

**PAGES  
MISSING**



PUBLISHED EVERY WEEK. \$1.50 PER YEAR.

# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

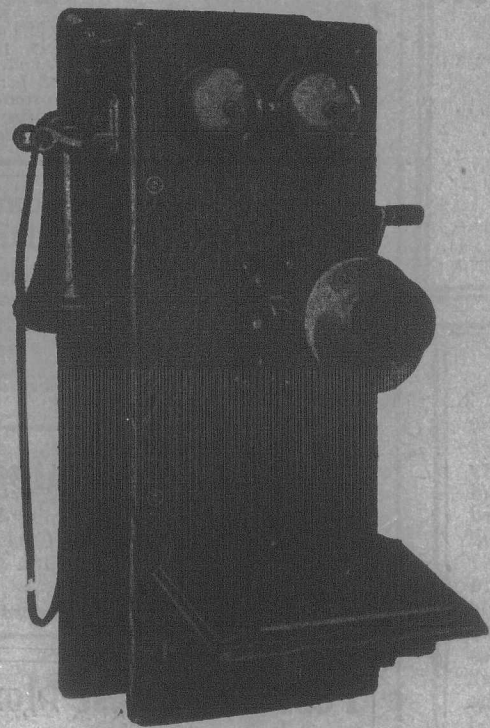
\* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE \*

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Vol. LII.

LONDON, ONTARIO, OCTOBER 11, 1917.

No. 1307



## Made-in-Canada Telephones

*of superior quality*

JUST as products of Canadian farms should be purchased in preference to foreign-grown products, so should Made-in-Canada goods be bought in preference to similar lines manufactured outside of Canada.

Money spent for imported goods is sent out of the country, whereas, money spent for home-manufactured goods stays in Canada. The more money kept circulating in Canada the more funds there are available for war-time financing.

In telephones there is really no excuse for purchasing imported makes. Canadian Independent Telephones are unsurpassed in quality of materials, workmanship and up-to-date design, and their records for durability and low cost of maintenance stand unequalled on Canadian telephone systems.

Canadian Independent Telephones are sold at reasonable prices and are fully guaranteed by a financially responsible company operating a fully-equipped, modern telephone plant in Toronto. Write and get our free trial offer.

Furthermore, you can get manual and automatic switchboards of the latest design, and guaranteed construction materials at right prices from us. Let us furnish you an estimate on your wants.

**Canadian Independent  
Telephone Company, Limited**

261 Adelaide St. West

Toronto, Canada

Send for  
any of these  
bulletins

They are all FREE

The No. 3 tells how to build rural lines.

The No. 5 describes our Canadian Automatic or Presto-Phone for large factories.

The No. 6 describes our rural telephones.

The No. 7 tells all about our small private systems for homes, garages, etc.

Sent FREE

Canadian Oil Company, Dept. L2, 100 Queen St. W., Toronto, Ont.

Tractor, 2-cent, Handy, point in, prices marked, about.

Today



### The Dwindling Dollar

Down, down, down, day by day goes the purchasing value of the dollar.

These are the days of the high cost of living; money is "cheaper" than it ever was before, so that it takes more of it to buy the necessities of life.

Where formerly a man protected his family with an insurance of \$2000., to-day it would take almost \$4000. to assure them the same comforts.

Some think that after the war money will become "dearer" again, so that it will be possible to buy as much with a dollar as we could before the war.

The best opinion is that the present high prices will continue for a very long period; in other words, that the "good old times" will not come back.

As far as life insurance is concerned this means one thing and one only—increased protection. We must, if possible, double the amount of our Life policies.

Owing to its ever-increasing prosperity the Mutual Life of Canada, though conservatively managed, offers policy features that afford the most generous protection. We would like to explain the Mutual's total disability clause. Write for booklet entitled, "Ideal Policies," which gives full particulars of this advantageous option available to Mutual policyholders.

—Premiums have not gone up with—

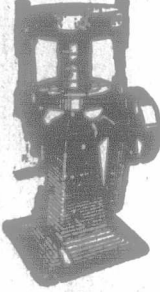
**The Mutual Life Assurance Company of Canada**  
Waterloo-Ontario

## GUNS TRAPS ANIMAL BAIT

and all Trappers Supplies

**John Hallam Limited**

722 Hallam Building, Toronto.



**DUNN CEMENT Drain Tile Machine**  
Makes all sizes, from 3 to 18 inches. Price with one size, \$250. Cement Drain Tiles are here to stay. Large profits in the business. If interested, send for catalogue No. 2.  
**LONDON CONCRETE MACHINERY CO.**  
Dept. B., London, Ontario  
World's Largest Manufacturers of Concrete Machinery.

When writing please mention this paper.

## Fresh Fish At 10c. Per Pound

The Dominion Food Controller is endeavoring to reduce the high cost of living by regulating the price of food to the consumer.

Up to the present time little if any noticeable progress has been made. During the fall season every fish caught in the lakes of Ontario or international fresh waters is needed and should be consumed by the residents of the province.

The greatest difficulty of the fisherman is to get in touch with the consumer when the big runs come on.

The Lake Erie Fish Company, of Port Stanley, on their own initiative, hereby offer Lake Erie Cisco Herring direct from the fisheries to the people of Ontario during the months of November and December when the big run is on in fifty-pound lots for ten and one-half cents per pound and in one-hundred-pound lots for ten cents per pound, delivered free of transportation charges at any freight or express office in Ontario, east-of Port Arthur.

Our object in making this offer is to demonstrate that fish can be distributed by the producer to the consumer.

By having your orders in advance we will know exactly what to do with our fish.

The orders first received will be first filled when the run comes on.

Fill out the following order form and mail to us as soon as convenient.

Complete instructions regarding the care of fish sent with every order.

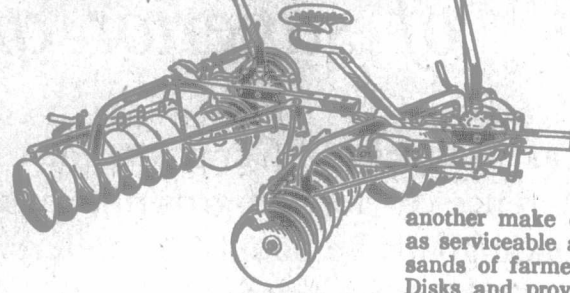
### The Lake Erie Fish Company Port Stanley, Ontario

N. S. CORNELL, Mgr.  
LAKE ERIE FISH CO., .....191.....  
Port Stanley, Ont.

Sometime during the month of November or December send me.....boxes of Lake Erie Cisco Herring containing.....lbs., to be delivered at..... Station, free of charge at.....c. per lb., to be paid for on delivery.

Lot.....Con..... NAME.....  
Township..... P. O.....

### Sizes for Horses or Tractors



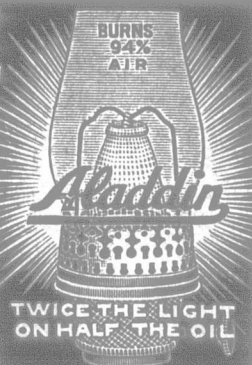
Use the Bissell Double Disk Harrows. They have great capacity for cultivating, and have made a record for working the soil better than other Disks—in fact, you won't be able to find another make of Disk Harrow nearly as serviceable as the Bissell. Thousands of farmers have tested Bissell Disks and proved them to have the

"knack" for doing the best work. They are simple in design, durable and Built for Business. Write Dept. W for Booklet. Man'f'd exclusively by—  
**T. E. BISSELL COMPANY, Ltd., Elora, Ontario**

When stubble land is too hard to plow, use a Bissell Disk. It will make plowing easy after disking—it will clean the ground and will increase the next crop.

### New COAL OIL LIGHT FREE

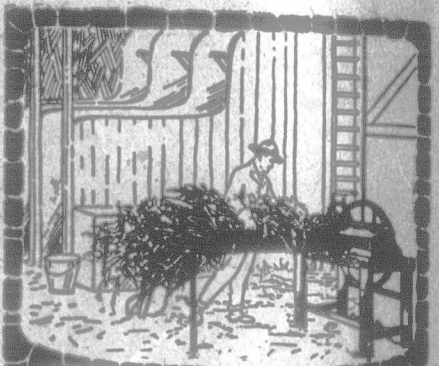
BEATS ELECTRIC or GASOLINE  
Here's your opportunity to get the wonderful new Aladdin Coal Oil Mantle light FREE. Write quick for particulars. This great free offer will be withdrawn as soon as some distributor starts work in your neighborhood. You only need show the Aladdin to a few friends and neighbors; they will want one. We give you yours free for this help. Takes very little time, no investment. Costs nothing to try the Aladdin 10 nights.  
**Burns 70 Hours on One Gallon**  
common coal oil, no odor, smoke or noise, simple, no pumping up, no pressure, won't explode. Tests by Government and thirty-five leading universities show the Aladdin gives three times as much light as best round wick flame lamps. Won Gold Medal at Panama Exposition. Over three million people already enjoying this powerful, white, steady light, nearest to sunlight. Guaranteed. And think of it—you can get it without paying out a cent. All charges prepaid. Ask for our 10-day Free Trial Offer and learn how to get one free.  
**AGENTS WANTED**  
MANTLE LAMP COMPANY, 233 Aladdin Building, MONTREAL  
Largest Coal Oil Mantle Lamp House in the World



### GILSON—"JOHNNY-ON-THE-SPOT"

THIS ENGINE only \$52.50

A BIG, little engine, that "Goes Like Sixty" at every light and medium heavy job on the farm. A heavy worker, and a light eater—dominating in Quality and Service. The biggest selling engine of any size in Canada—quantity production enables us to undersell all competitors—raising the quality, and lowering the price.  
Do not buy a cheap engine—buy a good one at a quantity price. All sizes at proportionate values. Write to-day for free catalogue stating what size engine interests you.  
**GILSON MFG. CO. Ltd. 409 York St., GUELPH, Ont. 40**



**Cut Your Own Feed**  
Our feed cutters embody the latest improvements for lessening the danger and inconvenience of cutting, and do their work quickly, easily, satisfactorily. There's a machine that will exactly meet your requirements among the hand and power outfits of

**Peter Hamilton Feed Cutters**  
They are made of the best materials throughout, and the knives are adjustable for cutting all kinds of fodder. Write To-day for Free Booklet.  
**PETER HAMILTON CO., Limited, Peterborough, Ont. 26**

### GLAZED SASH 65c.

BUY NOW AT OLD PRICES  
No. 1 clear white pine sash, already glazed. Specially low price for immediate shipment, safely packed. Over sixty sizes and styles, including house, barn and cellar sash, also storm sash. Builders catalogue free. The Halliday Co., Ltd., Factory Distributors, Hamilton, Can.

### Artificial limbs are admitted DUTY FREE. SOLDIERS and others should get the best



**Cockshutt Catalogue**  
will give you valuable farming hints, and shows the full line of Cockshutt and Frost & Wood Implements. Write for a copy to-day.  
Cockshutt Plow Co., Ltd., Brantford, Ont.

