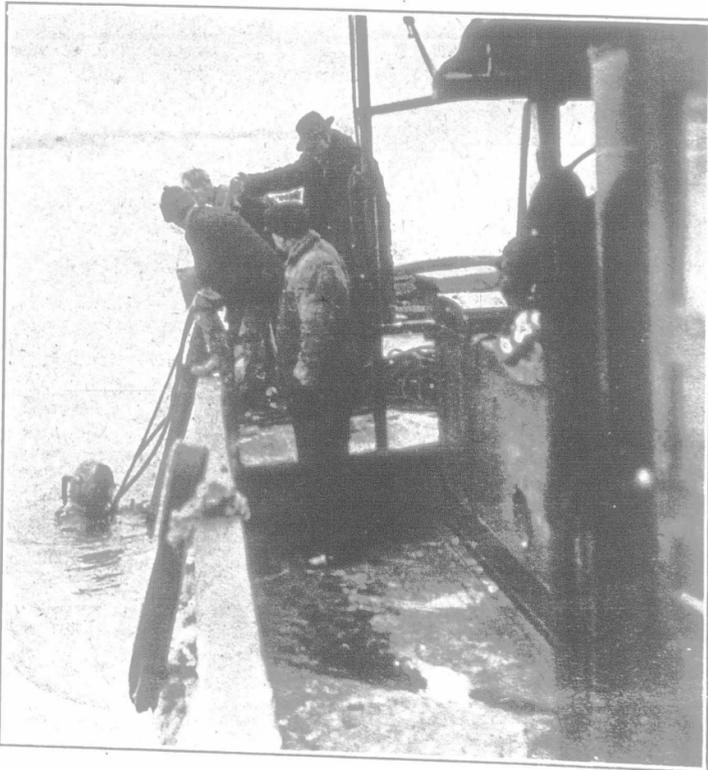
At length, from these abysses, the wagon emerged on to better roads, and presently, she notes, "the first view of the beautiful little town of Chatham made my sinking spirits bound like the sight of a friend."

After a short stay here the journey progressed to Detroit and thence to Mackinaw and the Manitoulin, no doubt the most interesting portion of this remarkable itinerary. The description must, however, be left for another time. (To be continued.)

Rt. Hon. Geo. N. Barnes, British Labor Leader, has resigned from the Cabinet. His action likely presages withdrawal of Labor from the Coalition Government.



Going Over the Side Into the Water in Zero Weather. Sometimes Mr. Margerison finds it necessary to stay under water for three hours.



Coming Up from a Long Dive. The water here is 85 feet deep.

The farm, she notes, consisted of 600 acres, with 16 acres of orchard in which all sorts of European fruit-trees were bearing; also there was a garden of over 2 acres, which delighted the visitor most of all. She says: "It abounds in roses of different kinds, the cuttings of which he had brought himself from England in the few visits he had made there. Of these he gathered the most beautiful buds, and presented them to me with such an air as might have become Dick Talbot presenting a bouquet to Miss

unreasonably, a high value on his noble and sustained lineage; and, in his lonely position, the simplicity of his life and manners lent to these lofty and not unreal pretensions a kind of political dignity.

"I told him of the surmises of the people relative to his early life and his motives for emigrating, at which he laughed. "Charlevoix," said he, "was, I believe, the true cause of my coming to this place. You know he calls this the 'Paradise of the Hurons.' Now I was resolved to get

## Garden and Lawn Planning.

IF you have built a new house you know the pleasure there was in planning it. Planning a garden should be quite as delightful, and possesses this advantage—that the garden costs less.

Just as a house must be planned to suit the needs and tastes of the family who are to occupy it, so must the garden be planned likewise. No absolute rule can be laid down. No two gardens are exactly alike in size, shape, conformation of the land, soil and outlook. The owner of each must plan to suit his or her especial case, and to express his or her own especial personality. For gardens express personality as surely as do clothes and houses. They may be showy, modest, formal, wild and gipsy like, imposing, or expressive chiefly of hospitality and comfort, and as a rule will be any one of these chiefly because of some similar quality in the owner of the garden. The woman who loves tuberous begonias is likely to be a very different sort of person from the one who loves violets.

However any sort of garden may please the artistic sense to some extent except two—the *spotty* garden, and the one that is just vulgarly garish—a mass of showy colors mixed without any regard to harmony.

Avoid those two mistakes as you would the cloven hoof itself if you want your garden to "pass."

For all practical purposes, in a small farm garden varying in size from a few square rods to an acre in extent, but two kinds need consideration—the "formal" and the "natural."

The formal is to be recommended only for the very small enclosed garden, whose owner has plenty of time to spend keeping it in order. It is made according to a pattern—exactly as one would draw out the pattern of a "mat" to be hooked for the floor; triangles, circles, semi-circles, etc., arranged symmetrically to form a pleasing whole. The "beds" must be separated by gravel or cinder paths and edged by some good bordering plant; even the colors of the flowers must be massed symmetrically in accordance with the plan. The Alternative to this, for a very small garden plot, is to cover almost the entire plot with grass-sward, reserving a border all about for flowers and covering the fence with vines. Or, if one does not care for so much border the interest in the garden may center in one motif—a pine or other tree with a seat beneath it, an arched gateway covered with flowering vines, a single mass of flowering shrubs close to the house, etc.

For the larger garden the "natural" plan is always the best—and the easiest, if one keeps constantly in mind not to overdo. It demands: green lawns, unbroken by beds or rockeries; shrubbery massed about the foundations of the house (to connect it with the lawn); vines on verandah, porch, or to screen any old fence or other unsightly object; trees wherever effective (massed behind the house, at least, and one or more on the lawn or the borders, for shade); flowers and shrubs only along the border or in corners.

A natural grove at the side of a lawn is excellent, especially if it dips down into a ravine. Also it is seldom advisable to put a row of shrubs and flowers all about any lawn; a clump here or there, as Nature might have planted, is usually preferable, especially if there is a background of evergreens, but be sure to avoid spottiness. A point to remember in planning for flowers is that Nature usually *masses* her colors. She never puts a row of "one about" of a dozen different hues, but always, when she strives for color effects, a mass of purple asters here, a bank of golden-rod along a fence, a sheet of daisies or blue-weed in a field (quite regardless of the timothy!) The idea is a good one to follow in a garden intended for effect. As a rule we do not *group* enough, and we use too many colors. A noted gardener has said that a garden should have simplicity and restraint as well as personality: "With simplicity comes restraint the special mark of the cultivated mind and of a capable art. In a garden two trees are better than a forest, two kinds of roses better than a thousand, and two harmonious colors better than the chrom-

atic scale. It is easy to over-do a garden, —to over-color it, to over-shade it, to over-plant it."

Of course this does not apply to the little side or back garden kept for flowers for cutting. There you may indulge your love for variety to the utmost, pack as many kinds as you choose in ever so small a plot.

In closing it may be said that, all things considered, the garden that is *comfortable and livable* gives the most satisfaction. Often an unassuming little garden is more adorable than the pretentious ones, especially if it suggests rest and the plants record a chain of friendships, as they may easily do when the gardener has got into the way of exchanging slips and roots. Nor need the most delightful garden cost very much money otherwise. The inexpensive, old-fashioned flowers are just as beautiful as the new, expensive kinds; the native trees that can be got in any woods (always choose the small ones, and don't cut the tops off) are likely to be more satisfactory than any you can buy. Annual flowers make the quickest show for the money, but in the end the garden is most satisfactory that is largely made up of hardy plants, bulbs and perennials that multiply and so increase of themselves.

## The Children's Poem.

### Poor Little Nobody's Cat.

Wretchedly homesick, frightened, forlorn,  
She peers through the windows with  
wistful great eyes;  
Oh, the quiet within; all in vain does she  
mourn,  
Abandoned, deserted, unheeded her cries  
Poor little nobody's cat!

Once she was patted; soft hands smoothed  
the coat  
So glossy and sleek now all cobwebs and  
burrs;  
What visions of past joys before her eyes  
float—  
When milk and good meat in abundance  
were hers,—  
When she was somebody's cat.

But gone now the summer, and summer  
friends too;  
"Poor pussy must forage—she'll hunt,"  
so they said;  
"T'is a pity to leave her, but what can we  
do?"—  
And away in their autos they heartlessly  
speed,  
Leaving the poor little cat.

Beneath the piazza, bare ground for a bed,  
Three diminutive kittens—alas for  
their fate,  
With starvation before them!—unhoused  
and unfed,  
Nigh frantic with hunger, the coming  
await  
Of poor little nobody's cat.

O sad little mother cat, faithful and true,  
Big-eyed with hunger, abandoned,  
forlorn,  
Left to "forage," alas, where the mice  
were so few,  
'Twere better for her had she never  
been born—  
Poor little nobody's cat!

LOUELLA C. POOLE.

## Hope's Quiet Hour.

### An Ancient Parable.

In the ninth chapter of the Book of Judges there is a quaint parable or fable—probably the oldest in history—which describes the efforts of the trees to find a king to rule over them. The olive, the fig and the vine refused to be promoted to this high position. Then all the trees appealed to the bramble (in the margin it is the "thistle") saying: "Come thou and reign over us." The bramble willingly agreed, telling them to come and put their trust under his shadow; but warned them that if they were not submissive to his rule, fire would come out of him and destroy the splendid cedars of Lebanon.

Have you ever invited the bramble to rule in your daily life?

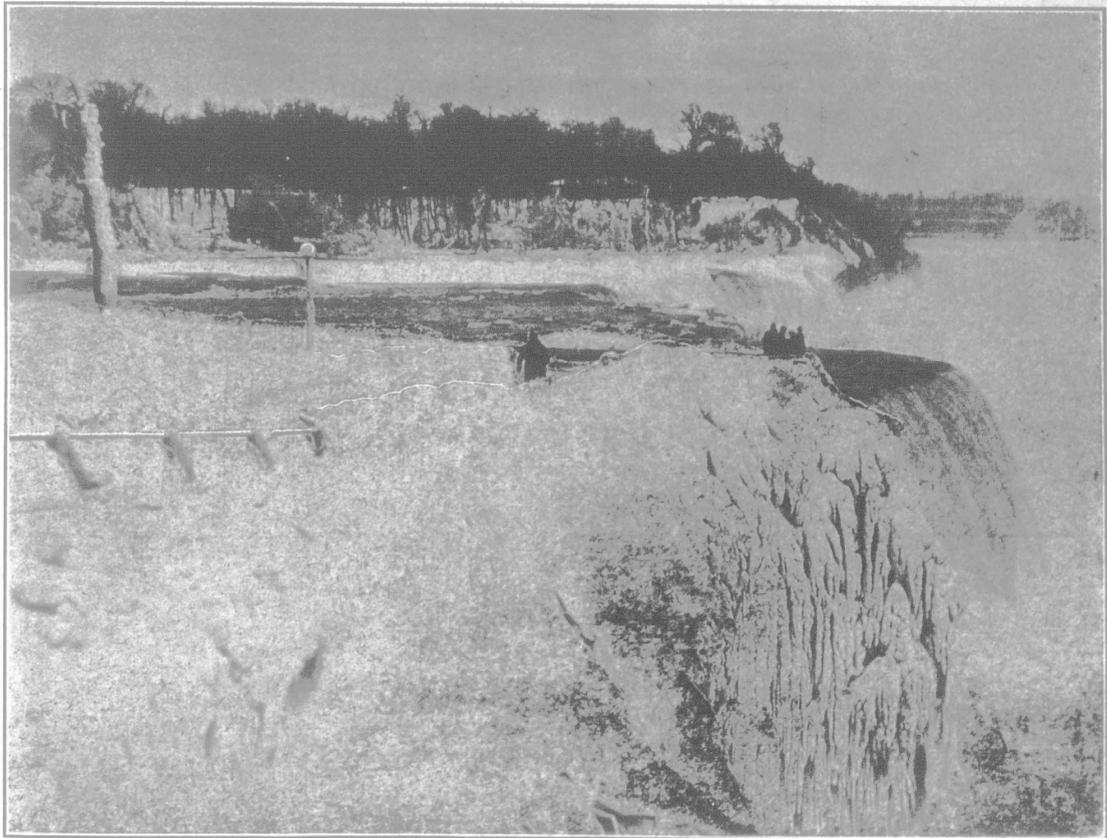
Perhaps you have had a quarrel with someone. It may have begun about some trifle, but neither party was big enough to make the first move towards a reconciliation. "It was all her fault! I am not going to speak first. It is her place to speak first." How often people who are allowing a quarrel to poison their happiness say such words as these! Only a few days ago I heard those familiar words. And yet, even if you were really not to blame at first (there is usually fault on both sides) you are certainly to blame now if you are doing nothing to heal the bitterness. It is when a Christian is not to blame in the beginning, that his orders are to go straight to the person who had treated him badly and do his best to

straighten the tangle.—S. Matt. 18 : 15. If we obeyed our Master, and talked about the quarrel only to the person concerned, instead of going over and over the matter behind his back, until the little wound has become a festering sore, life would be happier and sweeter for us all. But—too often—we invite the bramble pride to rule our thoughts, though it makes us very miserable. It tears and scratches, in bramble fashion, ruining our piece of mind and giving us nothing of value in return. We are made unhappy by soreness of heart and wearing pain—warning us of the soul-sickness which is crying out for cure—and yet we are too proud and obstinate to seek the help of the Good Physician. Why? He might say: "If thy brother shall trespass against thee, go and tell him his fault between thee and him alone: if he shall hear thee, thou hast gained thy brother."

Years ago, when I was doing "settlement work" in Boston, two of the girls in one of the sewing classes had a foolish quarrel. They had been "inseparables," and always went to the night school together. One evening Sadie went to school without calling for Rose. It was a small offence, to begin with, but hard words and unkind thoughts soon widened the breach. I discovered that both girls were very unhappy; but each of them said: "she must speak first. I am willing to be friends if she is." The first word of friendliness is not easily spoken in such a case. Anyone can be small enough to hold back, but it is a splendid opportunity to show greatness of spirit and make the first advances.

Those of us who know by happy experience the priceless value of a friendship that began in youth and has glorified the rest of life, can see the sadness of throwing away such a treasure at the bidding of the bramble-ruler, Pride.

Many and many a heart has been tortured for years by this cruel tyrant-king. If he should ever treat you as his slave, saying sternly: "You must not lower yourself by making the first advances, when you are not to blame!" just look at him and see what a miserable sham his grandeur is. There is nothing in the least noble about abstinence pride. The most commonplace person can stand on his dignity and act like a sulky child. There is nothing fine in that attitude. Only a grand and heroic soul can break the chains of Pride, and conquer an enemy by changing him into a friend. Even the perfect Man towered to the heights when He pleaded in tenderest kindness for the forgiveness of His cruel



Winter Scenery at Niagara Falls—Crest of the American Falls, and Part of the Ice-coated Cliff.

### The Fashions.

#### How to Order Patterns.

Order by number, giving age or measurement as required, and allowing at least ten days to receive pattern. Also state in which issue pattern appeared. Address Fashion Department, The Farmer's Advocate and Home Magazine, London, Ont. Be sure to sign your name when ordering patterns. Many forget to do this.

When ordering, please use this form:—  
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Number of Pattern.....  
Age (child or misses' pattern).....  
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2917. A Pretty Gown.  
Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 5 1/2 yards of 44-inch material. Width of skirt at lower edge, is about 1 1/2 yard. Price 10 cents.

3148. Girl's Dress.  
Cut in 4 sizes: 8, 10, 12 and 14 years. Size 10 will require 3 yards of 44-inch material. Price 10 cents.

3145. A Simple Apron.  
Cut in 4 sizes: Small, 32-34; medium,

36-38; large, 40-42; and extra large, 44-46 inches bust measure. A medium size will require 4 yards of 36-inch material. Price 10 cents.

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Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. A medium size will require 3 1/4 yards of 36-inch material. Price 10 cents.

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Blouse 3131 cut in 6 sizes: 34, 36, 38, 40, 42, and 44 inches bust measure. Skirt 2818 cut 7 sizes: 22, 24, 26, 28, 30, 32, and 34 inches waist measure. To make the dress for a medium size will require, about 6 yards of 30-inch material, with 1 1/2 yard for the overblouse. The skirt measures about 1 1/2 yard at lower edge. TWO separate patterns 10c. FOR EACH pattern.

3142. A Pretty Frock.  
Cut in 3 sizes: 12, 14 and 16 years. Size 16 will require 4 3/4 yards of material 27-inches wide. Price 10 cents.

2474. Ladies' House Dress.  
Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 1/4 yards of 36-inch material. Price, 10 cents.

3149. A New Skirt.  
Cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. A medium size will require 3 3/8 yards of 27-inch material. The width of skirt at lower edge, with plaits extended, is about 1 1/2 yard. Price 10 cents.

3136-2909. A Smart Afternoon Costume.

Blouse 3136 cut in 6 sizes: 34, 36, 38, 40, 42, and 44 inches bust measure. Skirt 2909 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. For a medium size: 5 3/4 yards of 32-inch material will be required to make the entire costume. The skirt measures about 1 1/2 yard at the foot. TWO separate patterns 10 cents FOR EACH pattern.

2883. Boys' Suit.  
Cut in 5 sizes: 2, 3, 4, 5 and 6 years. Size 4 requires 2—yards of 44-inch material. Price 10 cents.

3127. A Splendid Work Dress.  
Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 7 yards of 27-inch material. The width of the skirt at lower edge is 2 yards. Price 10 cents.

3138. Girl's Dress.  
Cut in 4 sizes: 6, 8, 10 and 12 years. Size 10 will require 1 3/4 yard of 27-inch material for the guimpe, and 3 3/8 yards for the dress. Price 10 cents.

3153. Ladies' Dress.  
Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 will require 6 1/2 yards of 44-inch material. The width of skirt at lower edge, with plaits extended, is 2 1/2 yards. Price 10 cents.

3141. A Simple Dress.  
Cut in 4 sizes: 2, 4, 6, and 8 years, and will require 2 3/4 yards of 27-inch material for 4-year size. Price 10c.

3137. A Practical Apron Dress.  
Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42 and extra large, 44-46 inches bust measure. For a medium size 4 1/2 yards of 36-inch material will be required. Price 10 cents.

2882. Girl's Dress.  
Cut in 5 sizes: 4, 6, 8, 10 and 12 years. Size 8 requires 1 3/4 yards of 27-inch for the guimpe, and 2 1/8 yards for the dress. Price, 10 cents.

murderers. With our eyes on Him we must try to climb the heights of love. We can't permit the bramble to destroy the cedar of Lebanon—the great cedar called Friendship. And yet there are people willing to sacrifice this noble cedar at the bidding of the haughty, but useless thistle. They throw away friendship and torture themselves by pressing pride in their arms and enthroning him in the heart. Though it takes two make a quarrel, one can usually end it. Not in a day, perhaps, but in time,—if the healing ointments of prayer and kindness are constantly applied.

Then there is another bramble which is often invited to rule over a life. Isaiah told his people that they were desperately poor, although their land was full of silver and gold. Their idols were silver and gold, but those idols would be helpless to save them in the day when the Lord should arise to shake terribly the earth. In that day they should fling away their helpless gods, and hide in trembling fear from their rightful King.

Anyone who makes idols of his silver and gold, giving them the place of highest importance in his daily thoughts, will find—when real need arises—that he has been serving heartless and helpless gods.

An African explorer described a strange custom of one of the tribes of the Upper Congo. He said that brass rods were the favorite currency of the natives, and these were made into great rings and welded securely around the necks of the married women. Those who were very "rich" had the heaviest loads. Some of these poor "rich" women were doomed to struggle miserably through life weighed down by thirty pounds of brass. Their riches rubbed great sores in their necks and sometimes nearly strangled them. Strange to say, they were proud of the heavy, useless burden that crushed out the brightness of life.

It is one thing to have money, and quite another thing to let money have you. Those who enthrone in the inner sanctuary of the heart an idol of silver or of gold, are placing the glorious cedar of Lebanon (the human soul) under the control of the bramble mammon.

Judas was a traitor for the sake of a handful of silver pieces, and sold his priceless treasure (his own soul) when he thought he was only (only!) selling his Master. Those who submit to be ruled by the bramble-king—Covetousness—may suddenly be commanded by this tyrant to sell their honor for a few dollars. Then, shivering before the bar of their own conscience and afraid to remember God, they see the word "Thief" branded on their souls.

Sometimes the tyrant-king demands that they shall commit murder for the sake of money. The money is soon spent, but it is not easy to wash blood-stains from the soul.

One day the strong messenger of God will shake out of each mammon-worshipper's hands the wealth for which he has spent his earthly opportunity of life. What a plunge into beggary death will be, if he has no treasure laid up in heaven, and has nothing to show for the time wasted on earth.

I have no room to-day to speak of other bramble-kings, but we all need to watch and pray, lest we sacrifice the greater things to the lower, allowing worthless brambles of sin to control our lives. The natural consequence of such a dangerous rule is that the cedars of righteousness are destroyed. What profit is there to any man if he should gain all the riches of earth and lose his own soul? What can it profit a nation to rule over other nations, if world-dominion has been bought at the expense of honor and righteousness?

What is the ambition that rules our life? Are we controlled by some bramble-king or have we consecrated ourselves to the service of Him who is chiefest among ten thousand and altogether lovely?

DORA FARNCOMB.

#### For The Needy.

Many papers for the shut-in have arrived this week, and a gift of five dollars from X. Y. Z., Grand Valley, Ontario, was dropped in the O. H. P.

The sick girl, who received "Betty's" gift, has entrusted me with a letter for her kind friend. Will you let me have your address, "Betty", so that I may forward the letter?

DORA FARNCOMB,  
6 West Ave., Toronto.



### The Ingle Nook

Rules for correspondence in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen name is also given the real name will not be published. (3) When enclosing a letter to be forwarded to anyone, place it in a stamped envelope ready to be sent-on. (4) Allow one month in this department for answers to questions to appear.

#### A Disease.

THE other day a visitor blew into the den. She was none other than Miss Jean Laidlaw, the Alberta woman-farmer whose story in our Christmas Number was enjoyed by so many people.

She told much about her experiment out there, and showed dozens of "snaps" taken on and near her ranch—her cattle, horses, neighbors, her neat little house with a chimney built up the outside to permit a fireplace in the living-room, and, last but not least, a number of views of her "electable mountains" as seen from the door, the snow-streaked peaks, battlements and ramparts of the Rockies.

She is not at all daunted by the recent "lean" years in her district, although another year's failure of crops may mean that she will have to give up the life that she really loves. "If next year is as bad as the last three have been," she said, with a smile, "I'm going to come East, take a course in carpentering at the Technical School and set up business."—No whimper or selpity there!

One day she addressed the Women's Canadian Club (speaking about her farm, among other things), and the story she told, as well as the very fact of her being on the platform to tell it, must have been a revelation to the city women in the seats, some of whom no doubt, had hitherto thought it rather lowering for a woman to carry a pail of "swill" to the pigs.—Not to mention wearing hideous smocks and overalls—Oh, no-o-o! . . . Of course all city women are not so narrow, as was very well proved by the honors paid by them, during the week, to Miss Laidlaw; they banqueted her again and again—the Mother's Clubs, the Froebel Society and other organizations. But one cannot help thinking, with a satisfied smile (inside at least) of the probable amazement of the over-dainty few who listened that day, and one cannot help hoping, too, that they got a new point of vision, and that they will henceforth realize that

in 6 sizes: 34, 36, 38, 40, 42, 44 inches bust measure. Sizes: 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 inches waist measure. 5 3/4 yards of 32-inch material required to make the skirt. The skirt measures at the foot. TWO DOLLARS FOR EACH SKIRT.

3, 4, 5 and 6 years. 1 1/2 yards of 44-inch material. Price 10 cents.

Work Dress. Sizes: 34, 36, 38, 40, 42, 44 inches bust measure. Size 38. 27-inch material. Skirt at lower edge is 2 inches. Price 10 cents.

8, 10 and 12 years. 1 1/2 yards of 27-inch material. Price 10 cents.

4, 6, 8 and 10 years. 1 1/2 yards of 27-inch material. Price 10 cents.

Apron Dress. Sizes: 32-34; medium, 34-36; large, 36-38. For a medium size material will be 1 1/2 yards. Price 10 cents.

6, 8, 10 and 12 years. 1 1/2 yards of 27-inch material. Price 10 cents.

a lady can still be a lady, no matter what she does—just as truly when dressed in overalls and carrying a pail of swill to a thirsty pig (if necessary) as when pouring tea in a drawing-room. Miss Laidlaw can do that, too, quite gracefully, as they knew, and has done so many a time.

After all neither work nor working clothes has anything to do with vulgarity, which depends *absolutely* on other things.

While chatting, afterwards, about Miss Laidlaw's address, it was agreed that only a very superficial listener could fail to recognize in her a pioneer—one of the forerunners of a new day which, it is to be hoped, is speedily coming, a day in which to work is to be honored and to fail to do so a disgrace. . . . But of that we shall talk another day, for I want to tell you then, about another of these forerunners whom I heard speak recently. Of course I know, and know well, that every farmer and farm-woman who respects his or her work in life, is a pioneer in this matter, but I am referring now to the people who are bringing it up in public places, coming as missionaries to certain classes in the cities, and to those farm folk (for there are some) who need the message just as much,—the species of farm-folk who look down on their "job," think "dressed-up work" better, and are always feeling themselves abused if they have to do hard or disagreeable hand-labor.

From this last point of view Miss Laidlaw is as far removed as the poles. She is enthusiastic—enthusiastic about farming, with all its hard work—and she has had eight years' experience. She only looks to carpentering because, should crops fail next year in Alberta she will not have capital left with which to buy another farm. She will not mind my mentioning this because—great soul that she is!—she is anxious for unattached women (there are so many of them, and more since the war) to realize that if one thing fails something else stands ready, and also for them to see clearly that hand work is just as good as any other. "If people have the taste," she says, "they will make a place for the real refinements of life, whatever their occupation may be."

But now what of the "disease"?—It looks as though I had forgotten my topic altogether, does it not?

"Coming down from the far West," said, Miss Laidlaw, the other day, in my den, "one sees that the people back East here are smitten with a *disease*—the disease of luxury. It's as much a disease as smallpox or typhoid."—Now, you'll confess that was too good a "text" to let slip.

For isn't it true that if the most of us—taking people as a whole, I mean—haven't easy work (or none at all), rich clothes, luxurious dwellings, motor-cars, trips abroad, and all the rest of it, it isn't our fault? Toss down the possibility of having all these things before a crowd, to be had for the picking up, and how many would be out of the scramble? How many people would remember that it is only by working *hard*, with either head or hands, that we grow? That we are not put in this world just to get things for ourselves, but to help the world along somehow towards that "far-off, divine event to which the whole creation moves?" That we must be, first of all, *useful*, if we would justify our being here at all.

Perhaps the farmer is as little likely to succumb to the disease of luxury as anyone; he hasn't time to. But if one, here or there has the *wish*,—ah, then, the germ of the disease is there, only waiting a chance to break out and take possession of him.

I suppose it must be admitted that the germ is all too common on the farms as everywhere else; but, glory be! it hasn't infected everybody, and perhaps it is safe to say that more and more will be immune from this time on. After all the world is becoming saner, slowly though it may be, and the idea of the dignity of work is not so submerged as it used to be. Just take notice of any farmer you know who has become filled with it. Can't you tell his idea by the unselfconscious poise and dignity of him? Quiz him a bit, and you find that here is a man who knows that growing food for the world is a useful occupation, and takes pleasure in thinking about it. He is proud of doing any kind of work well with his hands, and glad that farming provides plenty of "head"

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Farmers with vacancies will kindly write—H. A. MacDonell, Director of Colonization, Parliament Buildings, Toronto, at once for application forms. Applications will be filed as far as possible in the order in which they are received.

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exercise too; he doesn't see how under the canopy any man can bind himself to a factory and settle to a task that calls for just one movement, year in year out (in the fashion of modern factories) until he has become a sort of machine himself, and is afraid to start out and blaze a new trail. Your farmer realizes, of course, that there are lots of disagreeable things about his own work (it isn't very nice, for example, to take up turnips on a cold bleak day in late fall, or to sweat over a harvest field when the temperature is 93 in the sun!), but he takes comfort in reflecting that there is *something* disagreeable about *anything* one does. . . . He is, in short, a philosopher, busy in the present, hopeful for the future, serene in knowing that he is living a clean, helpful life, and is therefore in tune with the Universe, so that—"All must be well."

I think this is the sort of farmer Miss Laidlaw admires, and the sort of farmer she is.

Perhaps there is somebody—just *one* (?)—among the readers of this, who is very, very literal. To her it may be necessary (I wonder if it is necessary) to say that when I spoke, above, of taking up turnips and sweating in the hayfield, I meant, of course, scrubbing floors, and washing separator tins, and getting endless meals, too. It's tiresome work sometimes but it's *useful*. Think of the dignity of that!

**Worth Thinking Over.**

"The only magic we can rely upon in these times is work. There is no scarcity of men. There is only a scarcity of men who believe that Work is a patriotic duty now as it was during the war.—Henry W. Ford.

"The great modern fallacy is to identify the word 'wealth' with the word 'welfare.'"—John Galsworthy.

## le Nook

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## sease.

visitor blew into the as none other than Laidlaw, the Alberta se story in our Christ- enjoyed by so many

about her experiment ed dozens of "snaps" her ranch—her cattle, her neat little house tilt up the outside to in the living-room, st, a number of views "mountains" as seen snow-streaked peaks, mparts of the Rockies. launted by the recent er district, although re of crops may mean o give up the life that If next year is as bad e been," she said, with o come East, take a ring at the Technical siness."—No whimper

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## Mrs. Smith Helps Out

"—And, oh yes, I want a bag of Cream of the West Flour."

"Now that's too bad! I'm completely sold out of it, Mrs. Young. But I'm getting some in the day after to-morrow."

"Not till then?"

"I'm afraid not. We've had quite a run on it lately. Mrs. Fred Smith got the last bag this morning."

"Oh! Well that's all right. I'll borrow some from her. I'm baking bread to-morrow, and I simply *must* have



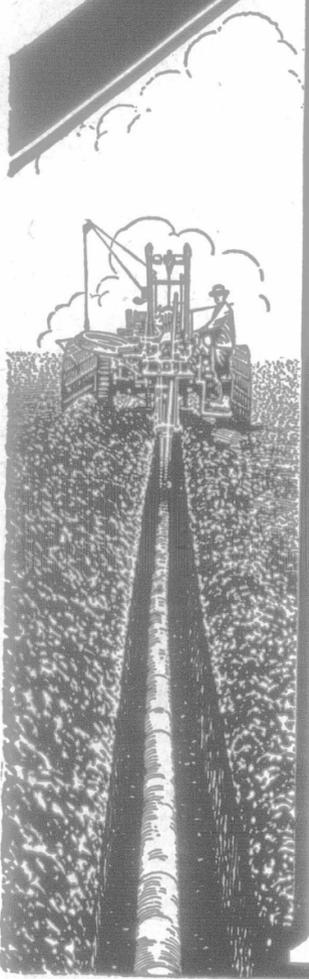
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### Hot School Lunches.

Dear Junia.—I read an article in your paper some time ago on the hot school lunch. I am serving it in my school. I have only a furnace with a rack on the top of it to cook on.

We have boiled potatoes and soups. The children are getting tired of these. Could you in some way let me know of other dishes I could prepare for them. Thanking you in advance. I remain,

Yours truly,

FLORENCE DEACON.

There are many simple and nutritious dishes that you could make instead of the hot potatoes and soup; variety is the spice of the hot school lunch as well as of everything else in life. Here are a few ideas.

**Hot Cocoa.**—Some days have just hot cocoa, which the children can eat with their bread and butter. To make it so that it will be nutritious and delicious, make it as follows: Allow a teaspoonful of cocoa for each cupful to be served. Put the cocoa with a little water to boil, and let boil hard for about 8 minutes. Next add enough milk to make up the required amount (the cocoa is better if over half milk), let become very hot, sweeten, add just enough salt to take the flat taste off, and serve.

**Delicious Stew.**—Cut a piece of any of the cheaper cuts of meat in bits about an inch each way, brown them well by frying in a little fat in the bottom of the pot, then add enough water for the stew. This may be done first thing in the morning. Let simmer all morning. About 11 o'clock add bits of turnips, potato, carrot—in fact, any kind of vegetable you like, also salt and pepper to season. Cover again and let simmer until noon, when the stew may be thickened by adding a little flour mixed with water and let boil up a few minutes.

**Bread and Milk.**—On some days have each child bring a pint of milk, which may be heated separately if you have not too many pupils. Break some bread in, let become very hot and serve at once. A little butter added to this makes it better; some of the children may like sugar also.

**Soups in Variety.**—Soup may be made in great variety—bean soup, pea soup, mixed vegetable, potato, celery (needs to be chiefly milk), barley, etc. A handful of oatmeal added to any thin soup will give it greater food value. So does the addition of milk, which "goes" very well with several kinds of soup.

I hope you'll write to us sometime before spring and tell us all about your experiment.—J.

### Breadmaking.

BREAD, dear brothers, is the staff of life," said Swift, long years ago, in *The Tale of a Tub*, and the saying has been repeated so many times since that it has become a household axiom. Of late years its truth seems to be more to the fore than ever, for just as soon as you become a bit run-down, or nervous, or tubercular, some doctor is sure to counsel you, with all his authority, "Eat more bread."

"But," someone notes, "there are so many kinds of bread—sour, soggy, dry, cracky, heavy! Some of them are a rather wobbly staff."

—So it appears that the old axiom should be revised to read "Good bread is the staff of life", and that, you will agree, stands beyond question.

If, then, good bread is of such great importance, there is surely no other accomplishment in cookery over which a woman or girl should be so proud as over her ability to make it—make it fit to take a prize at a fair. That means that it must be of a slightly yellowish tint, evenly and finely porous, and of a delicious flavor.

"To get it like that," says the accomplished bread-maker, you must have all the conditions right. The flour must be good, so must the yeast and the oven. You must keep the temperature right from start to finish, and you must knead very thoroughly.

Now let us watch her as she goes through the process. But we must remember that this is but one process; there are several others. The ingredients are: 1 yeast cake, 2 quarts liquid, 2 level tablespoons salt, 2 level tablespoons sugar, 2 level tablespoons lard, flour. And the various stages may be indicated as Ferment, Sponge, Dough,

### The Ferment.

Sometime during the afternoon the bread-maker takes the water drained off the potatoes, adding a little more warm water if there is not enough to make up the required 2 quarts, and, having first taken out about a pint of the liquid, mashes up a few potatoes in the rest. Into the pint of liquid, which is about lukewarm (about 90° F. if she wants to be very accurate and tests with a thermometer) she puts a dry yeast cake—and lets it soak for half an hour—in a bowl. Next she stirs into it enough flour to make a thin batter, adds 1 tablespoonful of sugar, and beats with a Dover egg-beater until well mixed and full of bubbles. She now leaves the bowl, covered with a cheesecloth or towel, in a fairly warm place (temperature of 70° to 80° F. until it is light and foamy—about 4 or 5 hours. This mixture is called the "ferment."

Just here may be the place to say that at every stage of bread-making it is necessary to keep the temperature just right. The reason is this: Whether sugar is added or not (some leave it out) a sort of sugar is formed, for the starch in the flour and potatoes becomes changed chemically, into it. Afterwards the sugary part is changed by the yeast (carbon dioxide) which shows itself by bubbles and the swelling or becoming "light" of the whole mass. If at any stage before going into the oven the mixture becomes too warm, the alcoholic fermentation gives way to the formation of a sort of vinegar and the bread becomes sour. The mixture in its earlier stages, you see, always contains the organisms that produce acetic acid (or vinegar) which multiply very rapidly after the temperature goes above 90° F.

Another disadvantage of letting ferment, sponge or dough become too hot is that, at such a high temperature, the yeast-plant does not grow well, and, as a result, the bread, besides souring, simply stops rising. When baked it is both heavy and sour.

Practised bread-makers know the temperature pretty well by the "feel" of the dough, etc., but the beginner will do well to enlist the aid of a good thermometer.

Now let us go back to our bread-maker, who is now, after the ferment has stood in a fairly warm place for about 5 hours, preparing to make the sponge.

### The Sponge.

About bedtime she puts a tablespoonful of sugar, 2 level tablespoonfuls salt, and 2 level tablespoonfuls lard into a kneading-pan, brings the rest of the liquid (the quart and a half potato-water) to 90° F. (about lukewarm) and adds it to the ingredients in the pan. She next puts in flour, gradually, until it will beat without spattering (warming the flour first, if it is very cold). The last step is to put in the ferment and beat until the mixture looks smooth and elastic, about 15 or 20 minutes. This makes the sponge, which is then covered closely and kept in a fairly warm place (about 70° F.) until light and spongy, about 9 or 10 hours, usually over night.

### The Dough.

Some bakers make the sponge into a dough at night, a plan that works very well if sufficient heat can be kept up through the night. Our bread-maker, however, adopts the plan of leaving the sponge over night and "stiffening" it in the morning. As her house may chill during the dark hours, she first fits the tin lid very closely, then wraps clean old blankets and rugs, kept for the purpose, all about to keep the sponge from chilling, but she is planning a much better way. She is going to pad a big box all about inside, lid and all; into this she will put her pan of bread-sponge, placing the tin lid over it and tucking a thick pad all about over that. By keeping the box in a warm place she hopes to do away with all fear of chilling, and, of course, she will use a large bread-pan so there will be no danger of the sponge overflowing. These precautions must be taken in any house that is not warm at night, for if either sponge or dough gets chilled the "rising" immediately stops (because the yeast-plant stops growing) and as a result the bread will be heavy and of poor flavor.

To return: In the morning, when the sponge is ready, our bread-maker stirs in more flour until the mixture is too

**Ferment.**  
 In the afternoon the water drained off a little more warm not enough to make up parts, and, having first a pint of the liquid, potatoes in the rest, liquid, which is about 90° F. if she wants to be d tests with a thermostat a dry yeast cake for half an hour—in a stirs into it enough a thin batter, adds of sugar, and beats beater until well mixed es. She now leaves with a cheesecloth or arm place (temperature il it is light and foamy hours. This mixture ment."

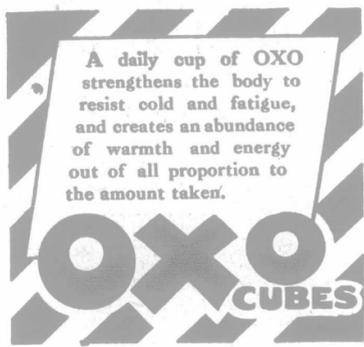
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stiff to use the spoon, then she mixes in more with the hand until the dough no longer sticks to her fingers. After that she turns the dough out on the board to knead, leaving the pan quite clean. If just right the dough should knead without flour being put on the board or the hands. If it proves sticky she returns it to the pan and very carefully mixes in a little more flour, remembering that while too slack a dough makes a coarse bread, one that is too stiff makes a slow-rising bread which will dry out quickly.

#### Kneading.

The bread-maker now kneads the mass lightly until it is velvety and elastic, the surface covered with a film of tiny bubbles, while a cut with a sharp knife shows the inside full of fine, even bubbles and free from lumps or unmixed portions. She then greases the kneading pan lightly with lard, warms both pan and cover if they are cold, puts the dough into the pan, covers it closely and keeps it in a warm place (at a temperature of about 80° F.) until rather more than doubled in volume. This will take from 2 to 3 hours, and when ready a gentle pressure of the fingers will cause the dough to fall in.

The next step is to knead lightly in the pan to get rid of the larger bubbles, when the dough is left to rise a second time until double in volume. This will take from 1 to 2 hours. A point to remember is that if rising dough has to stand near a stove or register the pan must be turned about from time to time to equalize the heat.

When the dough is ready again the bread-maker divides it into loaves, kneads each piece just long enough to get rid of large bubbles and smooth the surface, and puts it into a greased tin. The tins, by the way, should be only half filled by the loaves when they are put in. The loaves are kept warm

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(at a temperature of 70° to 80° F.) until doubled in volume, then brushed with milk or butter to brown them, and put into the oven.

#### Baking.

The baking, also is important. If the oven is too "slow" the loaf will be heavy, because the gas has time to burst away from it before becoming imprisoned in the stiffening walls of the loaf; probably, also, it will be somewhat sour, because the heat has not been great enough to prevent the fermentation from going on. On the other hand, if the oven is too hot the loaf will be very white, because the starch has not had time in which to undergo much change, but it will not be as digestible or as delicious in flavor as it would have been if baked at the right temperature. From 50 to 70 minutes, according to the size of the loaves, in a hot—but not fiercely hot—oven (about 350° F.) will be required. When the loaves are done they give a hollow sound when rapped on the bottom, and the bread-maker takes them at once from the pans and stands them on edge so the air may get to all parts and cool them quickly.

#### Variations of the Above.

Of course there may be several variations of the above, which is substantially a method recommended in a bulletin issued by the Ontario Department of Agriculture. (No. 180.)

Home-made yeast may be used instead of the dry yeast. Use 1 cup home-made yeast and only 3 1/2 pints of liquid.

The liquid may be part milk (scalded) and part water.

The second rising of the dough may be omitted, although the extra rising makes the loaf a rather finer texture.

The bread-mixer may be used to knead the dough after it is known exactly how much of the kind of flour used the liquid will need to make dough of the right stiffness. The recipe above calls for good "strong" bread flour. If the bread has to be made of "soft" flour the dough must be watched so that it will not rise a moment longer than necessary.

#### Extra Hints.

Always keep the dough covered while rising, so that it will not form a crust while in the doughstage. If it seems inclined to do this it should be moistened with warm milk and water. A crust is to be avoided, as it is likely to form a streak through the loaf when kneaded in at mixing, and an unsightly crust on the baked loaves if allowed to form on the loaves in the pan.

When sugar is added to the sponge the yeast acts more quickly, especially if the sponge is not too stiff with flour; hence it is advisable to add a little in cold weather, if there is any trouble about keeping the sponge uniformly warm enough for any length of time.

Salt, on the contrary, retards the growth of the yeast plant; hence in cold weather it may be left out until the latest possible moment i. e. immediately before stiffening the sponge. In warm weather, when the bread is likely to rise quickly anyway, perhaps too quickly, it may be added to the sponge at the beginning.

A last hint: If bread seems slow about rising, do not hurry it. Give it plenty of time, as, if mixed too soon it will be heavy and unpalatable.

#### Use For Old Fur.

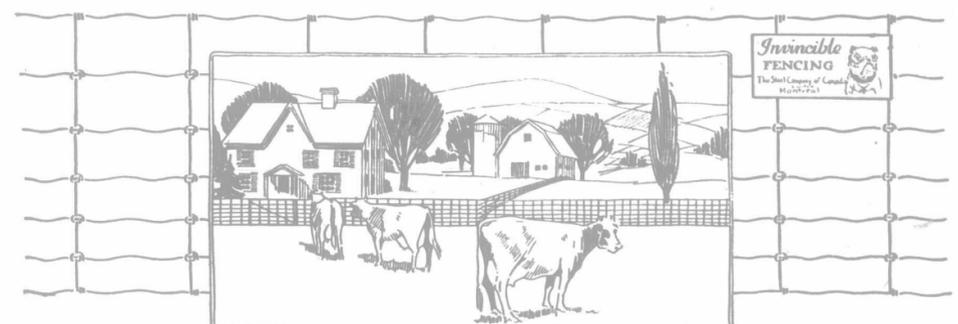
Muffs are not nearly in such demand as usual, notwithstanding the severity of the weather; it is now considered "quite correct" to put one's hands in one's pockets. A very practical girl has hit upon the plan of lining her pockets with fur.—So there it is!—a use for old fur!

He was on the Right Track.—Dr. J. M. Buckley, the Methodist divine, was asked one day to conduct an "experience meeting" at a colored church in the South.

A colored woman arose and bore witness to the preciousness of her religion as light-bringer and comfort-giver.

"That's good, sister!" commented Dr. Buckley. "But now about the practical side. Does your religion make you strive to prepare your husband a good dinner? Does it make you look after him in every way?"

Just then Dr. Buckley felt a yank at his coat-tails by the colored preacher, who whispered ardently: "Press dem questions, doctor; press dem questions. Dat's my wife!"—Ladies' Home Journal.



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# THE BANK OF TORONTO

## Current Events

Guelph Chamber of Commerce has decided to form an out-of-town farmers' section.

Sir Oliver Lodge, the famous British Scientist, who has of late been devoting much attention to psychic research, is in New York.

Paul Deschanel, the new President of France, is 60 years of age.

Great Britain will probably accept the mandate for Palestine.

Major Richard Lloyd George, son of Premier Lloyd George, who has been in the United States recently on a business trip, stated that the great landowners of England are rapidly selling parts of their holdings because of the heavy taxes imposed on them; thus England is largely passing into the hands of small land-owners.

As a result of a referendum, Verdun, Que., will remain "dry". The votes showed a majority of 728 against the "wets."

The Dominion Government has given to the Navy League of Canada the steamer "Restless," which will be used for training boys for the navy.

Mr. A. Hicks, of Centralia, has been named party whip by the U. F. O. members elect.

Twelve German Fokker airplanes have been turned over to the United States Government in fulfillment of the Armistice terms.

The letter of Viscount Grey to the London "Daily News" and New York "Times," in which he disposed of the Lodge reservations as useless, has had the effect of accelerating the action of the U. S. Senate in regard to the Peace Treaty.

On Feb 3rd the list of names of German military leaders accused by the Allies of war crimes was formally handed to Baron von Lersner, head of the German delegation at Paris, by Paul Dustata, Secretary of the Peace Conference. The list totals 800 names, beginning with that of the ex-Kaiser. Von Lersner at once returned the list, stating that he had resigned from office.

Ex-Premier Clemenceau of France has been warned by Dr. Abdul Said,

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WRITE OR CALL AT NEAREST BRANCH.

one of the Egyptian nationalist leaders, not to visit Egypt, as the nationalists regard him as a friend and co-worker with Great Britain.

Bernard Laster, a London merchant now in Germany says that country is in a terrible condition, needing food, clothing and fuel, but that the Germans in many cases have cut down their own rations to help the Austrians who are even in worse case.

Vladivostok is now in danger of an attack by the Reds, although Japanese armored trains are attempting to block the way. Collision between the Japanese and the Bolsheviks has occurred near Nikolsk, a railway town 50 miles north of Vladivostok.

Powerful Miss Howler—"Did my voice fill the drawing-room?" Mr. Rood—"No; it filled the refreshment-room and the conservatory."

## Serial Story

### "His Family."

BY ERNEST POOLE.

(Serial rights reserved by the Farmer's Advocate and Home Magazine.)

#### CHAPTER XXIII.

George met him at the station, as he had done a year before. But at once Roger noticed a difference. In the short time since his father's death certain lines had come in the boy's freckled face, and they gave him a thoughtful, resolute look. George's voice was changing. One moment it was high and boyish, again a deep and manly bass. As he kept his eyes on the horses and talked about his mother, his grandfather from time to time threw curious side glances.