### Post Holes Cost Money

You can save this labor and expense by using Standard Steel Tube Fence Posts. Write for prices  
**Standard Steel Tube & Fence Co. Limited Woodstock Ont.**

### A Better Separator For Less Money VIKING Cream Separators of Quality

You can assure your family a MONTHLY INCOME for LIFE or assure yourself an income during your old age by means of an  
**Imperial Monthly Income Policy**  
Write for particulars now and mention The Farmer's Advocate. Address: **Imperial Life Assurance Co. of Canada Head Office: TORONTO**

**Driver Agents Wanted**  
Drive and demonstrate the Bush Car. Pay for it out of your commissions on sales. My agents are making money. Six-hundred dollars guaranteed or money back. Write at once for my new catalogue and all particulars. H. Bush, Inc., Dept. 1000, Chicago, Illinois.  
1111 W. Wacker Drive  
Delco Ignition—Elect. Sts. & Ltg.  
**BUSH MOTOR COMPANY, Bush Temple, Chicago, Illinois**

**CHURCH BELLS CHIMES AND PEALS**  
MEMORIAL BELLS A SPECIALTY FULLY WARRANTED  
**McSHANE BELL FOUNDRY CO.,**  
MILWAUKEE, Wis., U. S. A.  
Chicago Office: 154 W. Randolph St.  
Established 1860



JUST ISSUED

1917-1918

## "Investors' Reference"

A BOOKLET EXPLAINING THE PROCEDURE IN THE MAKING OF PURCHASES AND SALES OF SECURITIES AND GIVING THE LATEST AVAILABLE INFORMATION ABOUT THE MORE PROMINENT CORPORATIONS WHOSE SECURITIES ARE LISTED ON THE EXCHANGES OF CANADA.

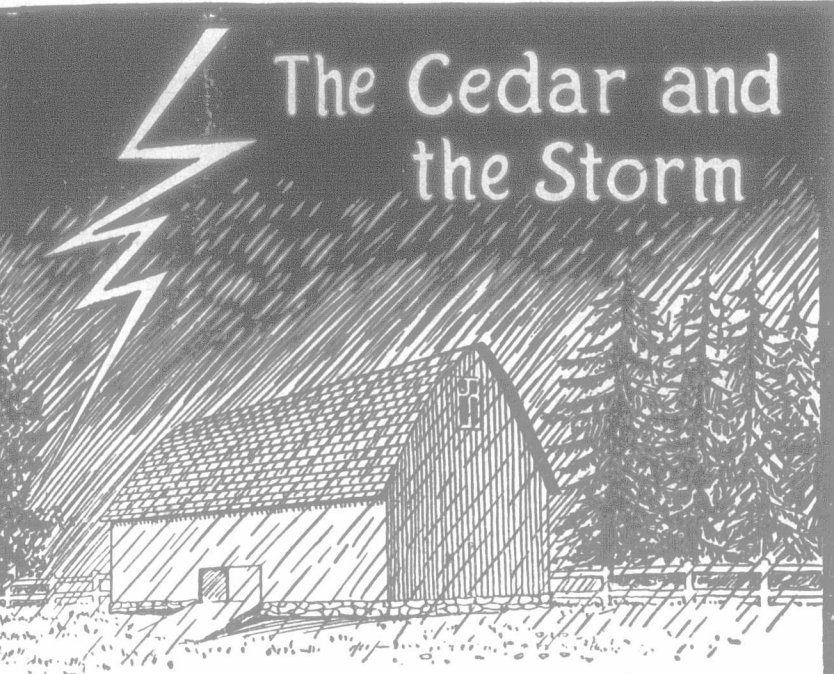
We shall be glad to send a copy on request.

Investment Securities

**A. E. AMES & CO.**

UNION BANK BLDG. :: TORONTO  
TRANSPORTATION BLDG. :: MONTREAL  
74 BROADWAY :: NEW YORK

Established 1889



## The Cedar and the Storm

### A BARN IS AS GOOD AS ITS ROOF

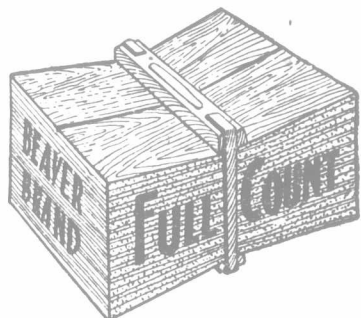
Watch the cedar in the storm—its toughness and resiliency resist all shocks.

Nature's products can best withstand nature's forces. The roof of your home and barn have to stand all the stress of the storm. They call for a covering that will stay down, that can defy wind and water and the disintegrating forces of time.

All these qualities, and more, are to be found in

## BEAVER BRAND WHITE CEDAR SHINGLES

Beaver Brand Shingles are made from the best of the New Brunswick White Cedar. They hold down their job. They need no paint, are easily laid, and the very occasional repairs are simple, the only tool required being a hammer.



Ask Your Dealer

"THE SHINGLE ROOF THAT'S STORM PROOF."

**BATHURST**  
LUMBER CO. LIMITED  
BATHURST N.B.

## This Stump Puller Sent FREE

Write! Don't endure stumps any longer. Get them out with a **Kirstin One-Man Stump Puller**. Think of it! To prove the wonderful, amazing work of the Kirstin One-Man Puller, we ship it anywhere without one cent in advance, on thirty days' free trial. No obligation to pay after trial. If pleased take a half year to pay or return at our expense and keep your money. Write for this **No Money In Advance** offer. Get a Puller and clear your land—FREE. The Kirstin One-Man Pullers pull stumps easiest and quickest. No horses required. All-steel construction—unbreakable. Guaranteed 3 years, law or no law.

Send for **FREE BOOK** One man alone pulls all kinds of stumps quick and easy. Get the book which tells how, also ask for very special offer. Don't Miss This.

Prices very low. All types and sizes.

**A. J. KIRSTIN CANADIAN COMPANY**  
Sault Ste. Marie, Ontario  
711 507 Dennis Street

## BIG MONEY in TRAPPING THIS YEAR

## RAW FURS

**FREE** Hallam's Trappers' Guide—36 pages; illustrated; English or French; tells how and where to trap; what bait and traps to use; is full of useful information. Hallam's Trappers' Supply Catalog—36 pages; illustrated; of trappers' and sportsmen's supplies, at low prices. Hallam's Raw Fur News—Gives latest prices and advance information on fur market. Address, using number given below.

**John Hallam Limited**  
531 HALLAM BUILDING, TORONTO.

## It's Here! The engine a thinking man will buy—

# The new "Z" Engine

## 1 1/2 H.P. On Skids With BUILT-IN MAGNETO

Absolutely the one great, convincing engine value.

**Fairbanks-Morse Quality at a Popular Price**

That's the story in a nutshell. This new "Z" Engine puts dependable—efficient—economical "power" within the reach of every farm.

**All Sizes Can be Shipped Immediately from Stock**

Simple—Easy to Operate—Light Weight—Substantial—Fool-proof Construction—Gun Barrel Cylinder Bore—Leak-proof Compression—Complete with Built-in-Magneto. Quick starting even in cold weather. Low first cost—low fuel cost—low maintenance cost. That's the new "Z."

**Go to Your Dealer and See the "Z"**

Inspect it. Compare it. Match it point by point. Have him show you the features that make the new "Z" the greatest engine value offered. You'll buy it.

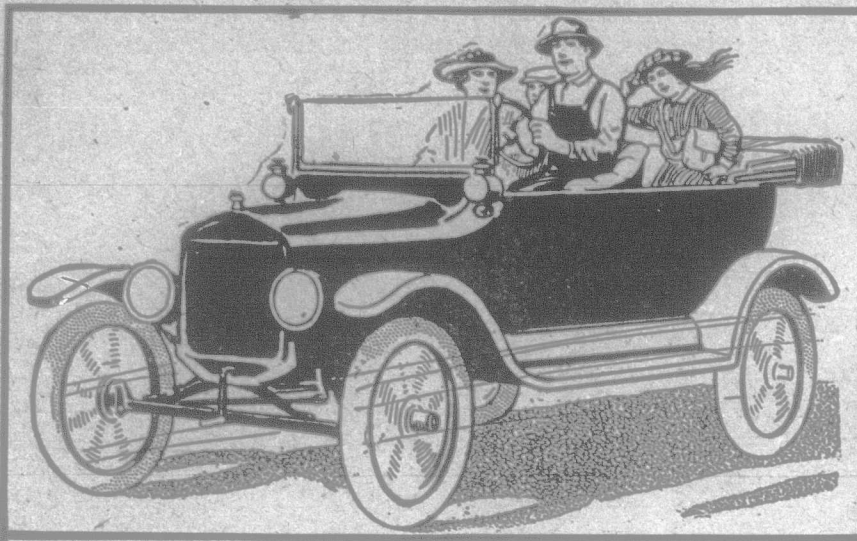
**The Canadian Fairbanks-Morse Co., Limited**

St. John, Montreal, Toronto, Winnipeg, Saskatoon, Calgary, Vancouver.

**Important Dealer Service**

When you buy an engine from your dealer you deal with a local representative of the manufacturer. He shares their responsibility. He stands behind the engine he sells. He's responsible to you. He's at your service to see that you are satisfied, and he's as near you as your telephone any time you want him.





## Save the Horses for Farm Work



THE average farmer has enough work for his horses right on the farm. He can ill spare them to pull a buggy or a phaeton. And his own time is valuable, too. With farm labor so scarce, he cannot afford to spend half a day or a day to drive a horse to town and back, when he can do it in an hour or two in a Ford.

### Costs Less

A Ford car soon pays for itself in the time it saves the busy farmer, costs less to run than a horse. It doesn't eat its head off when idle.

Mr. S. M. Smith, of Holstein, Ont., says: "I can run my Ford car more miles with less expense than a horse." His experience is typical of thousands of others.

Mr. W. A. Fallin, of Vermillion, Alberta, states that he has driven his Ford more than 13,000 miles over muddy roads, prairies and fields in every kind of weather. His entire maintenance expense for three years, outside of one set of rear tires has been only \$3.35.

With the cost of running a Ford less than driving a horse, it doesn't seem good business to drive a horse to town and tire him out so that he is not fit for work on the farm the next day, now does it?

### Never Tired

That's the great beauty of a Ford! It never gets tired. It whirls you to town and back, or takes the children to school, or your wife to visit a friend, 15 miles down the line, without any slowing up for breath or any urging with a whip. You

don't have to say "gid-dap" to a Ford. And as for hills, well, it scurries over them like a squirrel climbs a tree.

### Easy to Drive

It is as easy to drive a Ford as to drive a horse. It is just the car for country service. Narrow roads or sharp turns do not bother it. It can turn completely around in a very little larger space than a horse and buggy. It is not afraid of a traction engine, a street car, a train or another motor car. It never "shies." It stands without hitching.