"Oh, yes," George was saying, "mother's all right, she's doing fine. It was pretty bad at first, though. She wouldn't let me sit up with her any—she treated me like a regular kid. But any fellow with any sense could see how she was feeling. She'd get thinking of the accident." George stopped short and clamped his jaws. "You know, my dad did a wonderful thing," he continued presently. "Even when he was dying, and mother and I were there by his bed, he remembered how she'd get thinking alone—all about the accident. You see he knew mother pretty darned well. So he told her to remember that he was the one to blame for it. If it hadn't been for him, he said, they would have gone home in the taxi. That's a pretty good point to keep in her mind. Don't you think so?" he inquired. And Roger glanced affectionately into the anxious face by his side.

"Yes," he said, "it's a mighty good point. Did you think of it?"

"Yes sir," George replied. "I've told it to her a good many times—that and two other points I thought of."

"What are they, son?" asked Roger. "First," the boy said awkwardly, "about how good she was to him. And second, that she let him buy the new car before he died. He had such a lot of fun out of that car—"

On the last words the lad's changing voice went from an impressive bass to a most undignified treble. He savagely scowled.

"Those three points," he continued, in more careful measured tones, "were about all I could think of. I had to use 'em over and over—on mother when things got bad, I mean." A flush of embarrassment came on his face. "And hold her and kiss her," he muttered. Then he whipped his horses. "We've had some pretty bad times this month," he continued, loud and manfully. "You see, mother isn't so young as she was. She's well on in her thirties." A glimmer of amusement appeared in Roger's heavy eyes. "But she don't cry often any more, and with you here we'll pull her through." He shot a quick look at his grandfather. "Gee, but I'm glad you're here!" he said. "So am I," said Roger. And with a little pressure of his hand on George's shoulder, "I guess you've had about your share. Now tell me the news. How are things on the farm?"

With a breath of evident relief, the lad launched into the animal world. And soon he was talking eagerly.

In the next few days with his daughter Roger found that George was right. She had been through the worst of it. But she still had her reactions, her spells of emptiness, bleak despair, her moods of fierce rebellion or of sudden self-reproach for not having given Bruce more while he lived. And in such hours her father tried to comfort her with poor success.

"Remember, child, I'm with you, and I know how it feels," he said. "I went through it all myself. When your mother died—"

"But mother was so much older!" He looked at his daughter compassionately.

"How old are you?" he inquired.

"Thirty-six."

"Your mother was thirty-nine," he replied. And at that Edith turned and stared at him, bewildered, shocked, brought face to face with a new and momentous fact in her life.

"Mother only my age when she died?"

"Yes," said Roger gently, "only three years older." With a twinkle of pain he noticed two quite visible streaks

Story

Family."

NEXT POOL.

erved by the Farmer's Home Magazine.)

TER XXIII.

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of gray in his daughter's soft blonde hair. "And she felt as you do now—as though she were just starting out. And I felt the same way, my dear. If I'm not mistaken, everyone does. You still feel young—but the new generation is already growing up—and you can feel yourself being pushed on. And it is hard—it is very hard." Clumsily he took her hand. "Don't let yourself drop out," he said. "Be as your mother would have been if she had been left instead of me. Go straight on with your children."

To this note he could feel her respond. And at first, as he felt what a fight she was making, Roger glorified her pluck. As he watched her with her children at table, smiling at their talk with an evident effort to enter in, and again with her baby snug in her lap while she read bed-time stories to Bob and little Tad at her side, he kept noticing the resemblance between his daughter and his wife. How close were these two members of his family drawing together now, one of them living, the other dead.

But later, as the weeks wore on, she began to plan for her children. She planned precisely how to fit them all into the house in town, she planned the hours for their meals, for their going alone or with the nurse or a maid to their different private schools, to music lessons, to dancing school and uptown to the park to play. She planned their fall clothes and she planned their friends. And there came to her father occasional moods of anxiety. He remembered Bruce's grim remarks about those "simple" schools and clothes, the kind that always cost the most. And he began to realize what Bruce's existence must have been. For scarcely ever in their talks did Edith speak of anything outside of her family. Night after night, with a tensely born of her struggle with her grief, she talked about her children. And Roger was in Bruce's place, he was the one she planned with. At moments with a vague dismay he glimpsed the life ahead in his home.

George was hard at work each day down by the broken dam at the mill. He had an idea he could patch it up, put the old water-wheel back into place and make it run a dynamo, by which he could light the house and barn and run the machines in the dairy. In his new role as the man of his family, George was planning out his career. He was wrestling with a book entitled "Our New Mother Earth" and a journal called "The Modern Farm." And to Roger he confided that he meant to be a farmer. He wanted to go in the autumn to the State Agricultural College. But when one day, very cautiously, Roger spoke to Edith of this with a hard and jealous smile which quite transformed her features, she said,

"Oh, I know all about that, father dear. It's just a stage he's going through. And it's the same way with Elizabeth, too, and her crazy idea of becoming a doctor. She took that from Allan Baird, and George took his from Deborah! They'll get over it soon enough—" "They won't get over it!" Roger cried. "Their dreams are parts of something new! Something I'm quite vague about but some of it has come to stay! You're losing all your chances—just as I did years ago! You'll never know your children!"

But he uttered this cry to himself alone. Outwardly he only frowned. And Edith had gone on to say, "I do hope that Deborah won't come up this summer. She's been very good and kind, of course, and if she comes she'll be doing it entirely on my account. But I don't want her here—I want her to marry, the sooner the better, and come to her senses—be happy, I mean. And I wish you would tell her so." Within a few days after this Deborah wrote to her father that she was coming the next week. He said nothing to Edith at first, he had William saddled and went for a ride to try to determine what he should do. But it was ticklish business. For women were queer and touchy and once more he felt the working of those uncanny family ties.

"Deborah," he reflected, "is coming up here because she feels it's selfish of her to stay way. If she marries at once, as she told me herself, she thinks Edith will be hurt. Edith won't be hurt—and if Deborah comes, there'll be trouble every minute she stays. But can I tell her so? Not at all. I can't say, 'You're not wanted here.' If I do, she'll be hurt.

Oh Lord, these girls! And Deborah knows very well that if she does get married this month, with Laura abroad and Edith up here and only me at the wedding, Edith will smile to herself and say, 'Now isn't that just like Deborah?'"

As Roger slowly rode along a steep and winding mountain road, gloomily he reflected to what petty little troubles a family of women could descend, so soon after death itself. And he lifted his eyes up to the hills and decided to leave this matter alone. If women would be women, let them settle their own affairs. Deborah was due to arrive on the following Friday evening. All right, let her come, he thought. She would soon see she was in the way, and then in a little affectionate talk he would suggest that she marry right off and have a decent honeymoon before the school year opened.

So he dismissed it from his mind. And as he listened in the dusk to the numberless murmuring voices of living creatures large and small which rose out of the valley, and as from high above him the serenity of the mountains there towering over thousands of years stole into his spirit, Roger had a large quieting sense of something high and powerful looking down upon the earth, a sense of all humanity honeycombed with millions upon millions of small sorrows, absorbing joys and hopes and fears, and in spite of them all the Great Life sweeping on, with no Great Death to check its course no immense catastrophe, all these little troubles like mere tiny specks of foam upon the surface of the tide.

Deborah's visit, the following week, was as he had expected. Within an hour after her coming he could feel the tension grow. Deborah herself was tense, both from the work she had left in New York where she was soon to have five schools and from the thought of her marriage, only a few weeks ahead. She said nothing about it, however, until as a sisterly duty Edith tried to draw her out by showing an interest in her plans. But the cloud of Bruce's death was there, and Deborah shunned the topic. She tried to talk of the children instead. But Edith at once was on the defensive, vigilant for trouble, and as she unfolded her winter plans she grew distinctly brief and curt.

"If Deborah doesn't see it now, she's a fool," her father told himself. "I'll just wait a few days more, and then we'll have that little talk."

To be continued.

Gossip.

Sale Dates.

Feb. 12, 1920.—Dugald McKinnon, R. R. 3, Rockwood, Ont.—Shorthorns.

Feb. 12, 1920.—Lambton County Purebred, Live-Stock Breeders' Association, Petrolia, Ont.

Feb. 13, 1920.—Geo. A. Glennie, R. R. 2, West Montrose, Ont.—Shorthorns and Percherons.

Feb. 18, 1920.—I. N. Howe, R. 2, Mossley, Ont.—Holsteins.

Feb. 20, 1920.—T. H. Hassard, Markham, Ont.—Clydesdales and Percherons.

March 2, 1920.—Bruce County Breeders' Club, Walkerton, Ont.—Shorthorns.

March 2, 1920.—Victoria County Purebred Stock Association, Lindsay, Ont.

March 3, 1920.—Guelph Fat Stock Club, Guelph, Ont.—J. M. Duff, Sec'y.

March 4, 1920.—W. G. Strong & Sons, Gorrie, Ont.—Ayrshires.

March 4, 1920.—Geo. M. Hearne, Burford, Ont.—Shorthorns.

March 4 and 5, 1920.—Union Stock Yards, Toronto, Ont.—Clydesdales, Percherons, Shires and Belgians.

March 9, 1920.—R. Willis, R. R. 1, London.—Holsteins.

March 10, 1920.—Caledonia Shorthorn Breeders, Caledonia.

March 10, 1920.—R. M. Holmes, Otterville, Ont.—Clydesdales and Holsteins.

March 10, 1920.—A. G. McNiven, Putnam, Ont.—Ayrshires.

March 11, 1920.—Russell Bryant, Strathroy, Ont.—Holsteins.

March 16, 1920.—London District Holstein Breeders' Club, London.

March 17, 1920.—Oxford Holstein Breeders' Consignment sale, Woodstock, Ontario.

March 18, 1920.—Fred V. Heaney, Ingersoll, Ont., R. No. 2.—Holsteins.

March 24, 1920.—Perth Breeders' Holstein Club, Stratford, Ont.

THE DOMINION BANK

At the Forty-Ninth Annual General Meeting of the Shareholders of The Dominion Bank, held at the Head Office, in Toronto, on 28th January, 1920, the following statement of the affairs of the Bank as on the 31st December, 1919, was submitted:

Balance on Profit and Loss Account, 31st December, 1918.....	\$440,803 22
Profits for the year, after deducting charges on management and making full provision for bad and doubtful debts.....	\$1,256,053 83
Less	
Dominion Government War Tax (on circulation).....	\$90,000 00
Taxes paid to Provincial Governments.....	26,350 00
	86,350 00
Making net profits of.....	1,169,703 83
	\$ 1,610,207 09

GENERAL STATEMENT

LIABILITIES.	
Capital Stock paid in.....	\$ 6,000,000 00
Reserve Fund.....	\$7,000,000 00
Balance of Profit and Loss Account carried forward.....	495,707 05
Dividend No. 149, payable 2nd January, 1920.....	180,000 00
Bonus, one per cent., payable 2nd January, 1920.....	60,000 00
Former Dividends unclaimed.....	4,089 00
	7,730,796 05
Total Liabilities to the Shareholders.....	\$13,730,796 05
Notes in Circulation.....	\$9,525,809 00
Due to Dominion Government.....	5,000,000 00
Deposits bearing interest.....	\$37,088,309 96
Deposits bearing interest, including interest accrued to date.....	74,325,657 59
	111,414,057 55
Balances due to other Banks in Canada.....	878,911 22
Balances due to Banks and Banking Correspondents elsewhere than in Canada.....	973,956 16
Bills Payable.....	197,532 96
Acceptances under Letters of Credit.....	1,188,405 41
Liabilities not included in the foregoing.....	606,451 47
	129,765,123 77
Total Public Liabilities.....	\$143,504,919 82

ASSETS.	
Gold and Silver Coin.....	\$ 1,980,842 69
Dominion Government Notes.....	15,843,726 00
Deposited with Central Gold Reserves.....	4,100,000 00
Notes of other Banks.....	1,170,382 54
Cheques on other Banks.....	6,816,287 08
Balances due by other Banks in Canada.....	3,857 90
Balances due by Banks and Banking Correspondents elsewhere than in Canada.....	1,988,043 33
	\$31,903,139 60
Dominion and Provincial Government Securities, not exceeding market value.....	8,790,080 39
Canadian Municipal Securities, and British, Foreign and Colonial Public Securities other than Canadian, not exceeding market value.....	13,334,525 62
Railway and other Bonds, Debentures and Stocks, not exceeding market value.....	1,996,115 44
Call and Short (not exceeding thirty days) Loans in Canada on Bonds, Debentures and Stocks.....	9,352,534 25
Call and Short (not exceeding thirty days) Loans elsewhere than in Canada.....	4,098,984 25
	\$70,075,879 55
Other Current Loans and Discounts in Canada (less rebate of interest).....	65,396,248 68
Other Current Loans and Discounts elsewhere than in Canada (less rebate of interest).....	1,050,488 62
Liabilities of Customers under Letters of Credit, as per contra.....	1,168,405 41
Real Estate other than Bank Premises.....	5,469 87
Overdue Debts, (estimated loss provided for).....	74,566 85
Bank Premises, at not more than cost, less amounts written off.....	5,407,180 30
Deposit with the Minister of Finance for the purposes of the Circulation Fund.....	304,500 00
Mortgages on Real Estate sold.....	22,680 84
	78,429,540 27
	\$143,504,919 82

E. B. OSLER, President. C. A. BOGERT, General Manager.

AUDITORS' REPORT TO SHAREHOLDERS

We have compared the above Balance Sheet with the books and accounts at the Chief Office of The Dominion Bank, and the certified returns received from its Branches, and after checking the cash and verifying the securities at the Chief Office and certain of the principal Branches on December 31st, 1919, we certify that, in our opinion, such Balance Sheet exhibits a true and correct view of the state of the Bank's affairs, according to the best of our information, the explanations given to us and as shown by the books of the Bank.

In addition to the examinations mentioned, the cash and securities at the Chief Office and certain of the principal Branches were checked and verified by us at another time during the year and found to be in accord with the books of the bank.

All information and explanations required have been given to us and all transactions of the Bank which have come under our notice have, in our opinion, been within the powers of the Bank.

G. T. CLARKSON } of Clarkson, Gordon & Dilworth, C.A.  
R. J. DILWORTH }

TORONTO, January 20th, 1920.

## Deafness



Perfect hearing is now being restored in every condition of deafness or defective hearing from causes such as Catarrhal Deafness, Relaxed or Sunken Drums, Thickened Drums, Roaring and Hissing Sounds, Perforated, Wholly or Partially Destroyed Drums, Discharge from Ears, etc.

**Wilson Common-Sense Ear Drums**  
"Little Wireless Phones for the Ears" require no medicine but effectively replace what is lacking or defective in the natural ear drums. They are simple devices, which the wearer easily fits into the ears where they are invisible. Soft, safe and comfortable. Write today for our 168 page FREE book on DEAFNESS, giving you full particulars and testimonials.

WILSON EAR DRUM CO., Incorporated  
593 Inter-Southern Bldg. LOUISVILLE, KY.

## POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at four cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 60 cents.

**BABY CHICKS, EGGS FROM OUR WHITE** Leghorns, "Barron-Wyckoff strains." Send for our new, free catalogue and prices. Britannia Poultry Farm, R.R. 6, Brampton, Ont.

**BARRED ROCKS—EGGS FOR HATCHING** from trap-nested pedigreed layers. Ten pullets laid 2,044 eggs in eleven months. Few cockerels left. F. Coldham, Box 12, Kingston, Ont.

**BRED-TO-LAY WHITE WYANDOTTE** cockerels, Martin's strain, three-fifty each. W. S. Bennett, R. 1, Freeman, Ont.

**BABY CHICKS, ANCONAS, AND LEGHORNS** \$13 per fifty, \$25 per hundred, delivered. Maiting list ready, order now. G. A. Douglas, Ilderton, Ont.

**BRED TO LAY S.C. WHITE LEGHORNS—** choice cockerels \$3.00 each. Order baby chicks now. Literature free. Cooksville Poultry Farm, Cooksville, Ont.

**BRED-TO-LAY BARRED ROCKS—COCK-**ERELS three dollars and pullets two-fifty. A. Donaghy, Colborne, Ont.

**CHOICE PEN OF WHITE ROCKS. TEN** pullets and yearling cock; stay white and best breeding; thirty-five dollars. E. E. Charlton, Ilderton, Ont.

**FOR SALE—HATCHING EGGS, \$1.50 A SET-**TING; baby chicks, 25c. each; bred-to-lay S.-C. White Leghorns and B. P. Rocks. Hillside Poultry Farm, Christian Z. Albrecht, Prop., Bamberg, Ont.

**GOOD BARRED ROCK COCKERELS—\$5,** two \$9.50, three \$14. Eggs—fifteen \$2.50, thirty \$4.75, fifty \$7.50, \$14 hundred. From well barred and grand laying hens. Order direct from this advertisement. W. Bennett, Box 43, Kingsville, Ont.

**INDIAN RUNNER, WILD MALLARD** ducks, White Guineas, Barred Rocks. Mrs. John Annesser, Tilbury, Ont.

**I HAVE SOME LIGHT BRAHAM COCK-**ERELS for sale. E. H. Vint, Wyevale, Ont.

**PUREBRED WHITE LEGHORN COCK-**ERELS, \$2 each; Rouen duck eggs. A. F. Thornton, Thamesford, Ont.

**ROSE-COMB (REDS) COCKERELS—GOOD** water-laying strain; three-fifty. Alex. McKinney, Erin, Ont.

## Crate-Fattened Poultry

We are open for shipments of crate-fattened poultry. Highest market prices paid, according to quality.

**HENRY GATEHOUSE & SON**

Fish, Oysters, Game, Poultry, Eggs and Vegetables.

144-350 West Dorchester Street, Montreal

## WANTED Crate Fed Chickens

Dressed

Also

Large Hens Alive or Dressed

Write for price list.

**WALLER'S** 702 Spadina Ave. TORONTO

FOR SALE

## Barred Rock Cockerels

The O.A.C. bred-to-lay strain. Finely barred, single comb, rich yellow legs; sisters laid at 5 months. Price \$5 each.

A. H. CROZIER Ontario

## POULTRY WANTED

It will pay you to sell your poultry to the best market in Western Ontario. Special prices this month for heavy live hens. Be sure and sell to C. A. MANN & CO.

78 King St. London, Ontario

**BABY CHICKS** We ship thoroughbred chicks. All standard varieties. Safe arrival guaranteed. Delivery charges paid. Write for free illustrated catalogue and prices. **CANADIAN CHICK HATCHERY, LIMITED** Box 192C, Hamilton, Ont.

## Gossip.

Sale Dates.

March 25, 1920.—F. A. Legge, Jefferson, Ont.—Holsteins.

March 31, 1920.—Belleville District Holstein Club, Belleville, Ont.

April 1, 1920.—Norfolk Holstein Club, Hagersville, Ont.

Clearing sale of I. N. Howe's herds and flocks at his home, "Glenwood Stock Farm", R. No. 2, Mossley, Ont., Wednesday, Feb. 18 next. There is yet time to obtain a catalogue of this important sale which includes 40 head of high-class Holsteins, there being 15 daughters of the herd sire, "Baron Colantha Fayne," in the sale. There will also be sold a number of registered Clydesdales, 33 pure-bred Shropshire sheep, and 23 Poland China swine.

The farm is only 3 miles from Putman C. P. R. or 7 miles from Ingersoll. Conveyances will be provided and the sale will be under cover. Get a catalogue and attend the sale.

## Winter and Spring Feeding.

Keep your animals thriving so that they will lose no time picking up when put on pasture. The most economical way to accomplish this is to give them Herbageum twice daily. The cost for each horse, cow, beeve and hog is less than one cent a day, and the cost for three sheep or three calves or twenty fowl is less than one cent a day. To be exact only five-sixths of a cent a day, as one pound costing 25c. is sufficient for a horse, cow, beeve or hog, or for three sheep or three calves or twenty fowl for 30-days, that is five-sixths of a cent a day. If you cannot purchase it where you deal, The Beaver Mfg. Co., Ltd., of Galt, Ont., will send to any Post Office in Canada a 4-lb. package by Registered Parcel Post for \$1.40, or will deliver freight prepaid to your station 50 lbs. for \$12 or \$100 lbs. for \$23. Cash with order.

By its use you will be able to use more roughage and save expensive meals and grains at the same time keeping your animals in better condition. While the flesh, milk and butter produced will be in every respect better and the egg return increased. As good calves can be raised on skim or separated milk with Herbageum as on whole new milk without it. And no "Sheep Dips" will be required as the sheep will be free from ticks and will produce stronger lambs, while at shearing time there will be more wool and of better quality. In over thirty years Herbageum has never failed, when used as directed, to do all that has been claimed for it.

With present prices of farm produce Herbageum would be profitable for regular use if it were \$40 per 100 lbs. instead of \$23. Use it regularly with all animals when not on a good pasture. It is not a food nor is it a medicine. It replaces values which are in a good pasture but which are lacking in dry foods.

Make your own Calf Meal, as follows: 100 lbs. Oil-Cake Meal, 100 lbs. Feed Flour, 200 lbs. Wheat Middlings, 4 lbs. Herbageum, 1 lb., Fine Salt. Mix well; stir about two cupfuls in a gallon of scalding water and feed warm. If you cannot get Oil-Cake Meal use Ground Oats.—Adv't.

Willie Answered.—A doctor who was superintendent of the Sunday-school in a small village asked one of the boys this question:

"Willie, will you tell me what we must do in order to get to heaven?"  
Said Willie, "We must die."  
"Very true," replied the doctor, "but tell me what we must do before we die."  
"We must get sick," said Willie, "and send for you."—Newark Speed Up.

A Good Extractor—Willie had swallowed a penny, and his mother was in a state of alarm.

"Helen," she called to her sister in the next room, "send for a doctor; Willie has swallowed a penny."

The terrified and frightened boy looked up imploringly.

"No, mamma," he interposed, "send for the minister."

"The minister?" asked his mother, incredulously. "Why the minister?"

"Because papa says he can get money out of anybody."—London "Tit-Bits."

## Big Dispersion Sale

# Clydesdales & Percherons

STALLIONS AND FILLIES

To be sold by PUBLIC AUCTION at

MARKHAM, ONTARIO, on

Friday, February 20th, 1920

THE PROPERTY OF T. H. HASSARD

The lot consists of:

15 Clydesdale Stallions

5 Percheron Stallions

7 Clydesdale Fillies

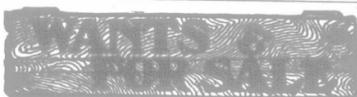
And the Champion Standard Bred Stallion, Peter Wilton.

As the property has been disposed of the animals will be sold without any reserve, and the sale will take place under cover, rain or shine. They are a high-class lot of show horses.

If interested, write for catalogue, with full description of horses, terms and conditions of sale.

T. H. Hassard, Proprietor, Markham, Ont.

Geo. Jackson, Auctioneer, Port Perry, Ont.



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted and Pet Stock.

TERMS—Four cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 60 cents.

**BLACK SIBERIAN HARES, 4 MONTHS, \$2.00** each; common rabbits fifty cents each. Frank Gollings, Science Hill P.O., St. Mary's, Ont.

**COLLIE PUPS FOR SALE—\$8 FOR MALE,** \$5 for female. Guaranteed heelers. Andrew Dodds, Belmont, Ont.

**FARM FOR SALE—WESTMINSTER TOWN-**SHIP, 150 acres best farming land available; clay loam; ideally situated on main road between London and St. Thomas, 6 miles from St. Thomas, 9 miles from London, 1 mile from L. & P. S. Ry. Two-story brick house, 2 barns, 1 bank, 10 acres fall wheat. Immediate possession. Apply J. Macdonald, 45 Stanley St., St. Thomas.

**POSITION WANTED BY QUALIFIED MAN** as farm manager or combined farm and garden, preferably on gentleman's country place, where the best of results are desired. Reply, stating full particulars, B. P., Box 206, MacDonald College, St. Anne De Bellevue, Que.