The initial cost of a Ford is small—\$495 for the touring car. If you care to sell it at the end of one year, you will find many buyers who will offer you the first price, less \$125. Consider, therefore, how much pleasure you can have in a year for \$125; how many hours of tedious travel, and how much horseflesh you can save. Don't you think it is a good "buy"?

No progressive farmer can afford not to own a Ford. The more you look into this, and think it over, the more you will realize that it is so.

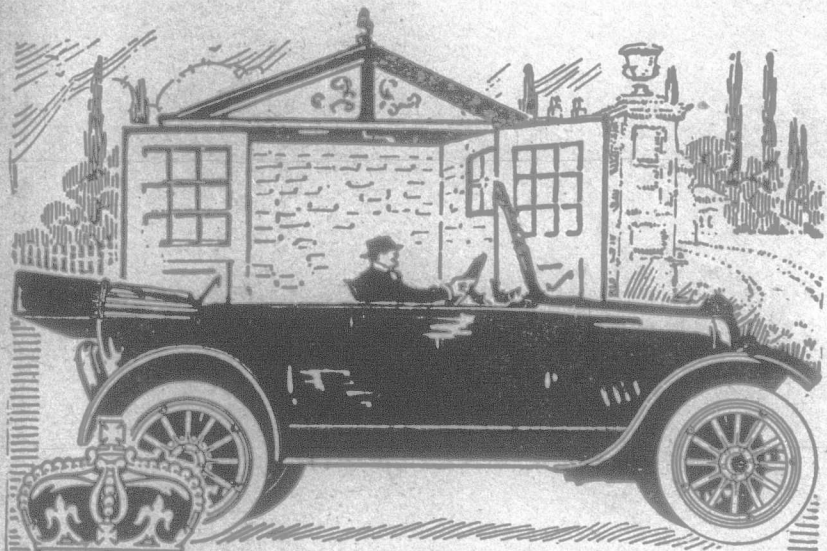
Touring Car - \$495  
Runabout - - \$475

F.O.B FORD, ONTARIO

Ford Motor Company of Canada, Limited

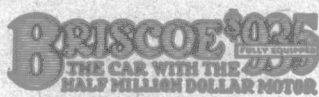
FORD . . . ONTARIO





### BRISCOE Why Your Choice Should be a BRISCOE

Because the BRISCOE is a real car at a moderate price.  
Because it is a car you can be proud of.  
Because it is easy on tires and economical of gasoline.  
Because it is handsome, roomy, speedy, powerful, responsive and durable.



The BRISCOE, B "4-24" is the climax of a million experiments—the final outcome of Benjamin Briscoe's determination to make the automobile value of a dollar mean more under the Briscoe name than anywhere else in the industry.

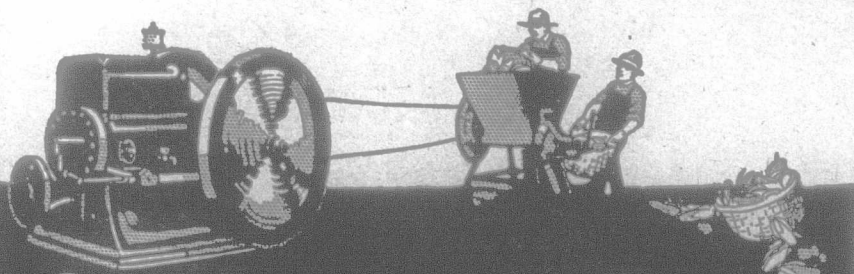
The BRISCOE, B "4-24" has: Electric Lighting and Starting System—Full Elliptic Springs—Floating Type Rear Axle—Tilted Eye Saver Windshield—Speedometer—Electric Horn—Gasoline Gauge—Ammeter—Trouble Light Socket—Automatic Switch with Key Lock—Tools—Repair Kit, etc.

The price includes everything—no extras to buy.  
BRISCOE, B "4-24" Touring Car or 4-Passenger Roadster, 105-inch Wheel Base, \$985 f.o.b. Brockville, Ont.

WRITE for Benjamin Briscoe's own story of the "Half Million Dollar Motor," or call at your local BRISCOE Garage and let the car "show" you.

THE CANADIAN BRISCOE MOTOR CO., LIMITED,  
BROCKVILLE, ONT.

93-B



## Lost Compression—Found

The one sure way to prevent gas leakage, oil waste, excess carbon and cylinder wear, is to install

### McQUAY-NORRIS LEAK-PROOF PISTON RINGS

Made in exact sizes to fit any make or type of gas engine. Give the same high efficiency in automobiles, motors, tractors, pumps, etc.

Get the genuine by asking for them by the makers' name—McQuay-Norris LEAK-PROOF Piston Rings. All garage and repair men can give you immediate service on them. If you have any difficulty getting them, write us. We'll see you are supplied.

#### Free Booklet

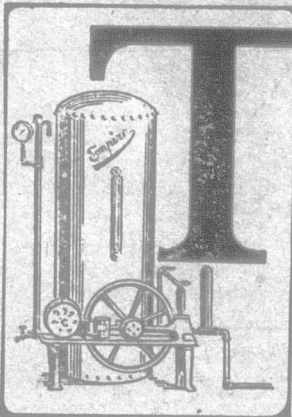
"To Have and to Hold Power"—the standard handbook on gas engine compression. Every farmer who runs an automobile, engine, tractor, etc., ought to have it.

Manufactured by McQuay-Norris Mfg. Co., St. Louis, U. S. A.  
Canadian Factory: W. H. Banfield & Sons, Ltd., 374 Pape Ave., Toronto.



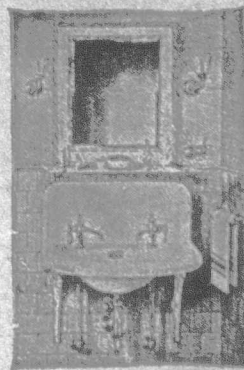
— the Genuine is packed this way

## Running Water for Country Homes



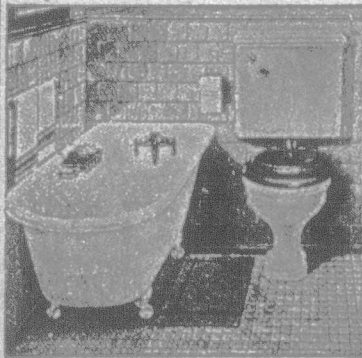
THIS electrically-driven pump and storage tank will supply every building on your property with running water at good pressure.

EMPIRE Systems are neat, compact and comparatively inexpensive. They are operated by hand, gasoline engine or electric power.



## Empire WATER SUPPLY System

The engine, pump and pressure tank, are placed in the basement. There is no danger of leakage, and all EMPIRE Systems are easily operated, powerful and durable. Your home needs one.



Send to-day for our Information Blank. Fill it in, return it, and we will select a system suited to your needs and estimate its cost, Free of Charge.

The Empire Mfg. Co., Ltd.  
East London, Canada

Branch Office: 119 Adelaide Street W., Toronto



## Buy a Western Farm

Much of the land close to old established Rail lines in Western Canada has been taken up but offers considerable advantages in the way of improvements and transportation facilities.

### \$15 to \$25 per Acre—Instalment Plan

Will purchase these fertile lands adapted for grain growing, dairy or mixed farming. To the man with a little capital to invest who objects to the pioneer work of homesteading they should prove a real bargain.

For full particulars and any of our descriptive booklets apply to nearest Agent or write General Passenger Dept., Montreal, Que., Toronto, Ont., or Winnipeg, Man.

CANADIAN NORTHERN RAILWAY

## OK CANADIAN

Saves exactly HALF the cost



### POTATO DIGGER

Made in Canada  
FREE to potato growers—our 48-page booklet, "Money in Potatoes."

CANADIAN POTATO MACHINERY CO., Limited Dept. 491 GALT, ONT.

Digs the crop clean and in half the time. New stone shield. Side delivery of vines. The O.K. Diggers are light in draft. Made in sizes and styles to suit every condition of soil.

## NORTHERN ONTARIO

Millions of acres of virgin soil, obtainable at 50c. an acre in some districts—in others, free—are calling for cultivation.

Thousands of farmers have responded to the call of this fertile country and are being made comfortable and rich. Here—right at the door of Old Ontario a home awaits you.

For full information as to terms, regulations and settlers rates, write to

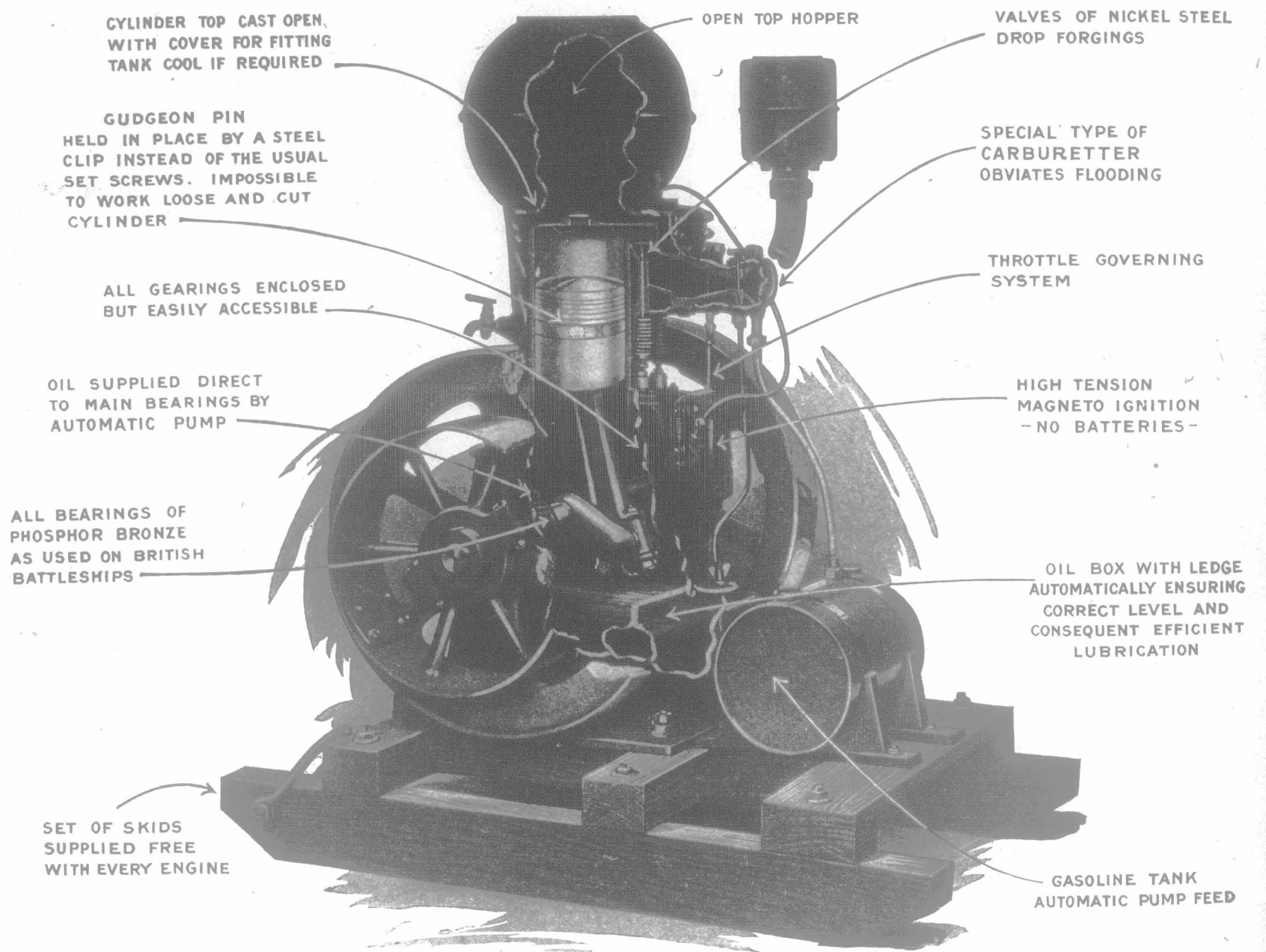
H. A. MACDONELL, Director of Colonization, Parliament Buildings, Toronto, Ont.  
Hon. G. H. Ferguson, Minister of Lands, Forests and Mines