**SINGLE MAN SEEKS POSITION ON FARM—**Can milk, good with horses; Ontario preferred. Has widowed mother who would require cottage. Address all replies to 522 Casgrain St., Mile End, Montreal.

**WANTED—DAIRYMEN WANTED—MUST** be good milkers; returned soldiers preferred. Cash to Dept. of Soldiers' Civil Re-Establishment, Speedwell Hospital, Guelph, Ont.

**WANT TO HEAR FROM PARTY HAVING** farm for sale—Give particulars and lowest price. John J. Black, Advocate St., Chippewa Falls, Wis.

**YOUNG, EXPERIENCED DAIRY HAND** wants work on dairy farm. Please state wages. Disengaged first of March next. Box 84, Farmer's Advocate, London.

**200-ACRE FARM FOR SALE—SOIL, CHOICE,** clean gravel loam; good water supply, new basement barn 45x100; good nine-room frame house, 25 acres hardwood timber, mostly sugar maple. This is a splendid dairy farm. Apply Nathaniel Carothers, Wilton Grove, Ont.

**62 BREEDS PROFITABLE** Pure-Bred Chickens, Geese, Ducks, Turkeys, Hardy Fowls, Eggs and Incubators at lowest prices. Pioneer Poultry Farm. Valuable poultry book and catalog FREE. F. A. NEUBERT, Box 110 Mankato, Minn.



## Auction Sale of Pure-bred Yorkshires and Holstein Cattle

on Thursday at 1.30 p.m. sharp  
FEBRUARY 26th, 1920

on Lot 10, Con. 2 Brantford Township, one and a quarter miles south of High School Paris, the following stock will be sold at auction.

**SWINE** 8 Pure-bred Yorkshire sows, born April 27th, 1919, Dam Oak Lodge Pride 211-57777 bred December 28th, 1919, to Jan. 18th, 1920.

4 Pure-bred Yorkshire sows—open, born May 29th and June 5th, Dams Bonny Vista Pride 63758 and 63759.

1 Pure-bred Yorkshire boar—born July 20th 1919, Dam Bonny Vista Pride 63760.

All the above are Sired by Qak Lodge Famous 222-64008, whose full sister was "Grand Champion at Chicago International" 1919 and whose Dam was "under six months" Champion at Guelph and Ottawa 1917.

1 Pure-bred boar, Oak Lodge Masterpiece 42-57774 born Sept. 23rd 1917, Dam Oak Lodge Maiden 104-52501 Sire Pine Grove Record 4-43606.

A number of Grade sows and shoats will also be offered.

**CATTLE** 11 Grade Holstein cows due to freshen between March 15th and midsummer.

1 Heifer 16 months old.

1 Pure-bred Holstein heifer, born February 1919, Dam Dumfries Iauline—44386. Sire Plus Evergreen 28609 whose Dam Evergreen March 3899 gave 26,107 lbs. milk in 1 year and 29.45 lbs. butter in 7 days.

Terms Ten months credit is given, or six per cent. discount for cash.

R. SCHUYLER, Proprietor, - Paris Alfred Perley, R. J. Thomas, Burford, Auctioneer. Auctioneer.

**PATENTS** Canadian, Foreign, Booklets Free

Egerton R. Case, 10 Adelaide East, Toronto

One choice Hereford bull left for sale. 15 months old, the get of Clayton Donald half brother to Perfection Fairfax. Price reasonable. WILBERT MAY R.R. No. 2, Orangeville, Ont.



When writing advertisers will you kindly mention The Farmer's Advocate.

**Something About Northern Ontario**

EDITOR "THE FARMER'S ADVOCATE":

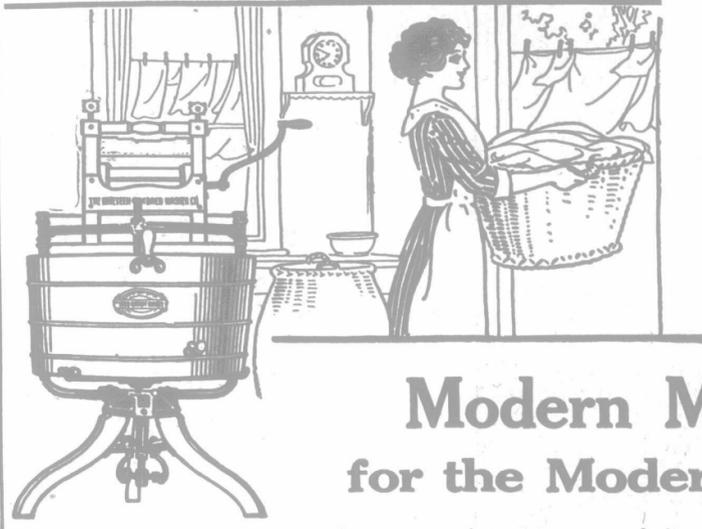
The old Northern-Ontario pioneer today is somewhat dubious, indeed he is far from optimistic since the old order of things is likely to pass away with the Government whose policy was strongly in favor of the development of that vast country known as New Ontario. He has not failed to note the trend of opinions expressed in some of the newspapers from time to time, and had he heard some of the statements made on the public platform in reference to the country of his adoption, he would be still more inclined to dismal foreboding. One gentleman, referring to the country immediately north of Cochrane, stated recently that the millions spent in developing Northern Ontario were wasted.

"It would never be anything but a wilderness, as he knew for a fact that at any time during the summer the ground just below a thick covering of moss was frozen solid, and the long and dreadful winters would paralyze every effort towards successful farming."

This "fact," he must have gleaned from ancient history, as the writer knows for an actual fact that this is absolutely untrue. The fires of recent years have made such a thing impossible. The evergreen bush is fast disappearing, and any extensive areas must be sought for, in these days, many miles beyond the settled part. Years ago, one could find the ground under a moss covering frozen in some parts where the land was low and the evergreens grew quickly. I venture to assert that such a state of affairs existed in part of Old Ontario many years ago, to some extent at least.

The extraordinary changes which have taken place in New Ontario within the last five years are worth calling attention to. The settler has cleared thousands of acres, and the great fires which occurred periodically have opened up vast tracts of land extending for hundreds of miles. This has had a wonderful effect on the climate conditions; summer frosts are less prevalent; the spring is earlier and the winter comes later than formerly. Then one must not lose sight of important other things; the black flies are confined more to the remnants of the green bush, and the mosquitoes compelled to hunt more cautiously as the open spaces increase.

Possibly, a short review of 1919 may prove of interest. Spring came early and was conducive to rapid growth. Plenty of rain fell in early spring, but like other parts of Ontario was followed by a drought which retarded all growth, but was favorable to land clearing, of which full advantage was taken, resulting in serious menace from fire, which found plenty of fuel in places, but was unable to work any serious destruction, being practically confined to places where pulp wood had been taken out and clearings which were not completed. Some anxiety was felt as to the proportion such fires might assume, but those who got ready to fight and did not run away, saved their places. The real danger was from the fire which crept along the ground, finding fuel in dry roots and punk, and in some cases hard to overcome even by digging or plowing. The new land not having been disturbed, contained much inflammable matter, crops suffered to some extent in consequence. A good rain put a stop to the fire, but unfortunately it was followed by a heavy frost which damaged crops. Excessive rains, prolonged drought, fire and frost would be expected to discourage the most optimistic settler, and it doubtless did. The hay crop was light and the grain did not fill well. This condition of things existed in August, yet before October came no one could doubt that the wonderful recuperative powers in the land changed matters to an extraordinary extent. Potatoes had been cut by frost and looked like a complete failure, grain was not worth cutting well on in July. On the eighth of September, a second crop of clover was in full bloom, exceeding the first cut of hay, both timothy and clover, by 100 per cent. in some cases. Potatoes, blossoming for the second time, turned out well; roots came on rapidly and an exceptionally good harvest was the result. Is it any wonder then, that those who live in New Ontario do not lose faith in its great possibilities? Had



**Modern Methods for the Modern Woman**

Thrifty Housewives Approve this Means of Saving Time and Labor

SCIENCE offers you a skilled servant—the "1900" Gravity Washer. With one of these machines in your kitchen, you can face wash day with a smile. For it will make it possible to wash clothes more efficiently than human hands can do. You need a

**"1900" GRAVITY WASHER**

This machine will save you labor, worry, time, clothes and money. There are 5 important points about a Washing Machine

1. Does it Wash Clean? With a vigorous motion the "Gravity" drives the soapy water clear through the fibres of the clothes until they are thoroughly clean.
2. Is it Easily Operated? Because gravity plays so large a part in its action, our Washer requires the least labor of any machine on the market. Gravity does all the hard work.
3. Does it Wash with Speed? The "1900" Gravity Washer takes just six minutes to wash a tub full of very dirty clothes.
4. Does it Save Wear and Tear? Because the clothes are held still while the water and tub are in motion, there is absolutely no strain on linens, lawns, or laces washed the "Gravity" way. No frayed edges—no broken buttons.
5. Is the Tub Well Built? The "1900" Gravity tub is made of Virginia White Cedar, which we know, from 20 years' experience, is positively the best wood for making washing machines. It is bound together with heavy galvanized steel wire hoops, which will not break, rust, or fall off. The tub is detachable—an important feature.

If you are interested, let us tell you more about it. There's a book about the "1900" Gravity Washer, which we will send to you if you will ask for it.

We make a full line of washers—machines that operate by Hand, Engine Power, Water Power and Electric Motor. And we have descriptive literature on each of them. So when you write, state which you are particularly interested in—and ask about our Free Trial Offer.

**THE NINETEEN HUNDRED WASHER CO.**  
354-A YONGE STREET, TORONTO

*Goos Like Sixty*



**THIS ENGINE WILL COST YOU NOTHING**

YOU need an engine—get a Gilson on our new easy payment plan, and it will pay for itself. You have the work for it to do all Winter through—help is scarce and high-priced—save yourself a lot of worry and enjoy that "feeling of security" which is such a definite part of the staunch, reliable Gilson Engine.

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

**GILSON MFG. CO., Limited - 519 York St., GUELPH, Ont.**

**WISCONSIN INCUBATOR AND BROODER BOTH FOR \$19.50**

**130 Egg INCUBATOR**  
**130 Chick Brooder**  
BOTH FOR **\$19.50** Freight and Duty PAID

If ordered together we send both machines for only \$19.50 and we pay all freight and duty charges to any R. R. station in Canada. We have branch warehouses in Winnipeg, Sask. and Toronto, Ont. Orders shipped from nearest warehouse to your R. R. station. Hot water, double walls, dead air space between, double glass doors, copper tanks and boilers, self-regulating. Nursery under egg tray. Especially adapted to Canadian climate. Incubator and Brooder shipped complete with thermometers, lamps, egg testers—ready to use when you get them. Ten year guarantee—90 days trial. Incubators finished in natural colors showing the high grade California Redwood lumber used—not painted to cover inferior material. If you will compare our machines with others, we feel sure of your order. Don't buy until you do this—you'll save money—it pays to investigate before you buy. Remember our price of \$19.50 is for both Incubator and Brooder and covers freight and duty charges. Send for FREE catalog today, or send in your order and save time.

**WISCONSIN INCUBATOR CO. Box 224 RACINE, WISCONSIN, U. S. A.**

Write Us Today—Don't Delay

Please mention The Farmer's Advocate.

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description of  
nam, Ont.  
y, Ont.  
Sale of  
Yorkshires  
ein Cattle  
1.30 p.m. sharp  
26th, 1920  
rantford Township,  
south of High School  
will be sold at auction.  
re-bred Yorkshire sows,  
April 27th, 1919, Dam Oak  
Pride 211-57777 bred  
Jan. 18th, 1920.  
sows—open, born May  
ms Bonny Vista Pride  
e boar—born July 20th  
Pride 63760.  
by Oak Lodge Famous  
er was "Grand Champion  
1919 and whose Dam was  
ampion at Guelph and  
Lodge Masterpiece 42-  
1917, Dam Oak Lodge  
ne Grove Record 4-43606.  
ws and shoats will also be  
Grade Holstein cows  
to freshen between March  
n and midsummer.  
eifer, born February 1919,  
-44386. Sire Plus Ever-  
Evergreen March 3896  
n 1 year and 29.45 lbs.  
credit is given, or six per  
nt for cash.  
roprietor, - Paris  
Thomas, Burford,  
Auctioneer.  
Canadian, Foreign,  
Booklets Free  
Adelaide East, Toronto  
e Hereford bull left for  
months old, the set of  
onald half brother to Per-  
rifax. Price reasonable.  
ILBERT MAY  
2, Orangeville, Ont.  
rmer's Advocate.



**BRAND**  
*All Wool Underwear*

Worn for the last fifteen years by Canada's nation builders—on railroads, farms and the Empire's battlefields; in mines and in construction camps. Warmth and durability. Medium and heavy weights. Combinations and two piece suits. Guarantee with every garment. Moderate prices. Sold everywhere.

**Bates & Innes Limited**  
CARLETON PLACE  
Ontario

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a visitor driven through the settled parts during July he would not have been impressed by what he saw then, except perhaps to thank God in his heart that his lot was cast in a more pleasant place, and going away, would naturally speak of the disheartening sight of meagre crops and other things, as he saw them. The longer hours of daylight and the good soil, with other things peculiar to this country, brings about a transformation almost startling, and this is one of the charms as well as truths which every settler realizes when he sells and leaves in a fit of the "blues."

New Ontario is worthy of every effort and expenditure which the Government can judiciously make in development, for each year increases its agricultural value and emphasizes the fact that before many years this will be a great cattle country. The discouragement and hardships of the settlers are decreasing year by year, and their financial affairs become more satisfactory. Schools are being built where practicable and roads improved; the log building is giving place to frame and substantial barns and other buildings are frequently seen where fairly extensive clearings exist, all indicating a present prosperity and faith in the future of this country where the poor man may begin life in a humble way and in a few years become prosperous with ordinary industry, for he has many advantages, such as material for building, fuel in abundance and a market for his wood at good prices. A few acres on which to throw his clover seed will produce feed for his cow and horse, and there are no taxes. Moose steak and other meats for the hunter and wild berries in immense quantity of fine flavor, and many other advantages more than compensate for all the drawbacks. Surely the Government will see to it that road improvement and other developing work in New Ontario is carried out vigorously, when the evidence is so strong in proof of the wisdom of doing so.

A number of farmers whose homes are in Old Ontario are developing places in the North, coming after seeding operations are over, they spend some months doing development work, others come later in the fall, residing and working on their places most of the winter or engaging in work for others. Although this is not just the way that the settlement duties ought to be done in the best interest of the country and those who have homes here, it is at least some help and is preferable to another "modus operandi," which is followed by the town dweller who pays for some improvement being done each year, does settlement duties indifferently well, by proxy, and hangs on to his lot with a view of selling it at a good price later on. As a business man, he uses good judgment in keeping his land and improving it, for the price of farms with only one or two acres improved has come to mean something where any settlement has taken place, and any well-located lot would bring a substantial profit if sold, and there being no taxes the expense of holding a place is practically nothing. It is right here that you will find the worst feature in the settlement of this new country. The country calls for and needs permanent residence. Not only is work and transportation made harder, social life is not possible. Families living on nearby places mean schools, wives and mothers and young people are not only content to share in the pioneer life but are quite happy in these conditions, and enthusiastic in their endeavors to promote happiness and help to make, not only a place to live, but a home, and the simple life after all, makes for a healthier, happier and more care-free people. An occasional trip to the city is a pleasant change, which arouses no yearnings but rather accentuates the contentment for the simple life, which the city dweller cannot understand.

As a comparison, take some of the improved farms on which are substantial buildings within fifty miles of Toronto. How many city families have been beguiled by the real-estate agent into buying and found to their sorrow that land which is composed of sand, such as a number of these farms, are absolutely useless. Nothing can be successfully grown, yet each year some deluded mortal attracted by the price, stakes his all only to find it a dead loss. I examined some of these places a few years ago and apparently they offered possibilities, but upon enquiring I was informed that for

years the game had been played and hopeful city dwellers had gone on the land only to find their investment a complete loss and left, in many cases, penniless. How does this compare with a homestead in New Ontario? Granting that there are many lots which, under present conditions, it would be foolish to develop, the fact remains that any able-bodied man can, for a nominal payment, get a grant of 100 acres and from this can make a living, either from the sale of wood or from employment which can be found at any time. He can build his little home and in a few years have a clearing. A small capital is all that is necessary to go ahead with, or he can buy an improved farm with buildings and a small clearing for a few hundred dollars, or a place with sufficient clearance to grow all his requirements for horses and a cow or two, involving an outlay of about \$1,500. Such places are to be had with practically virgin soil of a quality equal to the best.

I am not championing the North Country with any ulterior motives. It is with a sincere wish to see a just view of that country taken by those who have been misled during the late political campaign, by the statements made publicly by those who are opposed to any further money being spent in developing Northern Ontario.

Timiskaming, Ont. H. W. PARSONS.

**The Horse Sale.**

"Against you, Sir!" "Twenty pounds I am bid!"  
"Twenty-five!" called I (my suspense I hid).  
"Thirty!" "Thirty-three," I could bid no more.  
Then a pause, a silence, then "Thirty-four!"  
He was restless now. "Whoa Dobbin there, whoa!"  
Did he know, I wonder, he'd have to go? Then he turned, and his looks said plain to me:  
"Is that all you've got, master, Thirty-three?"  
"Yes, Dobbin, God help us," cried I, and then,  
A voice broke the stillness ('twas God's Amen!)  
"Selling Dobbin, Dad, are you? Short of oats!"  
And he put in my hands a roll of notes. 'Twas my soldier-son come home overseas. Accident? answer to prayer? which you please!  
Of in dreams I cry: "I can bid no more;" Then a pause, a silence, then "Thirty-four!"  
But the morning drives all shadows away And I hear in the paddock Dobbin's neigh.

REV. W. WILLIAMS, M. A.

His aunt was rich and elderly. She had called unexpectedly when he was out, and his wife was trying to entertain her by such methods as she thought best conducive to their future welfare.

The old lady had recently added a phonograph to her establishment, and when she heard that early that morning her loving nephew had made for her a record of her favorite violin solo she was delighted.

"How nice of him!" she said. "Can I hear it?"

"Well," said her niece, "we haven't tried it yet, but I'll put it on."

It was a pronounced success, and the old lady was charmed.

But her feeling changed when after the solo was finished the instrument brought out these words with fatal clearness:

"Phew! If that isn't good for an extra hundred in the old girl's will, I'm a Dutchman!"

Bills are now pending in both Houses of Congress at Washington, by which all woollen goods and mixed goods must be labelled as "all wool" or must state the percentage of cotton used. Henceforth if these bills pass, people in the United States cannot have shoddy imposed on them.

The Irish poet and dramatist, William Butler Yeats, also Mr. St. John Ervine, the Irish novelist, are in Canada.

**Some Northern Methods.**

BY ROBERT G. HODGSON.

All trappers are interested in the methods as practiced by the trappers of the North, be they whites or Indians; this doubtless being because they think these people as professional trappers would have better methods than they have.

However, to tell the truth, there is nothing very new in trapping in the methods employed, whether it is in rural districts or the far Northern parts of Canada, so long as it is an experienced and well-read trapper who is trapping in each place. Of course, there are the differences made necessary by different climates and different circumstances; but the professional reads the trapping publications in search of new methods, new information of other trappers, who are perhaps only amateurs, quite as much as the amateur and small trapper reads these same publications in the hope of securing valuable information from the professional. There are two points on which most Northern trappers differ, and they are, the traps to be used; and the scents or decoys, commonly termed "medicine" by them. A professional trapper seldom, if ever, buys manufactured lures, for as one old ex-Hudson Bay factor told me, "We can make better 'medicine' for one-tenth of the cost." I have heard many of these old war-horses of the wilds arguing backward and forward on these two questions, and yet when it was all boiled down, it meant little, for as wide apart as their arguments may have been in starting, when they ended, there was not a great deal of difference between the opinions.

In former years, these trappers would no more think of using anything but a Newhouse trap, than I would of using a mouse trap for mink; anything but a Newhouse, no matter by whom made, was no good; but now I notice that the Victor and Jump traps are replacing the Newhouse in the smaller sizes. In the larger sizes they still stick to the Newhouse. I asked an Indian why they did not use the larger sizes of Victor and such of the lighter brands, and he said: "For mink, marten, weasel, muskrat—heem good; for otter, beaver, bear—heem no good," which shows their prejudices you see.

Two Indian fox methods, which give excellent results, are the following:

Save the urine from every fox you catch, and sprinkle some on the beds and places where you make your fox sets. Every fox will stop at this place to cast his water, similar to dogs, and will scratch over it. The trap should be placed a foot or so from the spot where the water is sprinkled, and you will catch them every time when they turn around to scratch. This plan has become "civilized" to some extent, and now one-quarter as much fish brine—taken from salted whitefish or mackerel—as there is urine—is often added to make it go further, improve the formula, and preserve it.

Get some mice nests from the grain bins or a field; now find where the foxes cross meadows, or fields, or run through the woods, or wherever they have a trail. Rake up some fine grass, earth and other debris, and make a "bed" two feet square. Put the mice nests on this bed and setting the traps in the nests, allow the edges of the nests to show, as an attraction to Mr. Fox. Now get some live mice and a handful of wheat; tie the mice by means of a string to the bottom of trap, and sprinkle some wheat around, so they can get it, as it may be several days before the fox comes around, and of course the mice must be alive if they are to be of any use as an attraction. The odor of the nest is very strong and highly attractive to the fox. The trap used for fox by the Indian is the 1½ Victor, Jump or Newhouse.

I do not believe the Indian considers the matter of human scent in trapping any animal. All traps are, of course, set carefully, because the Indian recognizes this of the utmost importance; traps are usually set with gloves or mitts on, not on account of the human scent, but because they wish to protect their hands from the cold.

The following method, while not an Indian method, is one used by a Hudson Bay trapper:

Find where the foxes have been running,

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Here is a furnace you can put in NOW as well as any time. It is hardly a day's work

**T**HAT means you can have your furnace NOW, when you need it most; that you can make your home cozy and be comfortable for the rest of this winter.

Then why put off enjoying your furnace until next winter?

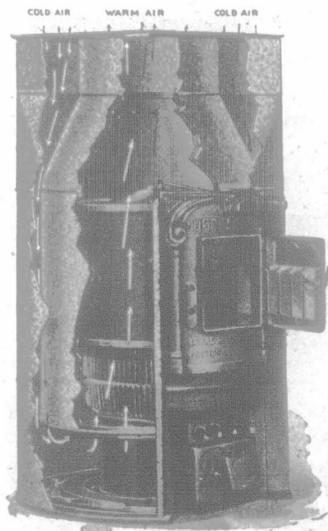
There's no need to wait until spring to have the work done. With this Pipeless Furnace there is hardly any work anyway. You can do it now as well as any time. There is no cutting up the walls of your home, no muss or trouble, no need for a big excavation, no men tracking dirt through the house. Inside of twenty-four hours your Hecla Pipeless can be installed and the fire started.

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**T**HE Hecla Pipeless is the modern style of furnace for a six or eight-roomed house. It circulates heat in a house with less waste than any other style of furnace. One large register directly over the furnace sends out the warm air and draws in the cold air. It is the simplest, most economical, and, as hundreds have found, the best method of heating homes, stores, schools and buildings of all kinds. The furnace itself is the famous Hecla. It has the same safeguards against gas and dust, for the joints are fused. It has the large, circular waterpan to supply health-giving moisture. It has the steel-ribbed Firepot that saves one ton of coal in seven.

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economy, their clean, healthful heating, and their durability.

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You save money too by installing the Hecla Pipeless. There are no pipes—and so no expense of putting them in. No carpenters' bills, no costly labor. When you pay for the furnace you have practically paid for everything, for the work of installing should cost but a trifle.