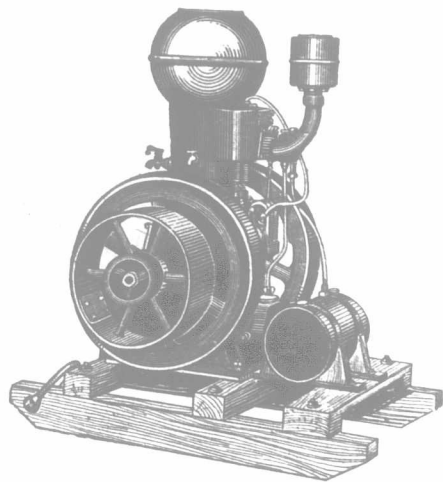
# Lister

POWER ON THE FARM

A BRITISH-MADE ENGINE THAT IS USED IN EVERY QUARTER OF THE GLOBE



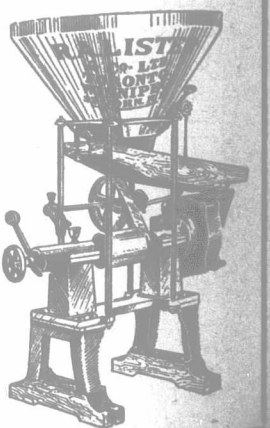
LISTER ENGINES ARE IN USE ON THOUSANDS OF CANADIAN FARMS. When buying an engine consider the HIGH-GRADE EQUIPMENT, UNEQUALLED WORKMANSHIP, SIMPLICITY OF CONSTRUCTION, ECONOMY IN FUEL AND OIL CONSUMPTION of the **LISTER ENGINE**, and you will not be satisfied to install any engine of inferior quality. Get the **Lister Catalogue** right away. Dept. "G"



**A GRINDING OUTFIT THAT**

A CUSTOMER WRITES: "The way your Lister 5 H. Engine handles this 9 $\frac{3}{4}$ -inch grinder beats me. I am more proud of your outfit than ever before. I really didn't think such perfection was possible."

**EVERYONE IS TALKING ABOUT**



**R. A. LISTER & CO., LIMITED**  
WINNIPEG TORONTO MONTREAL



# The Farmer's Advocate and Home Magazine

PERSEVERE  
AND  
SUCCEED

ESTABLISHED  
1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

LII.

LONDON, ONTARIO, OCTOBER 11, 1917.

1307

## EDITORIAL.

The best stock, well fed, is always profitable.

Regularity in feeding is a first step toward success.

Cold nights cut off milk when cows are left outside.

Organize early this fall for a profitable winter of Club or Society meetings.

Great physical drill—pulling mangels by hand! All the muscles of the body are exercised.

We haven't heard anyone complaining about having too many apples to harvest this year.

Plowing in October is a much better job than plowing in April when next year's crop is kept in mind.

At least 75,000 Canadians should subscribe to the next war loan. It will profit every one of them to help his country.

Money opens many doors; even the immigrant relies more on money than upon physical and mental fitness to open the door to Canada.

Germany hopes to sink Allied freight ships fast enough and to build ships at home at such a rate as to be commercially supreme on the high seas when the war is over.

Every good farmer has had some experience this year which he likes to relate to his neighbor. Tell thousands through the columns of this paper and do more good.

Is your constituency to be represented by a farmer in the next house of parliament, or are you satisfied to let the other fellow look after your interests in the country's affairs?

A little fertilizer and often may be more profitable than a heavy coat at long intervals. Make it go as far as possible and bring the biggest yields for the greatest areas next year.

Whether your bank account is large or small take your share of the coming war loan. The investment is the safest in Canada and the returns are attractive. Besides, your bit will help win the war and keep the wheels of commerce turning.

"Willy" and "Nicky" carried on a delightful bit of correspondence with plenty of love to "Alice". But now "Nicky" and "Alice" are in Siberia and "Willy" is headed straight for even closer confinement. The plain people are going to have some little say in the way this old planet is to be run.

Our Departments of Agriculture might do some really effective work for the good of all people by explaining away, through the daily press, some of the fallacies of such notions as the compulsory prevention of calf and lamb slaughtering, and many other much-talked-of forms of control. The people residing in cities do not know the rudiments of agricultural economics and they would only be too glad to learn. Farm papers do not circulate to any great extent in cities so for the good of all and the better understanding of our basic industry it would be well for those in the Department of Agriculture to get together and help do a little educational work through the daily as well as the farm press.

## Take Your Share of the War Loan.

Buy war bonds. No safer and sounder advice could be given Canadians at the present time. The new war loan should be readily taken up and not by a few large investors in large blocks, but by thousands and thousands of people who have smaller sums to loan. In Germany, one in every ten of the entire population subscribed to the last war loan floated in that country. In Canada, the last loan was subscribed to by only one in every two hundred. This time at least one in every seventy-five or eighty, the more the better, should apply for and secure their portion of the loan.

Farmers and workers have not been purchasers of bonds in the numbers which they might have been, largely because they have not understood the financial world and because they have been "bit" by promoters selling worthless stock. Government war bonds are different. They are the safest investment in the country. Canada—big, broad, fertile Canada—with only the fringe of her resources touched, is your security for the money you invest. What bank, what trust company, what loan or mortgage corporation, safe though they may be, could give security equal to Canada?

Business has been good in this country. Crops have been abundant. Money is plentiful. Automobiles have increased by 25,000 during the present year. We hear much of the high cost of living, but with it all many thrifty and careful people have been laying by a little money for a rainy day. Farmers do not get rich quick. Their work yields comparatively small returns, yet many have a little more money than the amount required to meet their immediate needs. Many a laborer has saved a few hundred dollars. And now all have an opportunity to invest their hard-earned cash in an absolutely safe proposition at good interest. The opportunity is the people's, but it is not only opportunity but duty. The country must have ready money. Our armies and all the Allied war work must be maintained and, if necessary, increased. Our industries must be kept going at home. Money to finance it all is necessary. Upon the country's ability to raise money—upon the country's financial condition—depends Canada's war work at home and abroad; Canada's business, Canada's prosperity. A quick response to the call for money will hold business good, will mean work for the worker, business for the manufacturer and business man, and good prices for the farmer. A nation financially embarrassed is a nation of out-of-works, closed-up business, and poor peasants. "Carry on," buy war bonds.

## Commercial Rivalry.

Most people naturally jump at the idea that Germany carries on ruthless submarine warfare against the Allies chiefly to put fear into her enemies, especially Britain, and to sink so many ships that the British, with the countries fighting side by side, will be driven into submission. This is no doubt true to no inconsiderable extent but a writer in an American magazine recently brought out a new point for us to think about. We have heard a great deal about the commercial war to come after armed hostilities cease. Some have gone so far as to say that the war itself is a commercial war. There is no doubt but that the great nations vie with one another for top place in trade, and this may not always lead to the best of feeling between peoples. Taking all these statements for what they are worth, it does seem that there may be a new pace set in the race for commercial supremacy after the war is over. Commissions are already formed in the groups of nations aligned on either side to look after the interests of the respective groups commercially after the war. Trade agreements are in the making. And in the midst of all this the writer previously referred to makes the statement that Germany's main hope in sinking Allied and neutral

shipping promiscuously is to ultimately gain commercial mastery through her own comparatively increasing ability to carry on sea-going commerce. According to this writer, Germany has built since the war began a large number of gigantic sea freighters. He mentions twenty-eight and says that there are undoubtedly many more. While Germany sinks Allied ships, Hun shipbuilders hasten to complete German ships to take their place. Small wonder, if this be true, that the Allies lay great stress upon the necessity of keeping up the ship supply. Germany looks ahead and plans to gain the mastery in commerce. This makes it necessary for the Allies to put forth Herculean efforts. It appears that unless Germany is practically crushed a great after-the-war race for commercial supremacy may result. These races are not in the interests of permanent peace which can scarcely be established while one nation, or group of nations, has the supreme desire to ultimately end another through a commercial victory. What a pity that in the interests of world democracy and world peace a world understanding could not be the outcome of all this strife! Commercial wars will invariably lead to bloodshed.

## What Export Trade Means to Canada.

Few of those busy with the problems of production take time to reflect upon the importance to Canada of our export trade, particularly in the products of the farm. Cut off the export demand for the products of Canada's fields and stables and prices to the farmer would surely fall far below the level at which they stand under an export demand. At the present time it is said that foodstuffs in Australia are only a little more than half the price they are in Canada. Wheat is not as much over the dollar as it is above the two-dollar mark here. Beef is plentiful in Argentina and those in touch with the situation are advising stockmen to hold on to them on foot; but labor is scarce. Besides the point we wish to bring out, this condition emphasizes another—the problem of the world is not famine because of lack of production but scarcity because of lack of bottoms to transport foodstuffs long distances which brings out the dependence of thickly-settled nations upon thinly-peopled, productive countries. Export trade is important not only to us but also to the importers of the product. To the Canadian farmer and to Canadian agriculture as a whole the export trade should in the future mean more than it has ever meant. It is the demand which in no small degree regulates prices and prices increase production of higher class products, make better farmers, thriving business, and in such times everyone has money and business is good. Canada's aim agriculturally should be to so improve, perfect and standardize finished farm products sent abroad as to permanently establish them in the markets of the world which take them. In this the man on the land must play his part. He must produce No. 1 hard wheat, No. 1 Wiltshire sides, No. 1 standardized beef, mutton, lamb, and No. 1 must apply to all other products of the farm for export. The Government can aid. They have the task of helping to formulate and set standards to be lived up to by the farmer, and to encourage them to live up to the standards a price premium must be the rule. Canada has a fine opportunity to gain a lasting place on foreign markets. Consumers sometimes complain that our food products are sent abroad and prices go up here. True, prices go up, but who ever saw prosperity very marked in any line of Canadian business when prices for the products of the soil were extremely low? Canada depends first upon her agriculture for prosperity, and good times only come when the man who works the land gets somewhere near reasonable returns for his efforts. These returns depend in no small measure upon export demand in a



## The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

Published weekly by  
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JOHN WELD, Manager.