**You Can Get Your Furnace Promptly**

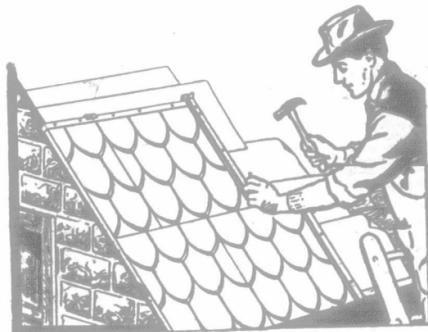
The first thing is to write to us, tell us about your house and find out what the Hecla Pipeless Furnace can do for you. Don't put it off another cold winter's day. We can send you your furnace the day you order, and in a few days later your home will be cozy and warm. Write NOW.

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and if their trails lead between two trees which stand close together, set your trap—a Newhouse 1½—in the centre of the space between the trees, in the following manner: Brush out a hole in the snow just large enough to receive the trap; set your trap in this hole and under the pan place a tuft of common white cotton wool; also work some of the same material in around the jaws of the trap, and on the springs, and then just over the pan of the trap place a dead mouse in such a position that it will resemble a live one. Brush snow over everything lightly, and close up against one of the trees place a part of a rabbit skin so as to resemble

a rabbit's back. To make the catch more sure, place some bait directly over the trap, about four feet high. Back out away from the trap, brushing out all trace of yourself as you go.

For marten, fisher, lynx, bear and all other such animals, the professional trapper uses the "pen-set" more than any other; in fact, I am safe in saying, more than all other methods combined. The size of the pen varies with the animal to be trapped, but the following description will serve as an illustration of the actual construction. The following is the size used for marten: Split some birch, oak, maple or other hardwood in slabs, a

couple of inches in thickness and about eighteen inches in length. Now with these chunks build a pen about eighteen inches square, standing the slabs on end, of course, with the split side turned inward to make the interior lighter. Roof it over with brush, bark, etc. No back will be required, as it should be built against a tree-trunk to give it support, the south end being left open, at the entrance to which the trap—Victor, Newhouse or Jump No. 1—is set. The bait, which for marten is usually rabbit or partridge (the Indian uses smoked fish, smoked moose-meat or smoked venison), is placed at the back of the pen.

The teacher was giving the class a natural-history lecture on Australia. "There is one animal," she said, "none of you have mentioned. It does not stand up on its legs all the time. It does not walk like other animals, but takes funny little skips. What is it?" And the class yelled with one voice, "Charlie Chaplin!"

"Do you find poultry-keeping pays?" "Well, no; I can't say that it pays me, but I think that it pays my boy Jim." "How's that?" "Well, you see, I bought him the fowls. I have to pay for their keep and buy the eggs from him, and he eats them."

## Sale March 22<sup>nd</sup>



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At Once**

**Last Receiving Date  
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You will get the opinions on your furs expressed in the satisfying form of RECORD PRICES by at least 300 buyers from the chief great distributing centers of the world.

The SMALL SHIPPER is welcome—we want to prove to all consignors, large or small, our certain ability to get them real results.

WE HAVE NOTHING to offer buyers at this sale but genuine average Canadian furs in ORIGINAL collections—that's all—just the best in the world! Immense quantities of every variety marked on this tag are on hand—yet we have not nearly enough—there are not enough anywhere to supply the universally keen demand existent.

March 1st is last receiving date; all shippers are cordially invited to attend the sale.

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**The Destruction of Rats on the Farm.**

(Experimental Farms Note.)

The annual losses on Canadian farm homesteads due to the depredation of rats have never been estimated, but they must amount to tens of thousands of dollars. There are few farmers in Eastern Canada who do not suffer from the ravages of this destructive rodent and unfortunately, having invaded the prairie provinces, this pest is now rapidly spreading westward.

There is nothing eatable, animal or vegetable, that the rat will not attack and it will "destroy by pollution ten times as much as it actually eats." On the farm, grain of all kinds, vegetables and fruits, eggs and poultry, constitute the chief objects of its foraging. It is omnivorous, voracious, destructive and withal very prolific when there is an ample food supply. No one means of destruction is usually successful and recourse must be had to as many of the various agencies of destruction as may be deemed necessary or practicable. We cannot emphasize too strongly the value of persistent effort if the premises are to be rid of rats.

**PREVENTION.**—This is of the first importance. It is inside the building rather than outside that rats do the most damage; the great object, therefore, must be to prevent their entrance. This is best attained by having all foundations and floor of concrete. From every standpoint concrete so used, for barns, stables, piggery, poultry houses, etc., represents a good investment. Old and dilapidated stone foundations may be made rat proof by an inside coating of concrete or, at times, simply by stopping the holes with a mixture of cement and broken glass.

All basement and cellar windows should be screened with stout metal netting; open windows are one of the readiest means by which rats effect an entrance.

Limit their food supply as far as may be practicable by keeping grain, meals, garbage, etc., in rat-proof bins or other receptacles, with close-fitting covers. It is impossible to make much headway in keeping under this pest so long as there is an abundance of unprotected food about the buildings.

The usefulness of the larger owls and hawks in the destruction of rats has not fully been recognized; on the whole these birds if kept in check are beneficial.

A well trained dog may be depended on to keep the buildings and yards fairly free from rats. Probably for this purpose there is nothing superior to a thoroughly trained fox terrier.

**TRAPS.**—Trapping is one of the most effective means of destroying rats. It fails if food is abundant, especially with old rats, which are very cunning. If the rats are numerous a number of traps should be used at once and used persistently.

There are several modern forms of the guillotine trap which are excellent. Cage traps are especially useful in catching young rats, particularly if baited and left open for a night or two and partially concealed as by hay or straw. Large catches may frequently be made by "barrel" and "pit" traps—the baited covers being hinged so as to turn with the weight of a rat. Among excellent baits may be mentioned toasted cheese, bacon, liver, raw meat, grain of various kinds, oatmeal and in winter fresh vegetables.

**POISONS.**—As there is always more or less danger to live stock in the use of poisons, they are the last means to employ. Barium carbonate (precipitated), is the least dangerous; it is comparatively harmless to domestic stocks in the small doses used for killing rats. It is used as a stiff dough, composed of flour or oatmeal and a little sugar with 15 to 20 per cent. of the carbonate. The addition of a few drops of oil of aniseed or of caraway makes the bait more attractive. Arsenic is very popular as a rat poison but experience has shown that it is variable in its effect and apparently not always fatal. The bait can be made as already described under carbonate of barium, or the arsenic may be spread or rubbed on buttered bread. Strychnine is also employed and is very rapid in its action. The best plan is to insert a small crystal in raw meat, the pieces of

meat being placed in the runs or burrows.

In buildings or yards in which there are poultry or other live stock, a precautionary measure in the use of poisons is the employment of two wooden boxes, the one considerably larger than the other and each having two or more holes in the sides large enough to admit rats. The poisoned bait is placed on the bottom and near the middle of the smaller box. By this means danger for live stock is avoided while the rats have free access to the poison.

Dominion Chemist. F. T. SHUTT.

**Exchange and International Trade.**

BY W. W. SWANSON, UNIVERSITY OF SASKATCHEWAN.

The cost-of-living problem has been made more difficult during the war period and since by the extraordinary fluctuations in the rates of exchange prevailing between Europe and this Continent, on the one hand, and the United States and Canada on the other. So important is this question to our economic well-being and progress that it should prove well worth while to give it serious study and attention. The decline in sterling exchange injures our export trade to the United Kingdom and European countries in general; while the fall in the value of Canadian funds in New York not only hampers and restricts imports from the United States but in the majority of instances adds to the cost of American products to Canadian consumers. The purpose of this article is to make clear in simple, non-technical language what is meant by exchange, and how it operates; and then to indicate its very great importance in the economic affairs of the Dominion.

Foreign exchange, reduced to its simplest terms, is the method and mechanism by which one nation discharges its indebtedness to another. It involves the payment of an obligation in one place (say New York) by the transfer of funds or credit from another. Inland or domestic exchange is of precisely the same nature. Inland exchange offsets debits and credits between different centres, such as Montreal and Winnipeg, while foreign exchange transactions do the same thing for nations. With respect to domestic exchange in Canada it is merely necessary to say here that the branch bank system prevents wide fluctuations in rates, the bank making a small "counter" charge for the transfer of funds from one place to another—and this whether one section of the country is in debt to another commercial centre or not. In fact, domestic exchange in Canada is largely reduced to transactions between the banks and the great corporations, and the cost of transferring credit rarely rises above 15c. per \$1,000. It is foreign exchange that causes difficulties, and complicates the credit and commercial problem.

For clearness and simplicity the disturbing effects of war will be left out of consideration, for the moment, and the manner in which exchange functioned until 1914 explained. Bearing in mind that exchange is merely the mechanism by which debits and credits are cancelled, it is evident that these accounts must first be reduced to similar terms; that is, that the foreign money standard—the British pound, the French franc, the German mark, etc.—must be expressed in terms of dollars. This is done by comparing the pure gold in the foreign standard with the pure gold in the dollar. On this basis, the British pound is the equivalent of \$4.86656 in Canadian or American money, since the dollar contains 23.33 grains of pure gold, and the sovereign 113.00160 grains. It should be made clear at this point, therefore, that when the British pound sterling is quoted below \$4.86 in New York the discounted money has no reference to the gold sovereign itself—which is always worth its mint value in pure gold—but to the price of foreign exchange, a commodity in itself, in terms of dollars for pounds sterling, a quite different matter. In other words, what is being offered in New York at less than par is the draft on an English Bank, the bill of exchange.

As every one knows, before the war—although Canada was on a gold basis—there was little or no gold actually in circulation. Gold could have been utilized, to be sure, for the nation had it; but it would have proved an unwieldy and cumbrous instrument of exchange. In

**CLEARING SALE**

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This herd, although small, comprises a number of choice Scotch-topped females, all of which are real good representatives of the breed, and selling in the best of breeding condition. The majority of the breeding cows will have calves at foot by, or be calving early to the service of the herd sire, which is a son of that good breeding bull, Nero of Cluny (imp.). The service of this sire should increase their value considerable, a fact which will be better appreciated when his one- and two-year-old daughters are seen on sale day. In all, there are six of these daughters, among which will be found some nice Strathallan and Roan Dutchess pedigrees. Catalogues on request.

*As Mr. Hearne is going up farming there will be positively no reserve, and, in addition to the pure-bred cattle, there will also be a number of grade cattle selling, as well as horses, implements, hay, grain, etc., including all equipment which has been used on this up-to-date 250-acre farm.*

**George M. Hearne, Burford, Ont.**  
Brant County

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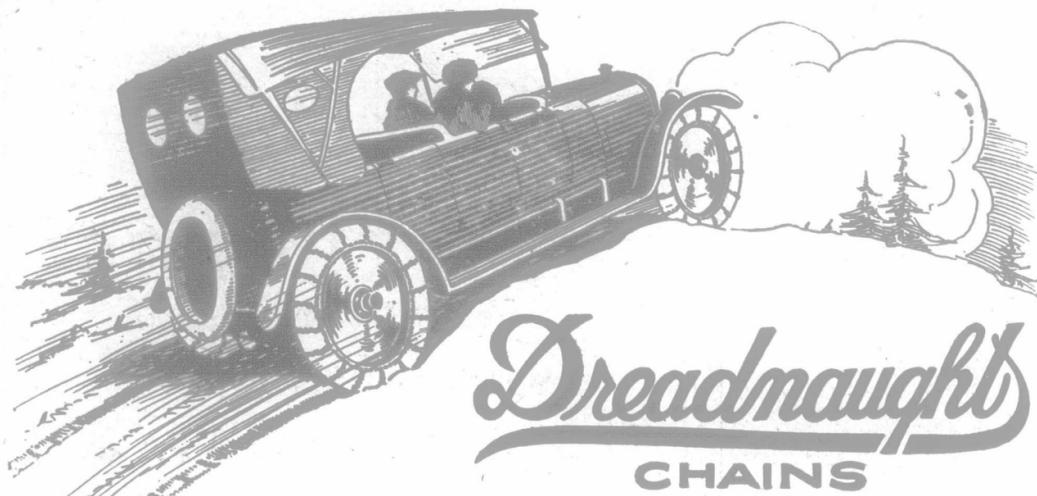
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Street  
Town  
County  
Prov.

was giving the class a  
lecture on Australia.  
mal," she said, "none of  
ned. It does not stand  
the time. It does not  
animals, but takes funny  
it is it?" And the class  
oice, "Charlie Chaplin!"  
poultry-keeping pays?"  
t say that it pays me,  
it pays my boy Jim."  
Well, you see, I bought  
I have to pay for their  
eggs from him, and he



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Your car has more life and power. You have more ease and confidence at the steering wheel. You can go any place in all kinds of weather when equipped with Dreadnaught Chains.

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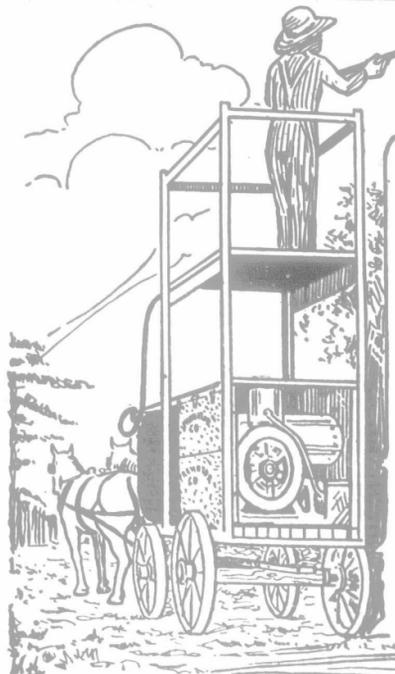
Constructed of electrically welded, case hardened cross sections, rust proof rim chain, and long lever fastener, Dreadnaught is the *Master Chain*. Imitations lack Dreadnaught quality.

The "Just as Good" argument will not do for the experienced motorist who knows. Insist on genuine Dreadnaught Chains.

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BETTER CROPS**



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the place of the yellow metal our traders, manufacturers and farmers used paper money—a form of credit—and cheques against bank deposits. That is, business was conducted almost altogether by means of credit instruments, and in very slight degree by hard money metals, such as silver and especially gold—the standard of value. What was true of domestic trade was equally true of international business; gold was utilized there only when all other methods of settling balances failed. In the autumn, after heavy shipments of wheat and cotton had been forwarded to the United Kingdom, drafts drawn against British buyers of Canadian and American produce would be offered for sale in New York. On the other hand, Canadian and American importers who had purchased British goods, would be in the "market" to buy such drafts, wherewith to pay the debts they owed in Great Britain. Obviously, the holders of drafts against British banks would not sell them too low; rather than allow the price to fall below a certain point they would import the face value of the draft, in actual gold from England. The buyers of draft, would refuse to pay more than a certain price for a draft; rather than go higher they would incur the expense of shipping the gold to the United Kingdom to discharge their obligations there. These upper and lower limits were known as the "gold points." The value of a draft (a bill of exchange) placed upon sale in New York, and calling for the payment of a pound sterling in London, could not, therefore, depart very widely from the par value of the British sovereign in terms of dollars—\$4.86—or otherwise the actual gold would be imported by creditors, or exported by debtors. Gold would be imported when a draft calling for the payment of sterling fell in value to \$4.84; gold would be exported by those who owed money to Great Britain when they were asked more than \$4.88 for sterling exchange. That is to say, the actual shipment of the yellow metal took place only as a last recourse—when drafts, or bills of exchange, were either too cheap from the seller's point of view, or too dear from the buyer's standpoint. In this connection, it may be remarked that the cost of shipping \$1,000 in gold from Montreal to New York, and vice versa, was 70c.; and this prevented exchange fluctuating above or below that figure to any extent, where large sums were involved.

It should be kept in mind that exchange is a commodity, just as wheat, iron and cotton are commodities; and that when too much of the exchange commodity, in relation to the demand, is offered it will fall in price just as any other commodity, under the same conditions, will fall in value. There is this difference, however, between exchange and other things offered for sale—in normal times it cannot fall below, or rise higher, than a certain figure, because of the ability to make use of gold. The yellow metal, therefore, was not utilized to settle international accounts, but merely to settle the balance of debits and credits, as between the nations. With the outbreak of war, and the consequent inability of the various nations to follow the normal course of trade, goods could not be exchanged for goods; debit balances piled up against the European nations, and it became a sheer impossibility to liquidate their obligations by payment either in goods or gold. Drafts or bills of exchange against them became plentiful; and the demand for them fell off, inasmuch as their exports to this Continent fell away. This is the meaning of the sensational decline in the value of the pound sterling in New York—once the premier security of the world.

As exchange between Canada and the United States is bound up with fluctuations in sterling exchange, as will shortly be shown, it is essential to make clearer than has been done the reasons why sterling money has fallen to such a heavy discount in New York. At the outbreak of hostilities the United States was indebted to Great Britain for a sum amounting to approximately \$4,500,000,000. This vast amount of capital was invested in railroads, factories, mines and farm lands. In addition, the merchant marine of the United Kingdom carried a great part of American exports sent overseas; and there was heavy charges payable to Great Britain on this and other accounts. Normally the United States paid interest and other tolls to the

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United Kingdom in the form of goods, and not of gold; and this explains the phenomenon of the imports of Great Britain annually exceeding its exports, while the nation continued to gain enormously in wealth. At the outbreak of war the United States had a floating indebtedness to the United Kingdom of about \$250,000,000, which was due immediately. Sterling exchange in New York rose to \$5.00, \$6.50, and finally to \$7.00, owing to the impossibility of shipping gold. Finally, the Bank of England permitted American debtors to forward gold to Ottawa, which was done to the extent of approximately \$150,000,000, and exchange returned to near normal. With conditions reversed to-day, with the United States a creditor, and not a debtor, of Great Britain, and with the utter impossibility of the United Kingdom exporting the yellow metal to the United States to cancel its obligations, sterling bills are selling in New York lower than ever before in their history. Although 60 per cent. of the annual output of gold is mined in the British Empire, and London is the gold market of the nations, it has become impossible for Great Britain to support its credit at home, if it also attempts to support its credit abroad by exporting the yellow metal. In simple language, and in the simplest terms, the only manner by which British credit in the United States can be restored and sterling exchange brought back to normal, is by exporting goods to the Republic and the other nations of the world. Americans can not sell to Europe if they will not buy; and this ought to afford "food for thought" to those politicians who still speak glibly of maintaining American money in circulation in American centres of commerce and industry. Indeed, to shrewd observers of business and finance in the United States, like Mr. Frank Vanderlip, it has become plain that not only American credits, but American markets as well, must be made available to the United Kingdom and the other nations of war-stricken Europe, if the social and economic life of the civilized world is to be made secure in our time.

It has been remarked in the course of this article that some knowledge of sterling exchange conditions was essential to understand the serious decline in the worth of Canadian funds in New York at the present time. As already explained, New York is the financial centre of the Continent; and sterling quotations in Canada are simply the New York quotations with the discount or premium on exchange between Canada and the United States subtracted or added, as the case may be. In ordinary times, as mentioned above, it costs about 70 cents to transfer \$1,000 in gold from Montreal to New York; and exchange, therefore, cannot range far from 5-64 per cent., on either side of par; for otherwise the actual gold would be shipped. With the outbreak of war, however, specie payments were suspended in the Dominion, both by the Government and the banks, and the nation's gold supply jealously guarded. As the exchange quotations became adverse to Canada, and as the flow of borrowed funds from the United Kingdom came to an end, it became necessary to borrow capital in the United States to cover purchases in that country. In 1915 the Dominion Government negotiated a loan of \$45,000,000 in New York, and the Canadian municipalities also borrowed heavily in the same market. For a time, and up to the end of 1916, exchange was maintained around par, when it again turned against Canada, necessitating further borrowing to meet the nation's obligations without having recourse to the shipment of gold. Since the end of the war the exchange situation has become steadily worse; until the time of writing Canadian funds in New York are quoted at 10 per cent. discount, and \$20,000,000 in gold—a mere drop in the bucket—has been forwarded to the United States to offset the unfavorable balance of current indebtedness against the Dominion.

The chief causes for the prevalent discount on Canadian funds in the United States are to be found in the unfavorable balance of the Dominion's trade with that country; to heavy investments of American funds in Canada, upon which interest and dividends must be paid; and to transportation charges and the payment of insurance premiums. There are other items that must be reckoned in the balance sheet, but these are the significant ones. Nevertheless, these factors were

relatively just as important before the war, and yet exchange was usually favorable to Canada. What was the explanation, and why have exchange rates turned so heavily against the Dominion?

Before the outbreak of hostilities imports from the United States were, as has been said, in excess of Canadian exports to that country, the balance being approximately \$250,000,000 against the Dominion. That exchange was maintained at a rate favorable to Canada was due largely to the enormous investment funds that flowed from Europe to the Dominion. At the outbreak of war Canada had borrowed not less than \$3,000,000,000, the greater part of which had come from the United Kingdom. The Dominion financed its purchases of goods in the United States in part by exports, and in large measure, also, by making use of British credit. And let it not be forgotten that while the adverse trade balances of \$314,000,000 and \$186,000,000 in 1913 and 1914 respectively were turned into favorable balances of \$283,000,000 and \$577,000,000 in 1916 and 1918, those favorable balances were secured in trade with the United Kingdom, and were financed largely with credits raised in Canada itself. The Dominion cannot look to Great Britain, as in the past, for the money to finance its purchases in the United States, but must rely upon its own efforts to produce the capital and goods to carry forward its trade and commerce.

The latest figures available indicate that up to the close of October, 1919, the total export trade of Canada, as compared with the previous years, shows a steady decline. Imports from the United Kingdom are increasing, while imports from the United States are decreasing. The unfavorable exchange rate, in other words, as between the Dominion and the Republic is making it more difficult to buy goods in the United States, while the heavy decline in sterling exchange is opening the Canadian market to British goods, since the dollar will buy more of them. On the other hand, Canadian exports to Great Britain are falling off, inasmuch as the buying power of the pound sterling in the Canadian market has decreased. Exports from the Dominion to the United States are on the increase, since the American dollar will buy more of Canadian products. These data may be presented as follows:

	Twelve Months Ending October.		
	1917	1918	1919
Total imports, merchandise	\$1,012,299,515	\$896,097,451	\$902,353,525
Duty collected	167,562,078	154,235,819	161,317,422
Total exports	1,492,276,886	1,371,386,423	1,252,141,958
Imports, United Kingdom	96,114,518	69,656,921	81,486,784
Imports, United States	832,134,077	738,806,162	714,274,832
Exports, United Kingdom	823,970,870	693,895,712	524,158,948
Exports, United States	387,764,931	424,179,172	439,341,339

Sufficient has been said to establish the fact that Canada's exchange problem with the United States is bound up with the question of sterling exchange also. The Dominion, notwithstanding the lapse of war business, continues to sell large amounts of agricultural and other products to Great Britain, much of which is paid for with Canadian credits. It is imperatively important that the United States, which was least affected by the war, extend credits to Great Britain and other European nations, on the one hand, and open its markets to the products of

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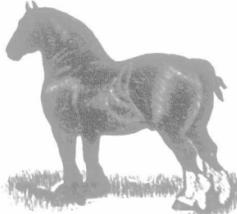
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Europe on the other. Unless that is done the external trade of the Republic, as well as that of Europe, will become demoralized; and the economic rehabilitation of the world set back for years to come. Sir George Paish, editor of the "Statist," estimates that Great Britain alone requires a credit of £1,000,000,000. With such a credit Canada could be paid in full for its exports to the United Kingdom, which in turn would aid the Dominion to discharge its obligations to the United States. Economy at home, along with the building up of the nation's export business are the two main instruments with which the country's credit abroad may be maintained unimpaired. Credit at home has been abnormally expanded; and the first essential, to bring economic security and progress, is to liquidate that credit by the production of goods. What is required is not the manipulation of money and credit instruments, but the production of actual wealth.