Agents for "The Farmer's Advocate and Home Journal,"  
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country like Canada. That demand should be ensured through a uniform high-quality product.

### Might Aid in Distributing Better Sires.

There are many evidences that business men and financiers are beginning to recognize, as never before the importance of a sound agriculture in Canada. They are living ear to what the farmer has to say and to heed his advice concerning the things of the farm and their relation to national prosperity. It is well that it is so. Canada stands to benefit by a closer and better understanding permeating all its people. We have a suggestion to make to the banks in this connection. In travelling over the country we are brought face to face with the facts regarding agriculture. While Canada is noted for good live stock and while our breeders deserve a great deal of credit, the fact remains that the proportion of the better class of animals in the fields and barns is altogether too small. All cannot have pure-breeds but any should be able to own the best class of grades. The outstanding need of both grade and pure-bred breeding is more high-class, pure-bred sires replacing the number of scrubs in use. We have wondered if the banks could not help finance the proposition. Could they not sell, on time, in the districts where they have branches located sires which would benefit the districts and ultimately benefit the business of the banks? They might care to act through the Dominion Live Stock Commissioner and through their efforts in locating better sires community breeding might receive an impetus. We favor, every time, letting the farmer or club of farmers buy the sire. Better results will follow than where he is loaned or given, but the banks might care to sell on credit and help the work along. This is merely a suggestion and particularly for the districts where better sires are most needed, but such work, we understand, was undertaken by textile manufacturers, in one of the States to the South, with sheep, and it might be elaborated here if the banks and the Federal Department of Agriculture think well of it.

### Daily Progress.

BY SANDY FRASER.

My niece Jennie has been stoppin' wi' me for a couple o' weeks past, an' we hae been haein' some pretty hot arguments about one thing an' anither, an' last night the subject o' oor discussion wis novel readin'. She thinks ye canna' pit in yer time tae better advantage than tae be readin' a guid story where ilka body gets married in the last chapter an' a' their troubles are a thing o' the past. I hae been tryin' tae show her how she wis wastin' her time an' spoilin' her mind wi' such trash, though for the matter o' that I'll hae to admit that I hae read an odd one in ma day mysel'. Gin ye read books at all ye're bound tae rin intae something every noo an' again that leaves a bad taste in yer mouth, an' mak's ye feel that ye've been wastin' valuable time.

But the book that Jennie wis tellin' me about last night must hae been a wee bit different tae some that she reads. It wis written by some chap wi' a great imagination, I'm thinkin', for it wis supposed tae be tellin' about things that will happen fifty or a hundred years frae noo, when the maist o' us will be deid, vera likely. He thinks there is gaen' tae be a collision between this world an' a comet some day, an' he says there's likely tae be something o' a change takin' place on the earth when that happens, as we might naturally expect. But he gaes on tae say that there won't be any smash-up, as the comet is made up o' naething mair solid than gas, an' that the great change that will come will be the change o' character o' the men an' women that are in the world at that time. He seems tae think that a difference in the atmosphere will make different men an' women, an' this difference he thinks will be brought about by means of the comet. An' he gaes on tae draw a picture o' this world an' the people in it, after they hae recovered frae the effects o' bein' gassed, sae to speak. There wis an unco' great change for the better, in fact it wis juist the same as bringin' in the millennium.

I didna tak' muckle stock in the yarn, but Jennie seemed tae think there might be something in it. "Why couldn' it happen, Uncle Sandy," says she. "Well," says I, "it's against Nature, for one thing, to hae things happen sae sudden like. She's unco' slow an' canny, as a rule, in ilka thing she does, an' maist o' all when it comes tae a particular job like buildin' character. It's something that tak's time, for gin ye try tae change a' yer habits an' ways o' livin' over night, as ye might sae, ye'll soon find that ye've tackled a' bigger job than ye thought for, an' the setbacks ye'll get will be weel nigh enough tae discourage ye. My idea is tae get a wee bit further ahead ilka day, an' then by the time the orders come for us to get off this auld airth the chances are that we may hae something tae show for a' the trouble an' worry we hae been tae oor friends. It's a fact that we can hardly help bein' the better for our trip through this world, gin we mak' ony effort at all tae help oorselves, and of course the maist o' us are tryin' to dae that. To a certain extent what we get is measured by what we want. The higher we aim the mair we accomplish, provided we use oor reason at all, an' stick tae oor job. But it's a case o' gaen' slow. When we get higher up we'll be able tae see further, an' we'll find that in spite o' a' the relapses an' setbacks that mankind has experienced, he has been gradually improving, an' we hae no reason tae think that the improvement will not continue. It's because we look at things the way we dae that we think that humanity is no' gettin' ahead. If things are no' right it's because the job is no' finished. Ye can find a guid deal o' fault wi' a house when it's juist half built, for it doesn't mak' a vera guid place tae live in. It may be all right sae far as it has gone. In fact, gin ye tak it as a half-finished house, it's perfect. An' sae it is wi' the world. It's in what ye might call a half-finished state, an' looked at frae that viewpoint it's perfect. An' so there is na reason why we should be discouraged wi' it, or wi' oorselves, gin we're daein' the best we ken tae get ahead. The reason we're sae inclined tae criticize an' condemn oor fellowmen is because we dinna tak' this way o' lookin' at things. We forget that they are still climbin' towards perfection, an' that naturally some o' them are not as far ahead as others. Gin some are pretty far back on the road we may juist as weel remind oorselves that we were in the same place at one time, an' that not sae vera lang ago either. Oor opportunities hae no' been the same, an' maybe the chap we're criticizin' is makin' as guid progress back where he is as we are on ahead. When we stop lookin' on mankind as a sinful, degraded race an' see them for what they are, that is, a lot o' imperfect creatures that are in the process o' becoming something o' some account, then we will lose the inclination tae find fault, an' instead we'll be tryin' tae help those that we see are daein' their best tae find their way intae a mair perfect an' useful life.

"The time will come when we will see man for the infinite possibility that he is, for the great being that he is becoming, an' then we'll quit dealin' wi' him in the auld spirit o' narrowness an' condemnation, an' we'll deal wi' him as we should wi' all men, in a spirit o' tolerance an' hope.

"An' when all the world comes to hae this faith in a gradual growth an' perfection o' the race, that same growth will not be sae slow as it is. Then the days o' the comet that we were talking about a while back may come nearer being a reality."

When I'd got through Jennie didna' say onything for a while, an' then she says, "Weel, Uncle Sandy, I guess maybe ye're right about makin' allowances for people, an' giein' them plenty time tae learn tae do better. I ken noo ye willna' be findin' fault wi' Auntie ony mair, when she hasna' yer dinner quite ready when

ye come in frae the field. Ye'll ken that she is gradually improvin' in her ways, an' that some day she will hae reached perfection, an' ye will get yer dinner on time. An' ye willna' be gettin' impatient wi' her on Sundays when she isna' ready tae gang tae the Kirk wi' ye the minute ye hae the horse harnessed. Ye'll remember that she had tae get yer guid clothes ready, an' pit on yer collar an' necktie, before she started tae get ready hersel', an' ye'll quit dealin' wi' her in the auld spirit o' narrowness an' condemnation that ye spoke about a meenute ago. Oh, yer ideas are fine, Uncle Sandy," says she, "an' I ken ye willna' hae ony trouble pittin' them intae practice."

"Hoot, Jennie," says I, "I'm thinkin' ye're tryin' tae gie me a dig in a sore spot. Ye ken yer Auntie isna' the worse for a word o' advice noo an' again. She's improvin' under my care, dae ye no' think?"

"Oh, na doot," says Jennie. "When that comet comes there will be naething for it to dae, sae far as Auntie is concerned, gin she's had the privilege o' livin' wi' you in the meantime," says she.

### Nature's Diary.

A. B. KLUGH, M.A.

The trees are now clothed in red and copper and yellow, and the landscape is a blaze of glorious color—the glory of a dying year. There is no region in the world in which the autumn tints are more splendid than in Eastern Canada. This is due largely to the composition of our woodlands, to the preponderance in them of species like the maples and oaks which take on brilliant and various colors. It is also due partly to the character of our usual fall weather, a period of comparative dryness with a gradually falling temperature, and it will be noticed that in long, dry autumns the colors are far brighter than in wetter and colder falls. Another factor which enhances the beauty of our autumnal tints is the free admixture of coniferous trees among the deciduous trees in our forests, as the dark green of these trees sets off the other colors most admirably.

Much as the beauty of autumnal coloration is appreciated it is quite generally the case that its cause is either not understood or misunderstood. It is frequently assumed that these colors are due to frost, an assumption which is entirely erroneous. As a matter of fact frost has nothing to do with it except that very heavy frosts tend to reduce the brilliance of the coloration by prematurely killing the leaves. To understand autumn coloration it is necessary to know something of the work performed by the leaf in the elaboration of food for the plant. The water which is taken up by the root hairs passes up through the root and trunk to the leaf, while carbon dioxide is taken in through the stomata (minute openings) in the epidermis of the leaf. These two substances are transformed in the leaf into other compounds, the final product being starch. This work of starch formation is accomplished by the chlorophyll (the green coloring matter) in the leaf, the energy being supplied by light. What is generally termed chlorophyll really consists of two chemical compounds, one a bluish-green pigment called chlorophyllin, the other a yellow pigment known as carotin. During the season of the leaf's activity the strong blue-green pigment completely cloaks the yellow pigment, but when activity ceases the chlorophyllin decomposes and the carotin then becomes visible and gives us the yellow tints. The reds are due to further decomposition products of carotin.

The appearance of autumnal tints is, therefore, an indication of the close of the leaf's activity, and is intimately associated with another familiar phase in the life of deciduous trees, the fall of the leaf. The leaf really begins to fall long before the autumn. Leaves do not suddenly drop off and leave an open wound, they grow off. This is accomplished by a ring of cork tissue which is situated at the base of the petiole (leaf-stalk) and which gradually grows inwards, until at last the leaf is attached to the stem only by a thin strand of fibres. When this stage is reached the leaf falls at the slightest extra strain, and this accounts for the heavy fall of leaves which takes place during storms of wind and rain. Thus when the leaf falls there is left only a very small wound which is rapidly healed over by a further growth of the cork.

A matter which demands attention in many localities during this fall and winter is the removal of the egg-masses of the White-marked Tussock Moth. In many places this insect has been extremely abundant during the past summer, and while it did not do any very serious harm, as far as I know, the indications point to a plague of these caterpillars next year. To recount briefly the life-history of this insect: The female is wingless and on emerging from her cocoon (in August) she lays her three hundred to five hundred eggs on it and covers them with a white sticky substance which hardens on exposure to the air. In late May and early June these eggs hatch into caterpillars which feed on the foliage until full grown. They then seek some crevice in the bark and spin their cocoon. Then in about two weeks the winged males and the wingless females emerge.

The egg-masses of the Tussock Moth are very conspicuous, and in some parts of Ontario immense numbers may be seen on the trunks and lower limbs of the trees. I counted two hundred and eighty-seven on a single small maple.

The method of combatting this pest is to gather the cocoons with their attached egg-masses, place them in a large box with a mosquito-netting screen over the top, and keep them until next May. The box should then be placed in the open air and the caterpillars should be destroyed as they hatch. The reason that the egg-



masses should be kept until spring and not burnt immediately is that there are small fly-like insects which are parasitic on the Tussock Moth and if the cocoons were burnt these would be destroyed and their valuable aid lost, whereas if the cocoons are kept as directed the parasites have an opportunity to emerge and carry on their good work.

## THE HORSE.

### Diseases of the Respiratory Organs—VI.

#### Pneumonia—Inflammation of the Lungs.

Pneumonia is a disease in which practically all the pulmonary substances are more or less involved. While in congestion of the lungs, the larger or functional vessels are congested, in pneumonia it is the smaller or nutrient vessels that suffer from congestion. Pneumonia may affect but one lung, or both. In the former case it is called "single pneumonia", in the latter "double pneumonia."

**Causes.**—The causes are largely the same as other respiratory troubles, viz., exposure to cold and wet, sudden chills, housing in cold, drafty stables. Horses kept in ill-ventilated stables are rendered more susceptible to many diseases, especially of the respiratory organs. The condition may appear as a sequel to pulmonary congestion, or it may be induced by irritating gases or by foreign bodies entering the wind-pipe.

**Symptoms.**—The animal becomes dull, the pulse is very much increased in both frequency and force, probably reaching eighty or more beats per minute. The mouth becomes hot, well marked elevation of temperature, reaching 103 to 104, or even 106, degrees Fahr.; there is usually a dry, dull cough, coldness of the extremities, and usually some degree of rigor (shivering). In some cases the disease is ushered in by a severe rigor, succeeded by a hot stage; the mucous membranes are red and injected, that of the eye sometimes of a yellowish, rusty tinge. The patient seldom lies down, and if he should do so will soon rise again. If loose he wanders about occasionally in a dull, depressed manner, now and then eating a mouthful of food. There is usually a tendency to constipation, the bowels are irritable, and will not tolerate drastic purgatives; the faeces are usually mixed with flakes of mucus. The respirations are usually increased in number, but not difficult in the early stages, but as the disease advances they become still more frequent and more or less labored. By placing the ear against the chest an altered and rather grating sound can be heard in the early stages. In this way the examiner, by listening with his ear at different parts of the ribs, can tell whether or not both lungs are affected, and whether or not the whole or only part of a lung is involved. Later on the abnormal sound becomes altered to a somewhat moist sound, and, (unless the disease becomes checked) still later on there will be an absence of sound in different parts of a lung, or possibly the whole lung. This indicates that portions of or the whole lung have become consolidated and no air is entering. Pneumonia is particularly dangerous during two stages, first, during the early fever, which may destroy life by its intensity, and, secondly, during the period of consolidation, which may prove fatal practically by suffocation. A horse suffering from pneumonia seldom lies down, but this is a symptom of many chest affections. When the breathing is very frequent the patient will stand with his elbows turned outwards and his toes turned inwards. If great prostration succeeds, the position of the limbs is generally altered. He will then spread his feet apart and the elbows will turn inwards. The pulse is very variable; sometimes full and hard, sometimes full and soft, at other times weak, irregular or intermittent.

**Treatment.**—The patient must be made as comfortable as possible in a stall (preferably a box stall) that is well ventilated, and allowed to stand in such a position that he can inhale pure air. Blood-letting should not be practiced, but in the early stages if the pulse be full and strong, the administration of 12 to 15 drops of Fleming's tincture of aconite in a little cold water as a drench gives good results, but must, on no account, be given except when the pulse is both frequent and strong. Perspiration should be encouraged by warm clothing and the administration of 2 to 4 ounces of liquor ammonia acetatis in a little cold water every two hours for two or three doses. The advisability of applying counter-irritants to the chest is a point upon which practitioners disagree. We have always thought we got benefit from rubbing breast and sides, from the shoulder to the last rib, well with mustard mixed with warm water and then clothing the parts well. This causes considerable distress for a few minutes, but good results generally follow. After a few hours the mustard should be brushed off and in some cases the application repeated. The chest must be kept well clothed, but if the weather be warm the croup should be left uncovered. It is good practice to hand-rub and bandage the legs. The patient should be given 2 to 4 drams of nitrate of potassium every six to eight hours, either in cold water or placed well back on the tongue out of a spoon. He should be allowed all the cold water he will drink. This should be given frequently, in order to prevent the consumption of too large quantities at once. The food should be of a laxative and easily digested nature. If constipation be noticed, he should be given about a pint of raw linseed oil and injections of soapy warm water per rectum. The administration of aloes or other drastic purgatives must be avoided. During conva-

lescence great care must be taken to keep him excluded from drafts and dampness, as a relapse is readily caused and usually ends fatally. He should be given grain and hay in moderate quantities, and given a little walking exercise, under cover, if in cold weather. Should moderate diarrhoea or increased secretion of urine be noticed, it should not be checked, as they are critical discharges by which effete materials in the blood are being eliminated from the body. Should the appetite be poor, it may be stimulated by the administration of stomachics or tonics, as a tablespoonful three times daily of equal parts of powdered sulphate of iron, gentian, ginger, nux vomica, and bicarbonate of soda. The patient should not be worked or exposed for several days after a complete recovery has apparently resulted.

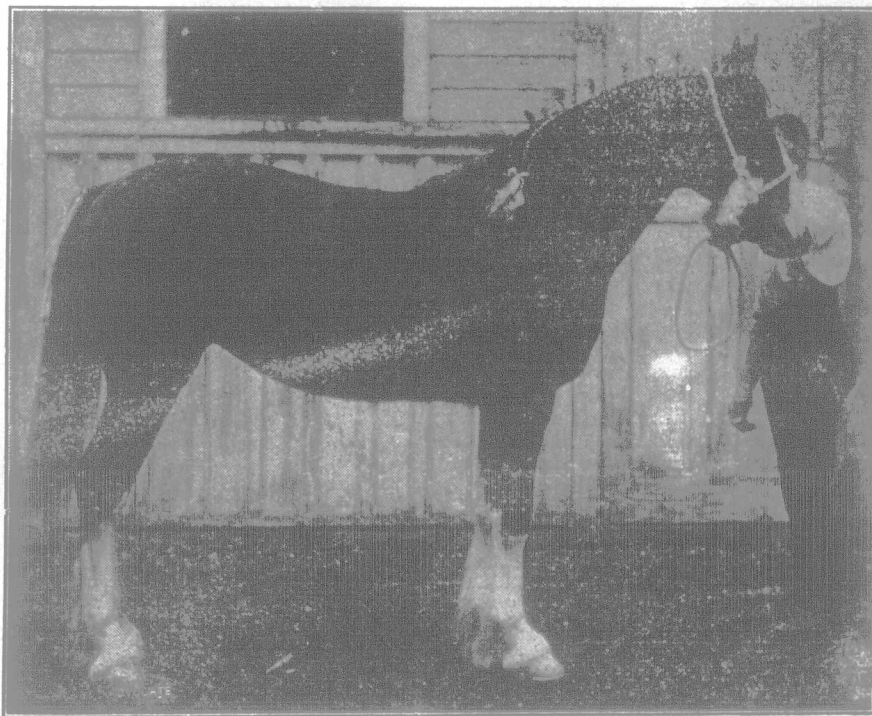
WHIP.

### The Horse of the English Farm.

EDITOR "THE FARMER'S ADVOCATE":

When the late William Smith commenced to use his small cultivator by steam power on his heavy land in Buckinghamshire, in England, it was thought by the agriculturists of that day that the problem of heavy land cultivation was solved, and that the tedious and expensive process of ploughing with horses and bullocks was going to be altogether cheapened if not entirely superseded by what was then called "steam farming," which for a period of fifteen years at least was boomed for all it was worth.

A user of Mr. Smith's cultivator sent him a testi-



Halma.

Champion Canadian-bred Clydesdale at Toronto and London for W. F. Batty, Brooklin, Ont.

monial dated January 30, 1858, which concluded with these words: "The difficulties attending the cultivation of clay land—thanks to you—are now at an end." At that time the Royal Agricultural Society of England gave a prize for the best essay on "Steam Power for the Cultivation of Land," which was won by J. A. Clarke, Long Sutton, Lincs, whose paper appeared in the Royal Journal of 1859. Twelve years after that, at the Wolverhampton show of 1871, the R. A. S. E. gave the large sum of £605 in prizes for engines and machinery for steam cultivation, which was supplemented by a £100 silver cup given by Lord Vernon, president for that year, "for the best combination of machinery for the cultivation of the soil by steam power, the price not to exceed £700." The classes numbered eighteen, and included prizes for drills and rolls to be used with the same power.

An exhaustive report of the trials is given in the Journal of that year, also written by Mr. Clarke, from which it was evident that great things were expected from this horse-saving machinery. The idea prevailed that if steam were employed horses could be almost dispensed with, and Mr. Smith—the pioneer—whose farm consisted of 110 acres of arable land and 90 acres of grass land, was in the habit of using six horses and a strong pony, but hitching his threshing engine on to his cultivator by means of wire rope pulleys and anchors, he sold three of his horses, while another user of steam (Mr. Redman, of Overton, Wilts) also sold three horses at £40 each, described as "remarkably powerful and good animals." At the same time he dispensed with the services of thirteen working oxen at an average of £17 10s. each in order to adopt "the cheap method of performing tillage operations."

In the essay referred to Mr. Redman was said to have "made a move in a safe direction. Time alone can show what the effect will be in empowering him to adopt a higher order of culture and a reformed system of cropping."

The Steam Age, as regards the general cultivation of clay land, was, however, of short duration. Undoubtedly the rainy years of 1879 gave a setback to this method of dealing with land, while the depression which reigned through the eighties did not favor the purchase of £700 sets of steam cultivation machinery.

When wheat got down to less than 20s. per quarter, as it did in 1894, nothing at all was heard about the use of steam power on clay land, for the reason that it did not pay for cultivation, therefore, the advice was to sow it down to grass and keep more stock. The first part of the advice was taken, while farmers began to turn their attention to milk production and to the breeding of Shire horses, a great export demand for the latter having set in. Pedigree mares began to take the place of the forty pounders above referred to, which were able to perform much of the soil cultivation and to breed a foal also, so that the farmers who embarked speedily into breeding registered Shires found that they possessed power which appreciated in value rather than depreciated as steam cultivation machinery did—and must always do.