#### Places for Imperial Ex-Service Men.

The Soldier Settlement Board desire that your attention be directed to their announcement in our advertising columns. The Board hopes to enlist the support of successful farmers in finding places for Imperial ex-service men who are coming to Canada under the Soldier Settlement scheme. Before these men can become beneficiaries they must spend a period (from one to two years) on a Canadian farm becoming acquainted with Canadian farm methods. Imperial soldiers who apply to the Board's representatives in the British Isles will be required to appear before a Selection Committee which will pass only those who possess the physical and general qualifications necessary to fit them for the duties they propose to undertake in Canada. They must have at least \$1,000 in cash on their arrival in Canada. It is expected that these requirements will ensure that only men of good type, who are earnest in their intention of making a living out of the soil in a new land, will reach our shores.

Farmers are asked to make places for these Imperials. Any who require assistance should leave their names with the District Superintendent of the Board. When places have been found for these men they will be allowed to come to Canada.

#### A Vista of the Days to Come.

BY W. J. LAUT.

How dimly must have seen our years,  
The sages of the years sped past,  
How faintly traced the change to come,  
How feebly sensed the triumph vast.  
No mind shall peer beyond its time,  
One comes to think as God unfolds  
The roll of things for men to do,  
The wonders that the future holds.

We know this simple truth to keep,  
That as earth aged the race won on,  
That riddles big and small were told,  
That many seeds the sun shone on.  
We know we cannot see what lies  
Beyond our day, yet we can feel  
The faith that God gives life in trust,  
To make our dreams live, great and real.

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SHUR-GAIN gives your crops a quick, vigorous start, and supplies plant food throughout the growing period.

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Under the auspices of the Ontario Department of Agriculture and management of the Guelph Fat Stock Club, will be held in the

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### Three Young Shorthorn Bulls

Bred and raised by the undersigned. Prince Pardee = 132671 =, red, born April 26th, 1919. Silent Navy = 132670 =, red, born May 9th, 1919. Sir Donald 2nd = 132726 =, roan, born May 17th, 1919. These three young bulls are grand individuals, and will be priced right for quick sale, as stable room is limited.

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**World Problems.**

The selling of dairy and farm products, and the finding of markets, have been governed by war conditions for the past four or five years. Prices have gradually advanced, and while Europe is reconstructing herself financially, productively, and otherwise, there will be a continued demand for all kinds of Canadian food products, at higher prices than in the years before the war.

More serious problems of the world are before us. The reduced value of the currency of each country in Europe, as well as of Great Britain and all her dominions, thus affecting the rate of exchange, has a serious result in making sales and in determining the price of our products. Our Canadian currency will not pass at par in the United States. Why not? For the reason that we are buying from the U. S. more than we are selling to them, hence, a Canadian dollar is worth only about 90 to 93 cents in New York, and even less in some other cities. The lesson is—Buy less from the United States and sell more to them.

The rate of exchange is much more serious in selling to European Countries. For instance—If Italy bought cheese from Canada to-day at, say, 25 cents per pound here, the exchange rate would more than double the price which it would have cost before the war in Italian currency, but, if England bought at 25 cents, the exchange would add only 5 or 6 cents per pound. In both cases, the freight and insurance would add further to the cost, plus its rate of exchange. The reason for depreciated currency in Europe is the cost and destruction of the war. The cure there will be restoration of productiveness on farms and in factories, which the working classes are now attempting by long hours of intensive labor. Not only these complications of payment, but many other difficulties require to be overcome in selling cheese and butter, such as exporters of grain have not so seriously to contend with.

Notwithstanding these difficulties, which you can leave to the long experience of the dairy produce firms of Montreal to solve, in my opinion the farmers of Ontario will continue to have very good returns for butter and cheese, and they should use every effort to increase their product. Under ordinary conditions, the selling price of everything depends, first, on the quantity produced, and second, on the market for it. Every citizen of Canada is interested in the quantity and quality of food produced by the farmers, and also interested in our manufacturing industries of all kinds. The predominant factor governing the quantity produced both in the farm and by the factories is labor. "Man shall live by the sweat of his brow," is as true today as when first spoken. The farmers neither in Canada, nor in the United States, have been able to produce sufficient food to feed the starving people of Europe. The manufacturers have not been able to produce sufficient clothing, and many other articles, to supply the people of Canada, so that an enormous advance in prices has occurred. One of the chief causes of this advance in prices has been the attitude of labor, not simply in higher wages, but in working shorter hours, thus limiting the product.

We believe that autocratic government has fought its last fight—but autocratic labor has now entered the field, and must be dealt with, before real peace and goodwill dominates the civilized world. We are passing through a period of reconstruction. Patience and perseverance is needed, but the world must have greater production, and that cannot be attained with shorter hours of labor.

**THE FARMER'S DAY.**

There are many signs in Canada to show that this is the farmer's day. I propose, therefore, instead of speaking only of what you are locally interested in, to take up those problems which every farmer and citizen is thinking about. He who holds the plow, who tills the ground, who raises the food to feed the people, now proposes for the people and by the people, to govern the people. It is a larger job than at any time in our history; perhaps the largest that any country with a population of seven or eight million people has ever undertaken. The first man in Ontario to-day is a farmer. All honor and success to him. He says he does not propose to legislate for the classes; that means, I suppose, that he will try and legislate

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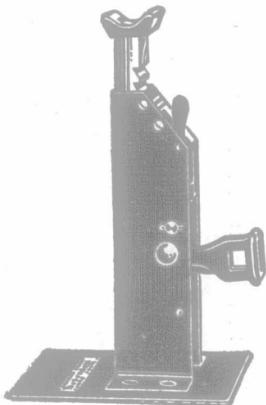
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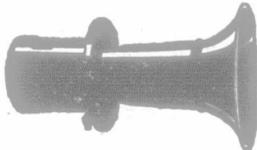
The merit of this jack lies in its strength, small size, and simple mechanism. The frame is steel, which is far more reliable than malleable. The rack is a three-quarter inch solid steel bar and the teeth are perfect.

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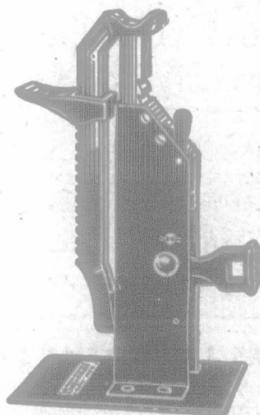
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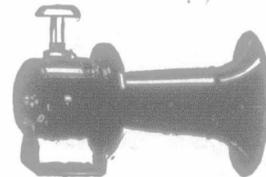
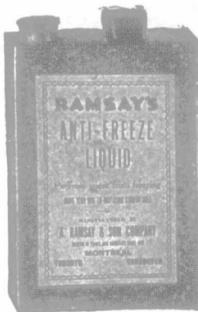
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**The Imported Percheron Stallion**

**Jabot [3139] (84214)**  
as illustrated on page 249 of this issue was imported in 1913 when three years old by his present owner T. J. Berry, Hensall, Ont. He weighs 1,900 lbs. and is a splendid specimen of a Percheron horse. He was exhibited at London last fall, winning second money out of 13 entries. A foal by him won first place in draft class in 1918, at London, and in 1919 won first at London and first at Toronto, the only places exhibited, and was sold for a long price.—Advt.

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We are emerging from the greatest war in all history, when all trade and commerce have been distributed, and when we can almost say that the world was, and is, up-side-down. Wisdom and experience are needed. It takes time to develop both. People living in the cities need to understand the farmers' problems much better than they have done heretofore, and the farmers need to know about the labor and city problems. Selfishness must be put aside. We are living in a period when all Canadians, whether on the farm or in the city, need to take broad national and international views. We must study and practice what is constructive—not destructive.

Strict party politics is a back number. The war has forced parties to get together in England, France and Italy, as well as in Canada. Union Government in most nations has taken the place of parties. In years gone by, politics has meant, in many cases, an easy job, with easy money, not applied simply to the members of parliament but to the officials, especially to the hangers-on and to government contractors. Times have changed, as some old-time politicians have discovered. The education and experience that fitted men for leadership years ago, are not sufficient to-day. Since that date, Canada has grown; Canals, terminal facilities on the Great Lakes, rivers and oceans, for our steamships, and various other needed improvements, necessary for the trade and commerce of a growing country, have been built.

**NATIONAL INDEBTEDNESS.**

Railroads, some wise and others very unwise, have been built, largely at the country's expense. Railroads, through wildernesses to the Pacific Ocean—not needed for another generation, and toward the Hudson Bay, that never will be needed, have been built, or partially built.

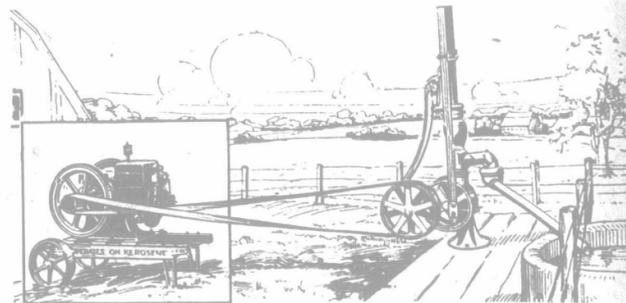
There is no use closing our eyes to these facts, nor to the fact that our Dominion Government is going to try and run a great system of railroads in Canada. All experience in Canada, United States and Great Britain, prove that Government roads are inevitably run at great loss, and the Canadian people must meet this loss. It will take time—much time—for new leaders to study and master these, and many other problems which have come and are coming upon Canada. It is to be hoped that the Dominion Government will not make any radical changes, either in the tariff or in anything else, until trade has had time to develop into a sound and settled condition, and it will not be settled until the labor and financial problems, which affect trade, have been adjusted. The old farmer's advice—"Never swap horses when you are crossing a stream" is good advice to-day.

You know all about our present large Dominion loans and debts and prospective debts, and hear the daily talk about financial affairs and taxes, and more debts and deficits, and the prospect of further taxes.—How shall Canada solve and meet these problems? We must face our difficulties; our great debts and probable losses. Meanwhile, it is the duty, the absolute duty of every citizen of Canada, to practice economy and patience, until we get out of the woods. Money in Canada is plentiful, but it is borrowed money, and, therefore, we have no business to spend it carelessly. We should act wisely, save up, and pay our debts like honest citizens. If the high cost of living makes real solid, lasting prosperity, without veneer, or camouflage, then never has all Canada been so prosperous in material things as it is to-day.

Farmers meet here with an air of real prosperity, but, beneath it, there are serious inquiries, and an honest desire to know the truth about the starving people of Europe, as well as the real value of the dollar. Millions of dollars were spent in the cities and in the country during December and Christmas, for unnecessary articles, many imported from the United States. No wonder our dollar is worth only about 90 cents in New York, and that it hardly pays for what we formerly obtained for 50 cents. There is too much paper money afloat and not enough gold behind it. What would you think of a farmer, who owns a farm worth, say, \$15,000, but with a mortgage on it of

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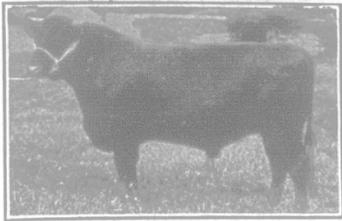
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\$10,000, but who buys automobiles, and spends hundreds of dollars on Christmas gifts for his family, as though he was independent, while paying nothing on his mortgage? It is high time that men—and women also—saved more and spent less. Along with economy, every farmer should work and plan to increase the quantity and keep up the quality of all farm and dairy products, and so maintain our good name; and while supplying Canada with food, not only help to supply Great Britain, but the continent of Europe, which is hungry for all kinds of food, especially for our butter, cheese and meat,—and they will be, until they can raise hogs, cattle and milch cows.—Part of an address delivered at the recent Eastern Ontario Dairymen's Association Convention, Brockville, by A. A. Ayer, Montreal.

**What Others Say.**

It is impossible to find space to publish the many tributes paid by subscribers to The Farmer's Advocate and Home Magazine, but we are here reproducing a few to let you know that you are not alone in entertaining a good opinion of this paper. Following are a few of the many testimonials which the mails constantly bring to this office.

"I am subscribing to your valuable paper, knowing it to be the best of its kind printed, not only in Canada but in North America or the British Empire. It is always up-to-date on all matters pertaining to farming, and I admire the stand the paper has always taken in the political arena. In discussing political questions, party politics is thrown to one side and one gets a clear and impartial view of the matter. Your paper proves a great boon to farmers on account of its articles, and with an index every six months the paper can be kept in book form so any matter can be looked up in a few minutes."  
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**Shorthorn Bulls and Females**—Herd headed by Ruby Marquis, a son of calves now coming are all by this sire. We are also offering a few females in calf to him. Get our prices before buying elsewhere.  
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**Shorthorn Females—Shorthorn Bulls**—We are now offering a number of choice heifers, good families and good individuals. Many are well forward in calf to our Roan Lady-bred sire, Meadow Lawn Laird. We also have bulls ready for service. Prices right. Satisfaction guaranteed.  
**J. K. CAMPBELL & SONS, Palmerston, Ont.**

**Newcastle Herd of Shorthorns and Tamworths for sale**—Several young bulls ready for service; several heifers bred to Primrose Duke =10754=, and several young things of nice quality and breeding. Two young cows with heifer calves at foot, all of a good milking strain. A choice lot of Tamworths of both sex, and various ages, from noted prize-winning stock. Pair of registered Clydesdale fillies rising 3.  
Long-distance Phone. **A. A. COLWILL, R.R. No. 2, Newcastle, Ont.**

**PUSLINCH PLAINS SHORTHORNS**  
Five bulls for sale by Burnbrae Sultan =80325=.  
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**Cedar Dale Scotch Shorthorns—Pleasing Cattle and Pleasing Pedigree**—Senior sire, Excel sired by Gainford Marquis (imp.). Junior sire, Matchless Duke sired by Gainford Matchless, the \$12,000 son of Gainford Marquis (imp.). I have a number of choice bred heifers, and must sell a few to make room. Also have a couple of Scotch-bred bulls. Prices right at all times.  
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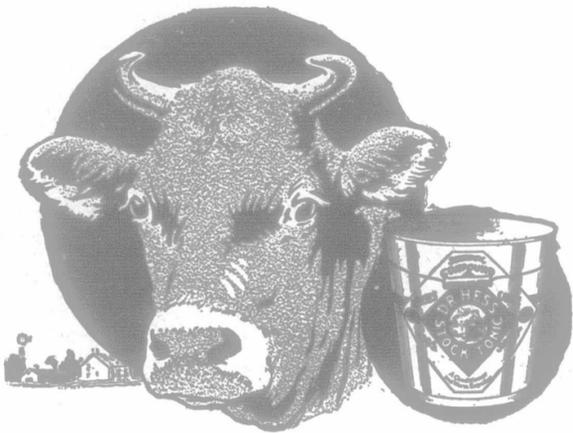
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Cows in calf and calf by side. Also heifers in calf and others ready to breed. Bulls of serviceable age.  
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Herd headed by Dominator 106224, whose two nearest dams average 12,112 pounds of milk in a year. Inspection of herd solicited.  
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**Irvin Scotch Shorthorns**—Herd Sire Marquis Supreme—by Gainford Marquis (imp.). We have at present three young bulls of serviceable age and one younger, all sired by our herd sire and from Scotch bred dams. Good individuals and the best of pedigrees. Also pricing a few females.  
**J. WATT & SON, ELORA, ONT.**

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*Good Health—Good Appetite—and Good Digestion are the essentials of a good milker.*

Dr. Hess Stock Tonic promotes health—makes cows hungry. Remember, it takes a healthy, hungry cow to convert a big mess into pails of milk day after day.

Dr. Hess Stock Tonic produces appetite, aids digestion, conditions a cow to stand the stuffing, cramming process necessary for heavy milking. Dr. Hess Stock Tonic contains the salts of Iron that supply rich red blood so necessary to cows in milk. It contains Laxatives and Diuretics that assist the kidneys and bowels to throw off and carry off the poisonous waste materials that so often clog up the system during heavy feeding.

## Dr. Hess Stock Tonic

Ever notice a cow slack up on her milk—not quite so keen for her mess—apparently not sick? Her system is clogged. This never occurs where Dr. Hess Stock Tonic is fed. Start right—by conditioning your cows for calving with a course of Dr. Hess Stock Tonic before freshening.

There is not a day during lactation that Dr. Hess Stock Tonic cannot be fed to cows at a profit. This is especially true where heavy feeding is the practice. Dr. Hess Stock Tonic is good alike for cattle, horses, hogs and sheep. It makes the ailing animals healthy, the whole herd thrifty. It expels worms.

**IMPORTANT:** Always buy Dr. Hess Stock Tonic according to the size of your herd—five pounds for each cow to start with. Get it from the responsible dealer in your town. Feed as directed and note the results in the milk pail.

25-lb. Pail, \$3.00; 100-lb. Drum, \$10.00

Smaller packages in proportion.

DR. HESS & CLARK, Ashland, O.

**Dr. Hess Dip and Disinfectant**  
Keeps the Dairy and Stables Healthful and Clean Smelling

## Burnbrae Shorthorns

Eighty-three years without change we have been breeding Scotch Shorthorns. The foundations of many of the best herds in America were laid from our farms.

I am in a position to furnish you now with the BEST in FORM and in BREEDING that can be found any place. Twenty-five young bulls, from small calves to fifteen months old. Sixty-three cows and heifers, every one of them bred right, not a plain-looking one in the lot. Every animal that I have sold in two years has been satisfactory; the most of them sold, by letter. I can satisfy you with the best in what you want at a price that will give you a chance, and I will pay the freight to your station. A Grand Champion and the son of a Grand Champion at head of the herd.

Post Office, Telegraph, Telephone and Station is Stouffville, Ont.

ROBERT MILLER :: Stouffville, Ont.

## BRAEBURN SCOTCH SHORTHORNS

150 Head Herd headed by Nero of Cluny (Imp.) 100 Breeding Females

I have at present twelve young bulls that are now nearing serviceable age. The majority are sired by my present imported herd sire, and we guarantee them as good individually as the get of any other one sire in Canada. They are nearly all roans, and are priced to sell. Can also spare some breeding cows in calf to Nero of Cluny (Imp.).

CHARLES MCINTYRE, Scotland, Ontario  
Brantford 7 miles. Oakland 1 mile. L. E. N. Electric R.R. Cars every hour.

## Walnut Grove Scotch Shorthorns

We are offering choice young males and females from the best Scotch families and sired by Gainford Eclipse and Trout Creek Wonder Ind. If wanting something real good, write, or come and see us. DUNCAN BROWN & SONS, Sheddin, Ont., P. M. M. C. R.

## SHORTHORN BULLS BY KING DORA (IMP.)

We have several young bulls by the above sire and from good milking dams. Also a few females bred to this sire. A choice lot throughout, and priced right. We have one Clyde mare, Lady Kinlock (Imp.) 12248, safe in foal.

SOCKETT BROS., ROCKWOOD, ONT.

**Scotch Shorthorn Bulls and Females**—I have a nice offering of Scotch young bulls still on hand. The pedigrees are choice, the individuality is good—and the prices are right. If you want one Shorthorn female or a carload, come to Markdale.

THOS. MERCER, Markdale, Ont.

## Questions and Answers

Miscellaneous.

### School Trustee.

Quite frequently I hear it stated that if a person is elected school trustee in a rural section, and refuses to act as such, he is liable to be fined \$5 or more. Is that statement correct?

Ontario. P. J. W.

Ans.—It is.

### Vendor and Purchaser.

A sold farm to B. A to erect a drive house before B gets possession. A erects drive house but during storm it is blown off foundation and smashed. B paid small amount cash at time agreement was made, balance on gaining possession. Does A have to erect building again.

Ontario. R. K.

Ans.—We think so.

### Indorser Dying.

If the backer of a note died before the note matures, is his estate, good for the same?

G. R.

Ans.—Yes, provided his executor or administrator be duly notified, in the event of non-payment at maturity, of the fact of the note having been dishonored and that the estate is looked to for payment of the amount of same.

If at the time for the giving of such notice in the regular course probate of the indorser's will has not been granted by the Surrogate Court, nor letters of administration issued, the holder of the note, besides having notice of dishonor, etc., mailed addressed to the indorser at his last residence, ought to give written notice to the executor or administrator just as soon as he learns that there is one.

### Abortion.

What are the symptoms of abortion? What treatment do you advise? S. E.

Ans.—There may be a little straining on the part of the cow and there may be a slight discharge but as a rule the first the breeders knows about anything being wrong is when he finds a dead calf in the stable or pasture. The foetus may be nearly mature or it may be from two months to seven months developed. When symptoms are shown little can be done to prevent abortion. Cleanliness is the first essential. Destroy the foetus and all bedding around it. Disinfect the stalls and thoroughly wash out the cow with a mild disinfectant, as a three per cent. solution of carbolic acid. For external use on cow and stalls, a solution of carbolic, zenoleum or other coal-tar product may be used. It is important that the infected cow be isolated from the herd until all discharge ceases. She should not be bred again for two or three months.

### Rent Money—Board.

1. A rents a farm from B, being the front part and pasture land at the back. B to get pasture rent when rented. A rents pasture land. B wants rent before A can see C for collection. B asks A for rent, A gives B an order to collect. B knows how much the rent was to be. He now tells A he got it all but \$5, and wants to collect from me. Should he have brought the order back to me, and let me collect?

2. B gets A to take off the crop of middle of said land. Asks A to tell him how much he will charge per acre, and how much per day for A's boys to help. A answers letter, and forgets to mention boys' board. B comes down. A's wife mentions boy's board. B says he will make it right for boys' board, as they should be encouraged. He tells A's wife and husband both together twice he will make it right and allow for boys' board. A's wife has hour and date when he agreed to do so. Can A collect for boys' board?

3. In making out the account A forgets some of the work that he had done and sends second account, but mentions boys' board in first account. Can A collect the full amount as B has no receipt?

4. A's wife boards some men for B. A's wife gives itemized account for the men's separate board as that did not go in on farm account. A's wife gave a receipt in full for separate board, up to date the separate account runs to. Does that give him receipt for boys' board?

Ans.—1. Yes.

2 and 3. We think so.

4. No.

## Ring-Bone

There is no case so old or bad that we will not guarantee

**Fleming's Spavin and Ringbone Paste** to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 45-minute applications cure. Works just as well on Sidebone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of

**Fleming's Vest Pocket Veterinary Adviser** Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durably bound, indexed and illustrated. Make a right beginning by sending for this book.

PLEMING BROS., Chemists  
75 Church St. Toronto, Ont.

## Maple Shade SHORTHORNS

A dozen young bulls imported and my own breeding at moderate prices.

W. A. DRYDEN

Brooklin - - - Ontario

## IMPORTED DUAL-PURPOSE

## Shorthorns

If you require a bull bred on the English system for milk and beef, we can sell you one of choice breeding, and in every way a good individual—one which will add value to your herd. We have a fine selection of young bulls at present, also English Large Black pigs.

CALL OR WRITE.

LYNNORE STOCK FARM  
F. W. COCKSHUTT, Brantford Ont.

## FEEDS FEEDS

We can quote inducing prices on all kinds of feed including Linseed Oilcake Meal, Cottonseed Meal, Gluten Feed, Distillers Grains, Oats, American Corn, Mill Feeds, Feeding Molasses, &c. (Carlots or less).

WE BUY: Hay, Straw, Potatoes, Oats, Buckwheat, Barley, Peas, Beans, &c.

Write us to-day.