Even Mr. Smith, of Woolston, grew tired of working heavy land, and he laid most of his ploughing down and bricked his engine into a shed.

With the decline in the use of steam-drawn implements has come a greater increase in the number of those for which draft horses are required, a long list of the same being absolutely necessary to the modern farmer who wishes to deal with his crops with speed and efficiency, though of course the steam plough and cultivator is still used by large farmers and in suitable weather. But a team of Shires is the pride of many a farmer in every county of England, while the price of 225 guineas for a gelding, realized at Crewe last year, and 180 guineas for a farmer's foal at Peterborough just recently, prove that animals of this great draft

breed do something towards paying the rent as well as doing the cultivation, seeing that those of the most fashionable breeding are quite able and willing to work if they are only trained in their youth, and the fact that they have worked does not limit their value, so that they only make the price of the workers sold in 1858 to make room for the steam engine. An average of £40 each would be considered a very poor one for a Shire breeder to make of matured animals at the present time, as the above figures prove. An average of double that should be aimed at for geldings which have spent two and a half or three years at draft work on the farm. In these days it is necessary for English farmers to keep profitable stock all round, and pedigree Shire mares can draw implements or machinery for half the year and rear good foals during the other half, so that a team capable of performing the work of the farm is always on the spot.

ALBION.

## LIVE STOCK.

### The Fall Care of Live Stock.

The fall is the hardest season of the year on live stock. It lies in between the period when nature is providing for her own and that time when man takes over the responsibility which climatic conditions impose upon the husbandman. When the days begin to get cold, the nights wet and the herbage poor, nature knows full well that it is man's duty then to care for the animal kind. In too many cases the average farmer thinks that nature is still equal to the task and does not interfere until much of the summer gains have been lost and snow covers the already too scanty vegetation on the ground. That is not good husbandry; it is a penny-wise and a pound-foolish policy, for grain and fodder saved by late pasturing are used up, with more added, to regain the flesh and general thrift lost through exposure to inclement weather and meagre rations. While we do not recommend close confinement there are two things that all classes of live stock should have from now on and they are full stomachs and adequate shelter. The success which will attend the winter's feeding depends largely on how the stock is cared for during the next two months. With this in mind we offer the following suggestions, briefly set down:

Begin feeding as soon as pastures and meadows fail to maintain flesh.

Stable all milch cows at night or provide a dry shelter of some kind.

Do not allow the cows to go down in their milk yield. Augment the pasture with corn fodder, chop or clover hay and roots or silage.

Don't allow the young stuff to "rough it". Keep them growing and gaining.

All but milch cows and calves will do very well till Christmas time at least, and perhaps all winter, if not stabled, but they should have a dry shelter free from strong drafts, as a resort from storm, and plenty of feed.



Dry, comfortable quarters are best for calves from now on, but they should be out on fine days for exercise.

When feeder cattle are first stabled do not feed heavily on grain. Fill them up with fodder and plenty of succulent roughage such as roots and silage. The chop should come later and very gradually.

If not already done, give the stables a thorough renovating, cleaning out all dust and cobwebs. Make all necessary repairs and freshen up the interior with a coat of whitewash containing a strong disinfectant.

Arrange a box of salt somewhere within reach of the cattle so they may resort to it daily and take what they require.

**Sheep Notes.**

Have the ewes thrifty and gaining in flesh when mated with the ram. This is termed "flushing" and insures a larger lamb crop. A few oats at this time are excellent.

Have the ram vigorous and thrifty but not too fat in preparation for the mating season. Thrifty, well-exercised rams get a larger percentage of strong lambs

than do sires too thin or too fat. Rams off in condition are not good sires.

Do not yard or pen the flock too early in the season. They enjoy free range but sheep require a shelter from storm, particularly rain storms, which are exceedingly objectionable to the woolled tribe.

If repairing the sheep pen or building a new one provide for large doors facing the south. These should be in two sections (an upper and lower) so the top part may be left open during the fine weather in winter.

Do away with the overhead feed racks. Wool is too valuable to have it stuck up with straw and chaff.

Provide large doors through which the sheep enter and leave their pens. Crowding through small entrances often means the loss of a ewe or lamb.

Save some clean, fresh clover or alfalfa hay for the flock, it cannot be fed more profitably than to sheep. This with some roots and oats makes an excellent ration.

Water is better than snow with which to quench the thirst of the sheep. Keep fresh water and salt before them all the time; they will appreciate both.

**Swine Pointers.**

Don't be too good to the breeding stock. Keep them outside but provide a comfortable shelter. Exercise, with ample feed, including some roots, make thrifty, successful breeding pigs.

Keep the young things separated according to sizes. Large and small pigs do not thrive well together. The battle is too one-sided.

When the hogs are confined throw into the pens plenty of green stuff, so long as there is any, and sods or fresh earth.

In the absence of milk a small quantity of tankage can be fed with advantage and profit. Particularly with young pigs will this feed show results but it should not exceed 8 to 10 per cent. of the grain ration.

Ground oats with the hulls sifted out make a splendid feed for little pigs before or after weaning.

Crippling is one of the worst troubles in the piggery. Guard against it by having a healthy, thrifty herd and dry, well-ventilated sleeping quarters. Feed a mixed grain ration and see that the pigs get exercise.

# International Trade in Pure-bred Live Stock

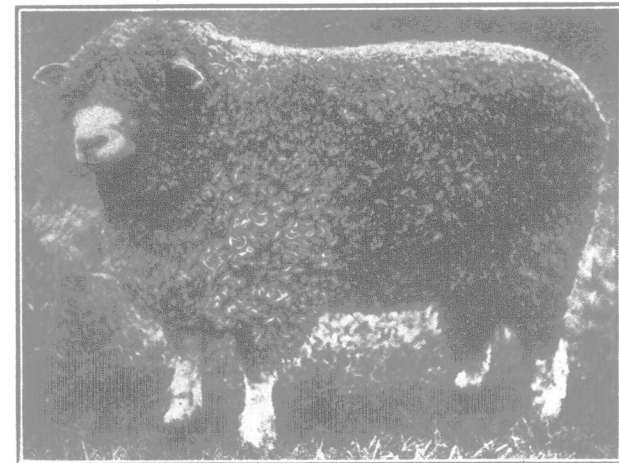
The pure-bred live-stock business is small compared with the movement of commercial horses and the enormous turnover of cattle, sheep and swine for feeding and slaughter purposes. On the Chicago Stock Yards over a million dollars' worth of business is transacted daily, and that is only one centre out of many on this continent where meat animals, as well as horses, are bought and sold. What is the propelling force behind this tremendous enterprise? Were it not for some stimulus the quality and general character of these live-stock offerings would deteriorate owing to indiscriminate breeding and the use, by many, of inferior or scrub sires. Fat stock shows are invaluable in arousing and maintaining interest in prime-fitted stock among the breeders, but these men in turn scour the country for the well-bred things, knowing full well that perfection, as a general thing, does not come by chance, and must be sought where the prepotent blood of the pure-bred has stamped his likeness and desirable fleshing characteristics upon his progeny. Here then is the answer to our question. Behind all this tremendous traffic in meat animals; behind this enormous business upon which the fertility of our lands and the financial security of the nation rests; behind the most important enterprise of any self-sustaining commonwealth is the pure-bred animal weaving into the warp and woof of the native or unimproved stock a realization of the noble aims fostered in the minds of a few men, real benefactors, and the founders of our breeds. Undoubtedly, pedigreed animals are the foundation, the cementing material, and the arch-stone of the industry; upon them the whole structure rests, they bind and hold it together. Out of this fundamental principle of animal industry has grown a world-wide movement of pure-bred sires and dams which we intend to trace briefly in order to reveal the tendencies of certain countries along particular channels and how the dissemination of the breeds, their multiplicity and popularity are much greater than we have allowed ourselves to comprehend. Every people, bound by national or political confines, have their own ideals, influenced of course by climate and agricultural conditions, and we in moments of egotism permit ourselves to think that our breeds are the only ones of any importance while others are discards, or favorites of the unenlightened. Some there are, too, who have not thought otherwise than that the breed they champion is superior to the selfsame blood in foreign lands. We should not forget that the farmer of Argentina, the New Zealander, the Boer in Africa, the Japanese, or the Slav, may breed just as good animals as we have in Canada. Notwithstanding the cosmopolitan nature of animal breeding and its adaptability to almost every land; with due respect to the magnitude of the Argentine estancias, the blue-grass lands of our neighboring Republic, the good grazing areas of Canada and divers countries, and with all honor to many skilful husbandmen, Britain has been and still is the stud farm of the world. That indefinable something in land or air; the climate, the mast and the "cake" all tend to produce an excellence that has filled the bottoms of thousands of vessels which have left her port for foreign lands. Britain's live stock has been one of the greatest colonizing factors at her command. It follows then, that any attempt to describe the international trade in pure-bred live stock must feature the exportation of pedigreed animals from Albion's shores.

**A Year's Business.**

Since the beginning of the war the export horse business has been very much reduced, while the trade in cattle and sheep has actually increased. The tabular records of export trade in Britain during 1914, 1915 and 1916, immediately following this paragraph, are from the Live Stock Journal, London, England, and convey a very good impression of the magnitude of the demand in foreign countries. As stated previously, there are few horses being shipped at present, the war having affected that branch of the industry very seriously. The following table in regard to horses is self-explanatory:

Period	Number exported	Declared value
January to December, 1914	37,704	£1,931,752
January to December, 1915	1,548	320,991

A different tale can be told about cattle. The 1916 business was good indeed, the largest customer being the Argentine, which took 1,342 head. The United States came next, taking 1,087 head, and Canada followed with 308. The Uruguayan imports amounted to 163, and those of Australia numbered 40. The demand listed under "Other Countries" totalled 877. The following table is a resume of three years' exports:



**Riby Perfect Model.**

A champion Lincoln ram in England; later sold in Buenos Aires for \$8,000.

Period	Number exported	Declared value
January to December, 1914	2,512	£171,938
January to December, 1915	2,106	175,362
January to December, 1916	3,817	275,020

The number of sheep sent abroad last year exceeded that of 1914, and the value was higher, being in excess of any average reported during the last twenty-five years. Argentina was again the best customer, importing 2,131 head. Canada took 407, at good prices; Uruguay bought 240 head; United States, 241; New Zealand, 26, and other countries (mostly Chili, The Falkland Islands, and that part of the world) required 660 to supply their demand.