Allen - Kelley Company  
214 Board of Trade Bldg., Toronto

## DUAL-PURPOSE SHORTHORNS

Present offering: Six young bulls, Reds and Roans, also a number of females. They have size, quality and breeding from good milking dams. Prices moderate. Satisfaction guaranteed.

CHAS. GRAHAM - Port Perry, Ontario

## Buy Glenfoyle Shorthorns

9 bulls, all ages; 25 heifers and cows. Herd bull 2,400 pound quality kind, which sire's dam and three nearest dam's milk records average over 9,000 pounds; also high-class yearling Clyde stallion. Come and see them.

Stewart M. Graham - Lindsay, Ont.

## Mardella Dual-purpose Shorthorns

8 choice young bulls; 30 females, cows and heifers. All of good size, type and breeding. Herd headed by The Duke; dam gave 13,599 lbs. milk, 474 lbs. butter-fat. He is one of the greatest living combinations of beef, milk and Shorthorn character. All priced to sell. Write, call or phone.

THOMAS GRAHAM, Port Perry, R.R. 3, Ont.

**Scotch Shorthorns**—Herd headed by Master Marquis = 123326 =, by Gainford Marquis. Stock of either sex for sale. Also Oxford Down ewes.

GEO. D. FLETCHER, Erin, R.R. 1, Ont.

**Ten Holstein Cows for Sale** Fresh and freshening in February, with good R.O.P. and R.O.M. records, all young. The cows to freshen are in calf to a 31-lb. sire. Hoping to hear from you, I remain,  
Fred Ormiston, R.R. 2, Burketon, Ont.

## MERCROFT FARM — HOLSTEINS

Farms at Dorval Station, Que., and Burlington, Vt.

Our imported herd sire, RAG APPLE PIETERTJE PONTIAC—36248—(239942) is undoubtedly one of the best individual sires in Canada to-day, and his calves, now coming, show his prepotency. In breeding—his ancestors include Rag Apple Korndyke 8th, Pontiac Korndyke, King Segis, King of the Pontiacs and Colantha Johanna Lad. As he differs in breeding from most high-record Canadian sires of to-day, a fusion of this blood should be advantageous in most herds. Our foundation herd being small, we have decided to accept a few approved cows for service to Rag Apple Pietertje Pontiac at \$100 each. Will also consider selling a half interest to some good breeder in Eastern Ontario or Quebec. At present we have a few young sons of this sire for sale. Our milking females average over 13,000 lbs. of milk per year on twice-a-day milking. They are never crowded, and therefore are healthy, normal cows, with healthy, normal calves. Herd tuberculin tested twice yearly.

R. J. MERCUR, Mercroft Farms, P.O. Box 1568, Montreal, Que.

## Hospital for Insane, Hamilton

Holsteins, yes! All bulls of serviceable age are sold, but several of six months and younger, from one of the best sons of King Segis Alcartra Spofford, and our best dams will be sold at reasonable prices.

APPLY TO SUPERINTENDENT

## MONTROSE HOLSTEIN - FRIESIAN FARMS

(The Home of 20,000-lb. Cows)

Present offering (at right prices), four young bulls out of R.O.P. cows with records of 20,000 lbs. milk and over. See this herd and our young bulls in particular before buying elsewhere. Visitors always welcome.

R. J. GRAHAM, - Montrose House Farms, - BELLVILLE, ONTARIO

### HOLSTEIN HERD AVERAGES 18,812 LBS. MILK

A herd of 13 pure-bred Holsteins last year averaged 18,812 lbs. milk and 638.57 lbs. fat. Do you realize the money there is in such cows? It is estimated that the average annual yield of all cows in this country is under 4,000 lbs. These 13 cows produce as much milk as 62 cows of the 4,000-lb. class.

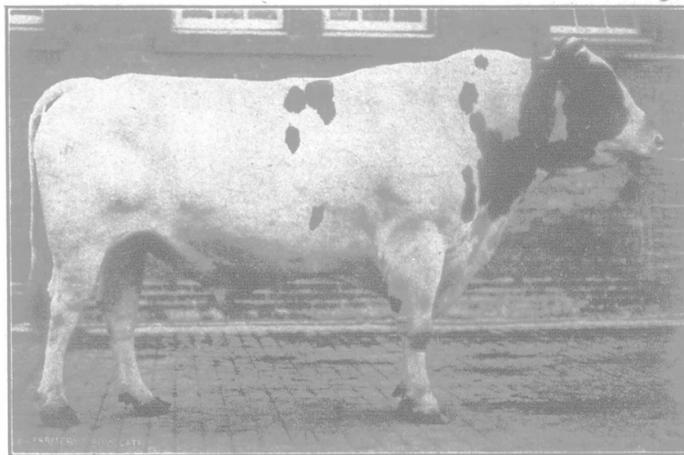
Why feed, milk and shelter any more cows than you need to produce the milk you require? If interested in **HOLSTEIN CATTLE** send for booklets—valuable information they contain much.

HOLSTEIN-FRIESIAN ASSOCIATION OF CANADA

W. A. CLEMONS, Secretary, ST. GEORGE, ONT.

"Premier" Holstein Bulls Ready for Service—I have several young bulls from dams with 7-day records up to 32.66 lbs. of butter, 755.9 lbs. of milk, with 110 lbs. of milk in one day—over 3,000 lbs. in 30 days. All are sired by present herd sire, which is a brother to May Echo Sylvia. Step lively if you want these calves.

H. H. BAILEY, Oak Park Farm, Paris, Ont.



The Herd Sire, "Baron Colantha Fayne," has 15 of his daughters in this sale.

## Last Call for the Great Sale of HOLSTEINS

Shropshire Sheep, Poland China Swine, a number of Clydesdales; also all Farm Implements AT GLENWOOD STOCK FARM

Wednesday, February 18, 1920 Stock sale commences 1.15 p.m. 10 a.m. sharp

This grand Holstein herd is headed by Baron Colantha Fayne, a worthy son of Queen Butter Baroness (for pedigree, etc., see last issue Farmer's Advocate), and included in the sale are females of such quality as King Segis Ormsby and Butter Boy breeding—a rare chance to get high-class stock at your own prices. Will sell also 18 consecutive numbers of the Holstein-Friesian Herd Book. Farm 3 miles from Putnam C.P.R., 7 miles from Ingersoll G.T.R. Conveyances provided. Sale under cover. Write for catalogue.

I. N. HOWE, R.R. 2, Mossley, Ont., Proprietor  
L. H. LIPSIT, Sales Manager  
MOORE & DEAN, Auctioneers

### Questions and Answers. Miscellaneous.

#### Water Supply in Stable.

Do you advise having a water supply in stable, with individual water bowls for the cattle? What is the best kind of supply tank and where should it be placed? Would it be all right to have a concrete tank built in the barn approach? How could it be built so as to stand a heavy load over the bridge. Would a float box be necessary to regulate the supply? Describe how the system could be put in by a farmer himself. A. S.

Ans.—Having the water before the cattle at all times insures them having a regular supply. It is well known that the cattle will drink many times during the day if they have the opportunity. We believe that the stock need exercise, but having the water in the stable does not need to prevent anyone from turning the cattle out regularly. Some object to having water before the cattle, owing to the danger of spreading disease, but we cannot see where there is any more danger than in having the stock drink out of a common trough in the yard. The continuous trough in front of the cattle would possibly come a little cheaper than individual bowls, as there would be much less piping required. The kind of storage tank will depend on the nature of the water supply. If one has a running spring, a small galvanized tank would serve the purpose, but where one depends on the water supply being pumped by a windmill, or even by an engine, it is well to have the tank large enough to hold possibly a week's supply. In this case the concrete tank might be preferred. It may be built almost anywhere; under the barn approach or beside the approach should be satisfactory. If under the approach, the walls should be built strongly and then iron rails, wire and concrete used for covering. The bottom of the tank should be high enough so that it would be drained to the watering trough or basins. Unless the top of your supply tank was on a level with the top of your trough or basins, it would be necessary to have a float box with valve to govern the supply to the stock. If you wish to store any quantity of water, then the valve is essential. In a concrete tank the piping would be set in the concrete; in a metal or wooden supply tank it is fastened with lock-nuts to prevent leaking. There is no reason why any farmer could not make the connections himself. If putting in water basins, the exact length of pipe should be ascertained and one can have them

## Raymondale Holstein-Friesians

A herd sire of our breeding will improve your herd. We have sons of our present sire, Pontiac Korndyke of Het Loo (sire of \$12,750 Het Loo Pieterje), and also sons of our former sire, Avondale Pontiac Echo. Several of these are of serviceable age, and all are from good record dams. Quality considered, our prices are lower than anywhere else on the continent. Their youngsters should not remain long. Write to-day.

RAYMONDALE FARM, Vaudreuil, Que. D. RAYMOND, Owner, Queen's Hotel, Montreal

## Hamilton House Holstein Herd Sires

Our highest record bull for sale at present is a 4 months calf from Lulu Darkness 30.33 lbs. and sired by a son of Lulu Keyes 36.56 lbs. His two nearest dams therefore average 33.44 lbs. and both have over 100 lbs. of milk per day. We have several older bulls by the same sire and from two and three-year-old heifers with records up to 27.24 lbs. All are priced to sell.

D. B. TRACY, Hamilton House, COBOURG, ONT.

## PIONEER FARM HOLSTEINS

My present sales' list includes only bull calves born after Jan. 1st, 1919. These are priced right. WALBURN RIVERS & SONS R.R. No. 2, Ingersoll, Ontario

### Evergreen Stock Farm Registered Holsteins

Our Motto: Choice individuals—the profitable producing kind. Nothing for sale now, but get in line early for your next herd sire.

A. E. HULET, Oxford Co., G.T.R. NORWICH, ONTARIO

### CHOICE HOLSTEIN FEMALES!!

I could spare ten or twelve two and three-year heifers, daughters of Baron Colantha Fayne and Louis Prilly Rouble Hartog. All are bred to freshen early to our 34-lb. sire. Also have a few young bulls, one from a 29.95-lb. cow that has milked 105 lbs. per day. Don't delay, this offering is priced right. T. W. McQUEEN, Tillsonburg Ont.

Bulls advertised in Christmas Number are both sold We are offering a bull calf sired by Hill Crest Rauwerd Vale, out of a 23-lb. jr. 4-year-old dam. Price \$300. Bull calf by same sire, out of a two-year-old heifer. Price \$100.

W. FRED FALLIS, R. R. 3, MILLBROOK, ONT.

—We have the best bunch of Holstein bulls ever offered at our farm. Their dams have records up to over 34 lbs. of butter in 7 days. All are sired by a bull with a 34-lb. dam. One is a full brother to the Grand Champion bull at Toronto this year. Prices reasonable

D. C. FLATT & SON, R.R. No. 2, Hamilton, Ont.

## SUNNYBROOK FARM HOLSTEINS

We are offering for quick sale one 24-lb. bull and one 26-lb. bull ready for service. Both are sired by a 33-lb. son of the great King Segis.

JOSEPH KILGOUR, NORTH TORONTO, ONT.

## HOLSTEIN BULLS FROM 30-lb. DAMS

If you want 30-lb. bulls—good individuals—and priced right—you should see my present offering. I also have lower priced bulls and am offering females bred to Ormsby Jane Burke. Correspondence solicited. R. M. HOLTBY, Manchester G.T.R.; Myrtle C.P.R.; PORT PERRY, Ont.

## CLOVERLEA HOLSTEIN FRIESIANS

We are offering this week two choice bulls, one ready for service, from a 25-lb. dam. Priced right for a quick sale. For price and particulars, apply to

GRIESBACH BROS., R. R. No. 1, COLLINGWOOD, ONT.

## Silver Stream Holsteins

—Special offering: Four choice bulls fit for service, sired by King Lyons Colantha, the records of his six nearest dams average 30.10 lbs. butter in 7 days and from R.O.P. tested dams. Individually as good as their breeding. Write at once for particulars and price, or better come and see them.

JACOB MOGK & SON, R. R. 1 Tavistock, Ont.

Cedar Dale Farm—The Home of Lakeview Johanna LeStrange, the \$15,000 sire—He is the son of the 38.06-lb. cow, Lakeview LeStrange, and is our chief sire in service. We are offering a few females bred to him and also have a few bull calves sired by him at right prices. Other older bulls, sired by our former herd sire, Prince Segis Walker, son of King Segis Walker.

A. J. TAMBLYN, Cedar Dale Holsteins - (C.N.R. station one mile) - Orono, Ontario

## ROWAN RIVER STOCK FARM

At present we have 3 bulls of serviceable age, sired by a 31-lb. sire from R. O. M. and R. O. P. dams. Younger ones sired by a grandson of May Echo Sylvia; his two nearest dams average 832 lbs. milk, 33½ lbs. butter for 7 days. Priced to sell.

PETER B. FICK, PORT ROWAN, ONT.

cut and threaded at the plumber's or hardware.

#### Mink Trapping.

What makes good bait for mink? How are they caught, and where do they make their homes during the winter? R. H.

Ans.—Mink are caught in spring traps, or in pitfalls or boxes. They are a carnivorous animal and are tempted by pieces of fowl, or heads of birds, frogs, etc. They make their homes beside streams and, where possible, beside waterfalls.

#### Intestacy.

A farmer died lately without leaving any will. What is the proper proceedings for the widow to take? There are four small children left and she does not want to sell out and leave the farm. Can the widow be her own administrator? Ontario. A. H.

Ans.—She can apply to the Surrogate Court of the county where her husband was domiciled at the date of his death for letters of administration to be granted to her by that Court. In making such application she would have to give her bond, with two substantial sureties in favor of the Surrogate Judge for double the value of the estate to ensure the due administration of same. It will be necessary for her to employ a solicitor to attend to the preparation, completion and filing of the necessary papers.

#### Miscellaneous.

1. I have an acre of black muck soil which has been seeded for three years and is pretty much blue grass and alsike. Would Japanese millet do on this? 2. There are about eight acres of rather cold clay-loam soil. Last year it was sown to mixed grain but scarcely any barley or peas grew. The soil is in good heart. Why was there not a better crop?

3. Will shavings or sawdust if used in moderation injure the land?

4. Would you advise sowing lime on cold spots? If so, how much? S. A.

Ans.—1. The millet should do very well on this soil. It should also grow a good crop of celery or corn.

2. The season no doubt had a good deal to do with it.

3. They should not injure the soil, but they do not add humus to the same extent as does straw.

4. Draining will very often improve the cold spots. Lime may help, and it can be sown at the rate of from one-half to one ton per acre of ground limestone, or in smaller quantities of the burnt lime.

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Ontario

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L OR WRITE.

RE STOCK FARM  
SHUTT, Brantford Ont.

S FEEDS

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-insed Oicake Meal, Cotton-  
uten Feed, Distillers Grains,  
Corn, Mill Feeds, Feeding  
(Carlots or less) 4  
Straw, Potatoes, Oats, Buck-  
Peas, Beans, &c.  
Write us to-day.

Kelley Company  
of Trade Bldg., Toronto

AL-PURPOSE  
RTHORNS

Six young bulls, Reds and  
umber of females. They have  
breeding from good milking dams.  
Satisfaction guaranteed.

M - Port Perry, Ontario

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ges; 25 heifers and cows.  
0 pound quality kind, which  
ad three nearest dam's milk  
verage over 9,000 pounds;  
gh-class yearling Clyde  
n. Come and see them.

Graham - Lindsay, Ont.

ual-purpose Shorthorns  
ulls; 30 females, cows and heifers.  
type and breeding. Herd headed  
an gave 13,599 lbs. milk, 474 lbs.  
is one of the greatest living com-  
f, milk and Shorthorn character.  
Write, call or 'phone.

HAM, Port Perry, R.R. 3, Ont.

horns—Herd headed by Master  
Marquis =123326=, by  
is. Stock of either sex for sale.  
rn ewes.

ETCHER, Erin, R.R. 1, Ont.

tein Cows for Sale  
ening in February, with good  
M. records, all young. The cows  
alf to a 31-lb. sire. Hoping to  
remain.

on, R.R. 2, Burketon, Ont.

# Milking 25 Cows In 60 Minutes



**P**RETTY good milking you will admit! Yet it is by no means unusual for one man with a Macartney double unit to milk a herd of this size in less than an hour.

What this means in dollars and cents is easily illustrated. The average person milks about 8 cows in an hour, by hand. Figuring wages and board at 25 cents an hour, handmilking one cow costs about 3 cents or 75 cents for the entire herd. Twice a day for 365 days means a wage expense of \$547.50.

At 25 cents an hour the labor cost per cow with the Macartney Milker works out at 1 cent, or 25 cents per day. Twice a day the year 'round, this would mean a milking cost of \$182.50 or a yearly saving of \$365.00 through the use of the Macartney Machine Milker.

Simple figures but very expressive. And remember that Macartney means profit in other ways. It means more milk per cow, longer lactation periods, less hired help and more time for other important work in the fields.

The Macartney Machine Milker is a real money making investment. You are losing money without it. You gain in every way when you adopt it.

## The Macartney Milking Machine Co. Limited

316 CATHERINE STREET :: :: OTTAWA

(A-1)

### Free Particulars

Further information concerning the Macartney Machine Milker will be mailed you on receipt of the attached coupon filled in as indicated. This information will not obligate you in any way. Even if you are not contemplating an immediate purchase our literature will prove helpful and interesting.

### The Macartney Milking Machine Co. Limited OTTAWA

Please send me full particulars about  
The Macartney Machine Milker

Name .....

Address .....

I have ..... Cows

## FEEDS

Linseed Oil Cake Meal. Cotton Seed Meal. Gluten Feed (23% protein). Hominy Feed. Bran. Shorts. Feeding Cane Molasses (in barrels). Feed Corn. Oats. Barley. Distillers Grains. Dairy Feed. Hog Feed. Poultry Feeds and supplies.

Car lots or less—Prices on application.

**Kelley Seed & Feed Co.**  
Successors to  
**CRAMPSEY & KELLEY**  
776 Dovercourt Road, Toronto

## Cream Wanted

Ship your cream to us. We pay all express charges. We supply cans. We remit daily. We guarantee highest market price.

### Ontario Creameries

LONDON LIMITED - ONTARIO

### DR. BARNARDO'S HOMES

A party of boys and girls under the auspices of the above Homes will arrive in Ontario middle of March, 1920. Applications for service, as well as boarded-out children, may be sent for boys to

Mr. John W. Hobday, Manager, 50-52 Peter Street, Toronto, and for girls to Miss Taylor, Secretary, Girls' Home, "Hazelbrae," Peterborough.

### CITY VIEW AYRSHIRES

Three bulls ready for service. One two-year-old heifer, bred. Bull calves, all have several direct crosses of R.O.P. blood.

James Begg & Son, - St. Thomas, Ont.

### Two Good Jersey Bulls for Sale

Ready for service; one (imp.) son, Combination Premier; dam, daughter of Golden Fern's Noble. IRA NICHOLS, - Burgessville, Ontario

### Questions and Answers. Miscellaneous.

#### Lump Jaw.

What is the cause of lump jaw and how is it treated? Does it appear on young calves, or does it develop in older stock? Is it hereditary, and is it contagious? H. R. E.

Ans.—Lump jaw is usually considered an infectious disease and is characterized by the formation of tumors and abscesses, which destroy the infected tissues. The disease usually is found on the jaw bone, or in that region. A similar disease may affect swine and horses. It is generally considered that it is caused by a fungus which grows on certain plants. The animals eating such plants contract the disease. Grasses with awns which may wound the mucous membrane of the mouth are most apt to produce the disease. According to "Infectious Diseases of Cattle," by Craig, young cattle that are erupting their teeth are most prone to lumpy jaws. A bruise on the jaw or an external wound also favors the development of the disease. The fungus causes pus to form and the destruction of the tissues. The tumor may be attached to the bone, or merely to the skin; in the latter case it is not difficult to dissect it out. The tongue, pharynx, or lungs may also be the seat of the disease. Tumors growing on the skin may be dissected out, or removed by a caustic preparation. The most desirable method of treatment is the administration of iodide of potassium three times daily. Commence with one-dram doses and increase the dose by one-half dram daily until the animal refuses feed and water, fluid runs from the eyes and mouth and the skin becomes scurfy. When any of these symptoms become well marked, cease giving the drug. If necessary, repeat treatment in three months. We do not know that the disease is hereditary, although it is infectious, and, as we mentioned before, it is more likely to appear in young animals shedding their teeth than in older stock. From what we can learn of the disease, the skin must be broken before the fungus can gain entrance and start the trouble.

### PROSPECT FARM JERSEYS

The prices of all dairy products are very high, and Jersey milk, and milk products are the highest quality. Where can you find a better investment, or one that will give you more satisfaction than to buy one or more good fresh Jersey cows?

We have for sale: pure-bred cows and high grades, fresh, or to freshen soon, or cows due to calve later. These are fine cows, good producers, quiet and easily milked, and in splendid condition. Also young bulls under nine months old, from R.O.P. dams that will be priced very reasonably. Buy bulls young so that they can be shipped by express.

R. & A. H. BAIRD, - R. R. 1, - NEW HAMBURG, ONT.

### BRAMPTON JERSEYS

The Largest Jersey Herd in the British Empire

At Toronto Exhibition, 1919, we won twenty-five of twenty-seven first prizes. We now have for sale first-prize young bulls from R. O. P. dams, as well as females of all ages.

B. H. BULL & SONS - Brampton, Ontario

**Laurentian Producing Jerseys**—The oldest bull we have at present is a year old youngster, sired by our herd sire, Broadview Bright Villa, No. 5630, and from Brampton Astoria, one of the best imported cows in the herd. We also have others younger of similar breeding, as well as a few heifers for sale. FREDERICK G. TODD, Owner, 801 New Birks Bldg., Montreal, P.O. Farm at Morin Heights - F. J. WATSON, Manager

**Edgeley Bright Prince**—a son of Sunbeam of Edgeley, R. O. P. champion, sired by a son of Viola's Bright Prince, is for sale. He is 3 years old, sure and active. Won third prize in aged class at Toronto and London, 1919. Write for price. JAMES BAGG & SONS (Woodbridge C.P.R., Concord G.T.R.) EDGELEY, ONT.

### FOR SALE---PURE-BRED JERSEY BULL

Dam gave 10,500 lbs. in 10½ months, also a Majesty Jersey bull with excellent record of performance backing; could spare 3 or 4 young, fresh, Jersey cows, choice. Please write for full particulars as the above are choice breeding. Apply to

E. A. SMITH, Maple Jersey Farm, - 386 Talbot Street, ST. THOMAS

**THE WOODVIEW FARM JERSEYS**  
CANADA'S MOST BEAUTIFUL JERSEY HERD  
Herd headed by Imported Champion Rower, winner of first prize with five of his daughters on the Island of Jersey, 1914, second in 1916, and again first in 1917. We are now offering for sale some very choice bull calves, ready for service, sired by imported bulls and from Record of Performance imported prize-winning cows. Also some cows and heifers. Prices right. We work our show cows and show our work cows.

**WESTSIDE AYRSHIRES AND YORKSHIRES**  
I have one young bull, 10 months old, from high testing dam and would sell my herd bull, 3 years old—St. Nicholas of Orkney—57087—whose dam gave 11,149 lbs. milk, 394 lbs. fat as a 3-year-old. and whose sire's dam is the famous Milkmaid of Orkney—39834—, with 3-year-old record of 14,000 lbs. milk, 534 lbs. fat. Write DAVID A. ASHWORTH, Denfield, Ont. (Middlesex Co.).

**SPRINGBANK R.O.P. AYRSHIRES**  
Our Ayrshires win in the show ring and they fill the pail. We hold more present R.O.P. Champion records than any other herd in Canada. Young bulls and females by present herd sire Netherpton King Theodore (imp.). A. S. TURNER & SON, - (Railway Station Hamilton) - RYCKMAN'S CORNERS, ONT.

**Homestead Farm R.O.P. Ayrshires**—At the head of our herd at present we have a grandson of the great Jean Armour. He is being used on the daughters of our former sire, Garlaugh Prince Fortune (imp.). Young cows freshen this fall and winter.

MACVICAR BROS., 'phone 2253 Harrietsville, Belmont, R.R. No. 1, Ont.

**Glenhurst Ayrshires** headed by Mansfield Mains Sir Douglas Hague No. 16163 Imp. have been noted for their depth and size, good teats and smoothness of conformation. If you are looking for a combination of size, type, and production—plus high butter fat—write me or visit the farm. Males and females of all ages for sale. JAMES BENNING, Summerstown Sta., G. T. R. Williamstown, C. P. R. Bell Telephone 78-3 Cornwall

Questions and Answers. Miscellaneous.

Dehorning Cattle.

I have four heifers that freshened in November. I would like to have them dehorned. At what time of the year would you advise having this done? S. E. B.

Ans.—Dehorning may be done anytime after the weather becomes more moderate, but before the warm weather sets in. March is usually a very good time to have the operation performed.

Vendor and Purchaser.

A sells his farm to B for cash. B wants immediate possession when he pays A for the farm. A cannot give B immediate possession before January 1, 1920, so B holds back \$100. An agreement was signed by B to settle for farm November 29, but business was not settled up till December 11 when B accepted the title deeds. There was no wind insurance on the buildings and the night of November 29 the roof of one barn on the property was partly torn off. Is A entitled to repair it? Ontario. J. T. G.

Ans.—We do not think that he can be compelled to do so.

Dangerous Dog.

1. A owns a dog that has the habit of running to the road at rigs passing. B's hired man is driving by when dog rushes out and frightens horse so badly that driver cannot get him under control, and in turning corner driver is thrown out and badly injured, rig upset and broken and horse badly staked. Owner has never shown the least consideration for injured man or beast.

1. Is owner reliable for his dog? 2. What proceedings should B take? Ontario. D. H.

Ans.—1. Assuming that A knew of this mischievous propensity on the part of his dog, we think that he is liable to both B and his hired man, in damages, for the property and personal injuries sustained.

2. B and his man should proceed by suit against A if he will not settle amicably to the avoidance of litigation.

Feeding Steers.

Is it profitable to feed molasses to baby beef steers when fitting them for show. I am feeding rolled oats, bran, oil cake, roots, clover hay, silage, and they are also getting new milk from their dam. At what age should one start to feed it, and in what quantities should it be fed? A. C. T.

Ans.—Molasses is being fed by a good many breeders, not only to their young stuff but to all the animals being fitted for show. A person might start with about half a pint and gradually increase it. One can tell pretty well when an animal is getting all it can stand of this laxative feed. We find that cattle and pigs of all ages are very fond of it, and we are feeding a few tablespoonfuls daily to calves a few weeks old, and are feeding as high as a quart a day to mature cows. The molasses gets quite thick in the cold weather, and we mix about an equal quantity of water with it in order to make it easier to feed.

A Legatee.

I am a young man 21 years and six months of age. My uncle died leaving me \$50 three years ago. I did not know it till lately and now the lawyer wants to charge me \$3 or \$4 dollars to give it to me.

1. Is that right? 2. Should I get interest on it? 3. What is legal interest? Ontario. A. J.

Ans.—1. It is impossible to tell with the foregoing statement alone to go upon. The fee suggested would obviously cover more than the mere attendance or letter involved in making the payment over of the amount of the legacy. There would be the preparation of a release to the executor and attention to the execution of same, and probably also some correspondence; and the regular solicitors' fees on same might properly amount to even the larger sum mentioned.

2. Possibly. It depends upon the circumstances. You ought to get at least savings bank interest (ordinarily 3 per cent. per annum) for 2 years, and you might be entitled to the full legal rate.

3. Five per cent per annum.

Advertisement for OilPull Fuel System. Includes a certificate of guarantee, a tractor illustration, and text: 'The OilPull Fuel System - another Proof of OilPull Quality'. 'ADVANCE-RUMELY THRESHER CO., Inc. La Porte, Indiana. Calgary, Alta. Saskatoon, Sask. Regina, Sask. Winnipeg, Man. Toronto, Ont.'

ADVANCE-RUMELY YORKSHIRES

Maple Shade Farm. Imported Shropshire ewes served by best imported rams, very desirable for foundation flocks. W. A. DRYDEN Brooklin - Ontario

Shropshire Yearling Ewes bred to Bibby's 84 (imp.) ram and Two Clydesdale stallions. W. H. PUGH, Myrtle Station, Ont. Meadow Brook Yorkshires—We have a choice offering of sows bred and boars fit for service. Also a number of large litters ready to wean. All show the best of breeding and excellent type. G. W. MINERS, R.R. No. 3, Exeter, Ont. Big Type Chester Whites—We cleaned up at London and Toronto Exhibitions, 1919. Now offering pigs from our 805-lb. sows, and sows bred to our 1,005-lb. boar JOHN ANNESSER, Tilbury, Ont. Invergie Tamworths—Sows carrying second litters for March farrow, a few choice 200-lb. boars, gilts bred for April farrow; a splendid lot, either sex, 3 to 5 months old. Wee lads and lassies just weaned. L. Hadden, Box 264, Sunderland, Ont.

WELWOOD FARM Farmer's Advocate, London, Ontario Berkshires—Boars ready for service and boar pigs, rich in the blood of Lord Premier's Successor 161500, Grand Champion, 1914, Champion sire of 1915, 1916, 1917. His descendants have won Grand Champion honors at the largest and strongest shows of 1919. The Champion Berkshire barrows of 1918 International were double grandsons of Lord Premier's Successor. We have shipped many Berkshires to Canada with satisfaction to customers. Prices on request. HOOD FARM, INC., Lowell, Mass.

Berkshires—At the great Smithfield Show, London, England, in December, the Berkshires won the Grand Championship for fairs, and made the remarkable showing in the four classes of the Carcase Competitions for pigs of all breeds by winning all the four prizes in the four classes; all sixteen pigs being pure-bred except one. We have over eighty head of splendid stock. Come and see them, or send for our breeding list. J. B. PEARSON, Manager. CREDIT GRANGE FARM, Meadowvale, Ont. ELMHURST LARGE ENGLISH BERKSHIRES From our recent importation of sows, together with the stock boar, Sudden Torredor, we can supply select breeding stock all ages. Satisfaction and safe delivery guaranteed. H. M. VANDERLIP, Breeder and Importer, R. R. 1, BRANTFORD, ONTARIO Langford Station on Brantford and Hamilton Radial. Sunnyside Chester Whites and Dorsets—In Chester Whites, both sexes, any age, bred from our champions. In Dorset ram and ewe lambs, by our Toronto and Ottawa champions, and out of Toronto, London and Guelph winners. W. E. Wright & Son, Glanworth, Ont.

Tamworth Boar (3 years old), has proved a grand stock-getter and very quiet. Will exchange for Tamworth boar weighing 150 lbs., or over to avoid inbreeding. G. D. MINER, Phone 491, ring 41. R. No. 4, St. Thomas, Ont.

TAMWORTHS Young sows bred for May and June farrow, and boars for sale. Write or phone. JOHN W. TODD - Corinth, Ontario Prospect Hill Berkshires—Young stock, either sex, for sale, from our imported sows and boars; also some from our show herd, headed by our stock boar, Ringleader. Terms and prices right. JOHN WEIR & SON, R.R. 1, Paris, Ont. DUROC JERSEYS My herd of Durocs have won more firsts and championships in four years showing at Toronto than all other herds combined. Write me for prices on bred sows. CULBERT MALOTT, R.R. 2, Wheatley, Ont.

Macartney on receipt indicated. you in any plating an will prove... Limited... particulars about... SEYS... and milk products are the will give you more satisfaction... NEW HAMBURG, ONT... RSEYS... Empire... mpton, Ontario... EDGLEY, ONT... JERSEY HERD... YORKSHIRES... HIREs... CKMAN'S CORNERS, ONT... Bell Telephone 78-3 Cornwall

## Vaudeville



"VOIX DE VILLE" said Jean Chardavoine, a French musician; and thus came into being three hundred and fifty years ago what to-day we call "Vaudeville".

Vaudeville is the melting pot of the dramatic and musical arts. In it nothing is out of place; it includes drama, comedy, tragedy, farce and burlesque; and every form of music from grand opera to jazz is heard upon its stage.

Every city has its favorite vaudeville house. But you—who live at a distance from the great cities—can have vaudeville right in your home, with

## The NEW EDISON

"The Phonograph with a Soul"

This marvellous instrument—that is every other instrument in one—will RE-CREATE everything that vaudeville has to offer—the entire magic of the theatre staged for your amusement and pleasure, in your parlor or living room.

Why not let the New Edison bring this wonderful variety of entertainment into your home?

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THOS. A. EDISON, INC., - ORANGE, N. J.

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## Infantile Paralysis

### Caused this Deformity



This letter from Hon. Boyd Watkins, member-elect, Mississippi House of Representatives, and Mrs. Watkins, should interest every parent of a crippled child.

"Our son Raymond walked on the toes of his right foot, due to Infantile Paralysis. He was in your Sanitarium exactly four months, when he came home with a straight foot, walking perfectly flat and with ease." Mr. and Mrs. Boyd Watkins, R.R. No. 1, Lamar, Miss.

### FOR CRIPPLED CHILDREN

The McLain Sanitarium is a thoroughly-equipped private institution devoted exclusively to the treatment of Club Feet, Infantile Paralysis, Spinal Diseases and Deformities, Hip Disease, Wry Neck, etc., especially as found in children and young adults. Our book, "Deformities and Paralysis," also "Book of References," free. Write for them.

McLain Orthopedic Sanitarium  
949B Aubert Ave., St. Louis, Mo.



## SEEDS WANTED

We are in the market to buy Alsike, Red Clover Timothy, White Blossom Sweet Clover. If any to offer send samples and we will quote you our best prices F. O. B. your station.

TODD & COOK  
Seed Merchants  
Stouffville, - - - Ontario

## SEEDS

We are in the market for Alsike, Red and Sweet Clover, Timothy, also all grain of good sample. Send samples and we will quote our best prices f.o.b. your station.

GEO. KEITH & SONS  
Seed Merchants since 1866  
124 King St. East - - - Toronto

## Our School Department.

### Types of Corn.

Considerable has been written in these columns about types in live stock, but there are types and standards to be observed in the seeds from which farm crops are produced. On this occasion we shall mention corn only, and give you an idea of what experts look for in different varieties. A committee of the Ontario Corn Growers' Association set about to standardize the varieties of corn suitable for Ontario, and they selected Wisconsin No. 7, Bailey, White Cap Yellow Dent and Golden Glow as dent varieties, and Longfellow, Salzer's North Dakota and Compton's Early as flint varieties. These four dents and three flints were considered sufficient to meet the requirements of the Province in seed or silage-producing districts, and they established certain standards to which these varieties should conform. This is the way they described them:

#### WISCONSIN No. 7.

Ear.—Length, 8 inches to 9 inches. Circumference, 6 $\frac{3}{4}$  inches to 7 $\frac{1}{4}$  inches. Kernel.—Color, creamy white. Indentation, well dented. Rows.—16—20. Butt.—Moderately rounded. Tip.—Well covered. Fairly full. Cob.—Color, glistening white.

Butt.—No larger than  $\frac{1}{2}$  distance up ear.

Tip.—Slightly tapering and well covered.

Cob.—Color, pure white.

#### SALZER'S NORTH DAKOTA.

Ear.—Length, 10 $\frac{1}{2}$  inches to 11 $\frac{1}{2}$  inches. Circumference, 5 inches to 5 $\frac{1}{2}$  inches.

Kernel.—Color, pearly white. Indentation, none. Rows, eight.

Butt.—No larger than one-third distance up ear.

Tip.—Slightly tapering and well covered.

Cob.—Color, pure white.

#### COMPTON'S EARLY.

Ear.—Length, 12 inches to 13 inches. Circumference, 5 $\frac{1}{2}$  inches to 6 inches.

Kernel.—Color, deep golden yellow. Indentation, none. Rows, twelve.

Butt.—No larger than one-third distance up ear.

Tip.—Well covered.

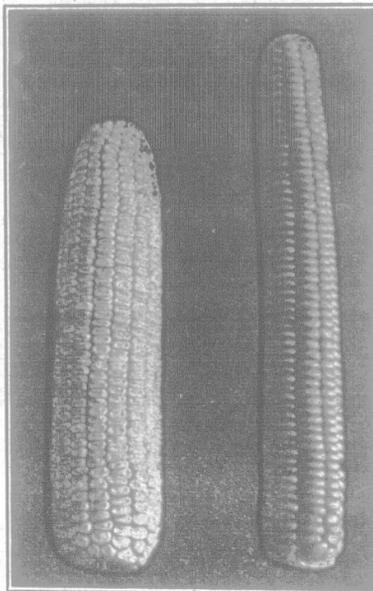
Cob.—Color, pure white.

### The Ingredients of Milk.

Milk is composed of water, fat, casein, albumen, milk sugar and ash, with a few other substances that are of no practical importance, and which are only present in very small quantities. Normal cows' milk should contain from eighty-four to eighty-eight per cent. of water. The fat in milk, or that which rises to the top as cream, is not dissolved in the milk but is suspended in very small globules, the size of which varies with each breed of cattle. We are told that there are about 100,000,000 globules in a single drop of milk. The diameter of an average sized fat globule is about one six-thousandth of an inch. The average milk produced in Ontario contains about 3.3 per cent. of fat, although milk does contain sometimes as little as less than 3 per cent. and as much as 7 per cent. of fat. Milk in Canada must contain 3.25 per cent. of fat to comply with the legal standard.

Casein and albumen belong to the nitrogenous substances of milk. Casein, together with fat and water, form the main constituents of most kinds of cheese. With Cheddar cheese, the kind manufactured so largely in Canada, the casein is coagulated by rennet. The albumen goes into the whey in cheese making, but about eighty per cent. of the nitrogenous compounds of normal cow's milk is casein, which is held partly in solution as in the case of milk sugar, and partly in suspension as with the butter-fat. The quantity of casein and albumen in normal milk is about 3.5 per cent. of which from .5 to .8 per cent. will be albumen. Milk sugar is a commercial product manufactured from whey, about seventy per cent. of the solids in the whey and thirty-three per cent. of the milk solids being composed of milk sugar. The souring of milk is caused primarily by the action of lactic acid forming bacteria on the milk sugar. There is from 3\* to 6 per cent. of milk sugar in normal milk. The ash or mineral substance of milk is largely composed of various compounds of sodium, potassium, magnesium and calcium. The mineral content of milk is about .75 per cent.

A teacher has drawn our attention to the word "kids," which appeared in an article some weeks ago in these columns, and she is quite justified in taking objection to the expression when applied to school children. However, the word quite naturally appeared in a conversation with a pupil whose vocabulary, no doubt, included some expressions which are not orthodox. At any rate, we should all be careful as to what words we use, for all should speak correctly, and to do so we must practice correct English and speak it constantly.



### Wisconsin No. 7 and Salzer's North Dakota.

The champion ears of dent and flint corn at the recent Ontario Corn Show.

#### BAILEY.

Ear.—Length, 7 $\frac{3}{4}$  inches to 8 $\frac{1}{2}$  inches. Circumference, 6 $\frac{3}{4}$  inches to 7 $\frac{1}{4}$  inches.

Kernel.—Color, yellow cap with reddish tinge lower. Indentation, nicely dented.

Rows.—16—18.

Butt.—Moderately rounded.

Tip.—Full. Well covered.

Cob.—Color, dark red.

#### WHITE CAP YELLOW DENT.

Ear.—Length, 7 $\frac{3}{4}$  inches to 8 $\frac{1}{2}$  inches. Circumference, 6 $\frac{3}{8}$  inches to 6 $\frac{7}{8}$  inches.

Kernel.—Color, cap white, remainder yellow. Indentation, fairly rough.

Rows.—14—16.

Butt.—Moderately rounded.

Tip.—Well covered, slightly tapering.

Cob.—Color, red or white.

#### GOLDEN GLOW.

Ear.—Length, 8 $\frac{1}{4}$  inches to 9 $\frac{1}{4}$  inches. Circumference 6 $\frac{1}{2}$  inches to 7 inches.

Kernel.—Color, deep yellow. Indentation, medium.

Rows.—16—18.

Butt.—Moderately rounded.

Tip.—Slightly tapering.

Cob.—Color, cherry red.

#### LONGFELLOW.

Ear.—Length, 10 $\frac{1}{2}$  inches to 11 $\frac{1}{2}$  inches. Circumference, 4 $\frac{1}{2}$  inches to 5 inches.

Kernel.—Color, deep golden yellow. Indentation, none. Rows, eight.

# BEGUN IN 1866

By an early pioneer, who saw there was a big work to be done for Canadian farmers, which could only be done by a practical farmer

## THE FARMER'S ADVOCATE AND HOME MAGAZINE

Has been the most effective means of promoting the best interests of Canadian Agriculture.

In spite of discouragements and difficulties, William Weld, the founder, held determinedly to his purpose, which was to produce for his readers a farm journal dealing only with practical farm questions, free from party politics and partizanship, and not seeking to advance the private interests of any individual or party.

Through all the years since its foundation, the aims of the Farmer's Advocate have been the same. It has grown in usefulness steadily and surely.

The Farmer's Advocate and Home Magazine desires to have as readers only those actually farming, or directly interested in agriculture.

Readers of The Farmer's Advocate subscribe to it purely on its merits, because it is valuable to them in their work.

Many Canadian farmers have never been given a direct opportunity to subscribe to The Farmer's Advocate, because paid canvassers are rarely employed, as the publishers of The Farmer's Advocate object to the strong-arm methods some publishers use in securing subscriptions.

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Gentlemen: Enclosed is  Value \$ , covering one year's subscription to **The Farmer's Advocate and Home Magazine** for the following new subscribers. In return for which kindly advance the date shown on my date label  months, free of charge, in accordance with your advertisement.

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# STOCKHOLM

## Sweden's Masterpiece

### The STOCKHOLM CREAM SEPARATOR

Seventeen years have been devoted by the Master Mechanics of the world's largest cream separator factory in perfecting this Masterpiece. Only the best of materials from the famous ore fields of Sweden are used in its manufacture. Sweden is the birth-place and home of the cream separator industry, located in the heart of the dairy industry of the world, where dairying is carried on by the most improved and scientific methods. The European farmer, the world's most efficient dairy farmer, buys very carefully and buys only the most efficient and up-to-date separators. The Stockholm has back of it the approval of over one million European farmers. The purchaser of a Stockholm Separator derives the benefit of generations of experienced workmen and the perfection of European methods. Sold direct to you on our great special offer. Send the coupon today. Find out all about this Master Separator which we guarantee for 15 years.

**\$7.50**  
After Free Trial

No! We do not want you to pay one cent until you have had and used the Stockholm—the wonderful Master Separator—on your own farm for thirty days. If, after that time, you decide to keep the separator, you pay only the small first payment and the balance in easy monthly payments. No extra charge for this accommodation. Write today. Know the facts that make the Stockholm Separator—Sweden's Masterpiece. Remember—Sold Direct to You, Middlemen's Large Profit Eliminated, Duty Free, Easy Payments, 15-Year Guarantee. Mail coupon today.

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Every Stockholm Cream Separator is sent on thirty days' free trial. Sold direct to you. No money down. No deposit. No obligation to buy. After you have satisfied yourself that its workmanship, material and construction are more perfect than any other. After you have demonstrated that it is easier and cheaper to operate, is the most efficient skimmer and gives a greater percentage of cream. After you have thoroughly examined the BLADE-DISC BOWL, the very small number of parts, and have found it so much easier to clean and to maintain. THEN take advantage of our very exceptional offer. Small first payment after free trial and the balance in easy monthly payments. Find out about this great offer. Send coupon below.

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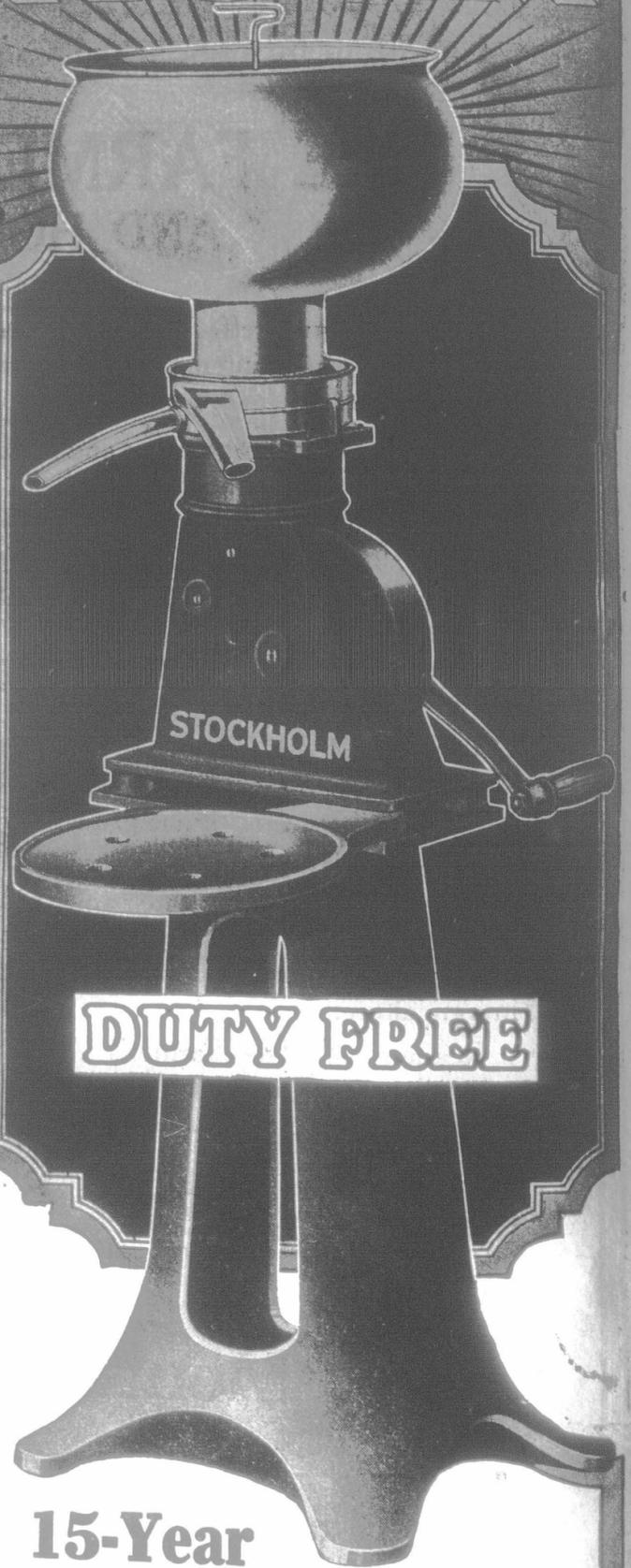
**Babson Bros.**  
Dept. 192  
181 Simcoe St.,  
Toronto, Ont.

Please send me your catalog. Tell me how I can get the Stockholm Cream Separator on your easy payment plan. Also send me the absolute 15-Year Direct Guarantee that you make on the Stockholm.

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**DUTY FREE**

### 15-Year Guarantee

A guarantee that all materials are the best obtainable and free from flaws; a guarantee of perfect workmanship; a guarantee that the Stockholm is easier to operate and maintain; a guarantee that it is the most efficient skimmer; a guarantee that the Stockholm is the most practical separator to operate, the easiest separator to clean and the cheapest any parts that may prove defective on account of either poor workmanship or poor material. No Stockholm Separator is ever sold without this 15-Year Guarantee.