The following table shows the trade during the last three years:

Period	Number exported	Declared value
January to December, 1914	3,003	£35,647
January to December, 1915	3,033	52,051
January to December, 1916	3,761	71,582



Out of the number of pigs exported in 1916, 10 went to the Argentine, 10 to Canada, and 308 to other countries not designated. The following table also gives their value:

Period	Number exported	Declared value
January to December, 1914	438	£5,757
January to December, 1915	128	1,403
January to December, 1916	328	3,367

Further computation in the same direction shows that the declared value of the live stock exported from Britain in 1914 amounted to \$7,218,057.46. Owing to the war it dropped to \$2,680,924.00 in 1915, the decline being chiefly in horses. Some improvement was made in 1916 when the total rose to \$3,830,397.60. These figures represent the trade between Great Britain and foreign countries only, but prior to the war the exportation of Percherons from France, and Belgian horses from Belgium, totalled very considerable amounts. These figures, however, are not to hand at present. It might be interesting also to review the averages for the last three years. In 1914 the average value per horse exported from Great Britain was £28; in 1915 it was £206, while in 1916 it rose to £254. This can be arrived at knowing the number exported and their declared value, in which case some shillings and pence enter into the calculations but we have omitted them here, giving the value roughly in pounds sterling. The average value of cattle exported in 1914 was £68; in 1915 it was £83, and in 1916 it was £72. The average value of sheep exported in 1914 was £11; in 1915, £17, and in 1916, £19. The pig value in 1914 was £13; in 1915, £10, and in 1916, £10.

Some idea about the tastes of different nations in regard to breeds can be gathered by noting the destination of exports from the fountain source. Horses, cattle, sheep and swine will be treated under different headings, in an endeavor to convey some impression, so far as importations tell the story, of the live-stock industry in the various countries of the world.

**Where the Horses Go.**

Since the outbreak of war the home demand for horses in the belligerent European countries has consumed practically all of the surplus horse supply. A few, however, have gone overseas to foreign lands, but the number is not at all representative of the trade in normal times. During 1916 only a few Shire horses were exported from England, so we have chosen the season of 1912 that the figures may testify to a certain extent in behalf of this breed. During the year in question 455 Shires were officially reported to have been sold to go abroad. Their distribution as told by exportation certificates was as follows: United States, 231; Canada, 85; Australia, 60; Russia, 33; South Africa, 18; Argentina, 14; Germany, 12; Austria, 1; Uruguay, 1.



During the years immediately preceding the outbreak of hostilities, equine exportations showed a decline so we have chosen the year 1911 as representative of a good season's trade in Clydesdales. In that year 1,617 were sent abroad, Canada being a very heavy buyer. New Zealand and Australia have taken Clydesdales for a number of years, but the North American continent is the best patron.

Perhaps no other horse or breed of live stock has seen a wider distribution than has the Hackney. During the last sixteen years they have gone to twenty-eight different countries, which number includes practically all of the European nations, many of the commonwealths of South America, Canada, United States and various small foreign countries. The greatest number that ever came to Canada in a year was 109, brought over in 1906, while anywhere from 30 to 80 per year was common during the decade from 1903 to 1913. Argentina has shown the Hackney considerable preference, while Italy has been one of its best patrons. Japan has used them to an appreciable extent, but probably the greatest number going to any one nation have gone to the United States. In the year 1906, 381 Hackneys were exported from Britain, being one of the best seasons' trade since 1900. Lately the motor has reduced the demand for Hackneys quite seriously.

The Percheron has had a wide distribution, but next to France perhaps the greatest population of this breed is to be found in the United States, where it is the national draft horse. The importation of Percherons into that Republic was heaviest in the early eighties. In 1884 more than 2,000 of all ages were brought to America. Since then heavy shipments have been made in order to extend and maintain the breed in that country. Canada, South America, Japan and Russia, all devote considerable attention to the Percheron, while just recently a few have gone across the Channel to England, the stronghold of the Shire and other heavy breeds.

Before the war Germany was a prominent buyer of the Belgian draft horse, while England, Holland, Sweden, France, Denmark, Austria and the United States have all been good customers in that market. In 1903 over 300 were shipped to America.

**Where Cattle Breeds Are Now Popular.**

The exportation certificates of Aberdeen-Angus cattle do not indicate altogether where that breed is most popular. More than half of last year's exports were for South Africa, where the breed is developing with remarkable rapidity. The success of the Angus cross in the fat stock shows that that country has advertised it widely, while a frozen-meat business which has developed there during recent years also helps to boost the Aberdeen-Angus through the adaptability of the carcass for the enterprise. It is well known, of course, that the United States and Canada have shown considerable preference for this breed, and it has made remarkable strides in North America during recent years, coincident with a decline in imports. The trade of pedigreed cattle last year was as follows: South Africa, 169; South America, 98; New Zealand, 10; Canada, 10; Australia, 5; Japan, 3; United States, 2; Jamaica, 1; Norway, 1; Sweden, 1, making a total of 300.

The Council of the Shorthorn Society of Great Britain and Ireland felt highly elated at their last annual meeting, in June, when they were able to announce that the exportation of pedigreed Shorthorns exceeded during the past year the number exported in any year in the Society's history, with but one exception, that of the year 1906. The total number of exportation certificates issued by the Society between June, 1916, and June, 1917, totalled 1,838; the cattle going to the following countries: Argentina, 580; United States, 558; South Africa, 292; Canada, 289; South America, 90; New Zealand, 10; Australia, 8; Uruguay, 6; Monte Video, 4; Chili, 1. During 1916 the United States had some dealing with the Argentine in Shorthorns, the latter country taking 81 head from America at an average price of \$700. Since then the trade has been too good on this continent to warrant any export business.

The Hereford breeders of Great Britain enjoyed somewhat of a boom last year when around 500 exportation certificates were issued. This breed which is very popular in the United States has become almost self-sustaining there and importations have decreased.

Trade is developing, however, with the South American republics and South African colonies, and in the future much is expected from the opening out of Northern India and Rangoon, Russia and the Balkan States. The export certificates issued during 1916 up to the end of September were as follows: South America, 276; South Africa, 108; United States, 49; New Zealand, 2. This makes a total of 435, but during the remainder of the year that was increased to 500. In 1915, 257 export certificates were issued; 229 in 1914, and 404 in 1913. About one dozen Herefords were exported from the United States to Argentina in 1916, and around 50 head came to Canada.

The Ayrshire breeders of Scotland have long enjoyed a good business with many countries of the world. In 1913, 450 export certificates were issued, the cattle being divided thus according to their destination: United States, 209; Canada, 80; South Africa, 65; South America, 24; Finland, 23; Japan, 19; British East Africa, 7; New Zealand, 6; Newfoundland, 4; Nova Scotia, 4; India, 3; Russia, 1; Holland, 1; no destination given, 4. This trade was very considerably curtailed by the war, and during the year ending June 12, 1916, the Society knew of only 96 animals being exported.

For many years practically no Holsteins have been imported to the North American continent, the United States being the stronghold for the breed on this side of the water. There is a very considerable exchange of Holsteins, however, between the United States and Canada. Some heavy importations of Jerseys are made to Canada and the neighboring Republic from their Island home, but at present actual figures are not to hand. Devon cattle is another breed which annually goes forth from England. In 1916 South Africa took 36 head, Brazil 2 and Australia 1. In 1913, 148 head were exported.

**Where the Woolled Breeds Are Sent.**

In recent years heavy importations of Shropshire sheep have been brought to Canada and the United States; the North American continent being the best customer in the world. The greatest number imported in one year was 1,774, which came over in 1908. In 1909, 1,352 were purchased. Since then there has been a considerable decline, due no doubt to the growing excellence of the home-grown stock, and to the difficulties, more recently, of shipping. South America took 267 head in 1914, but only 42 head in 1915. South Africa is another patron of this breed, and so are Australia, Tasmania and New Zealand. The European countries have always taken a few but not so many as have come to North America. In 1916 only 368 head were exported from England. The largest number exported during the last ten years was 2,314, which went abroad in 1907.

The Lincoln breed of sheep is very popular in South America, particularly in the Argentine. At last year's exhibition at Buenos Aires there were 18 pens of three Lincoln rams over one year. There were 67 pens of ram lambs, three in each; a wonderful lot all about twelve months old. In 1916 the exports were: one ram and 18 ewes to Australia; 20 ewes and 6 rams to South Africa; 100 ewes and 2 rams to Canada; 1 ram to Ireland; 2,019 rams and 17 ewes to South America; a total of 138 ewes and 2,046 rams. In 1915, 93 ewes and 1,939 rams were exported.

Recently Romney Marsh sheep have been coming to Canada, but prior to that the breed has not been well known here. The best demand is in the Argentine, Southern South America and South Africa. During 1916, 480 rams and 211 ewes, a total of 691, were exported, against 598 in the previous year.

Brazil, Canada, Denmark, France, Russia, South Africa and the United States are all heavy buyers of the Southdowns. In 1913, 78 head went to New Zealand alone. Since the war, however, the trade abroad has been exceedingly small, but wherever they have gone they are popular owing to the excellence of their carcass.

The Hampshire has had a fairly wide distribution, but in 1916 they went chiefly to the United States, Chili, and Argentina; 87 head in all were exported in 1916.

Since 1897 Suffolk sheep have been exported to Canada, United States, South America, South Africa, Australia, New Zealand, Jamaica, Spain, France, Belgium and Germany. All of these countries are still

regular importers except in so far as the war has interfered with the trade.

There were few Cheviot sheep exported to America last year, but a number went to the Falkland Islands and Norway at an average of £25 each. Of recent years Argentina has taken a few, but prohibitive rates since the war have reduced the trade.

The Oxford, Dorset Horn and Leicester have all had a fairly wide distribution, the range of which space will not permit of elaboration.

**Hogs Are Not Good Colonizers.**

The widest distribution of any breed must be credited to the English Large Yorkshire; one breeder alone having sent them to forty-six different countries. During the decade, 1905 to 1915, 2,181 Berkshires were distributed in 21 different countries. The Tamworth is not so widely known. While there is a considerable movement of pure-bred swine it is usually national, rather than international in scope. However, the export business for one year shown early in this article reveals the fact that a considerable number are annually sent abroad.

**Half-Rate Privilege Continued to Live Stock Shippers.**

Live stock men are no doubt aware that the Canadian Freight Association decided to discontinue the half-rate privilege on pedigreed live stock shipments in less than carload lots. After considerable negotiation between the Dominion Department of Agriculture and the Canadian Freight Association, the Canadian railways appointed a small committee to confer with the Minister in the matter. The result of this conference was that the committee on behalf of the railways agreed to continue the half-rate privilege, it being provided however that the minimum charge for any single shipment will be \$4, unless the full tariff rate makes a lower change, in which case the latter will apply.

**THE FARM.**

**Why is it all Directed at the Farmer?**

"EDITOR THE FARMER'S ADVOCATE":

I've meant to tell you for so long how delightfully refreshing it is to read the thousand urgent injunctions for the farmer to get busy and grow things, get a hustle on and produce, do something big for his country in the way of "thrift and production" stunts—you know what I mean, you may have seen it yourself in every form of English, slang or sermon.

The funny part of it is that the farmer has been too busy to read nine hundred and ninety-nine one-thousandths of the sensible advice or of the impudence of ignorant idlers. The only conceivable reason that people can have for dinging at the farmers so continually is that they know no other class of people can rise to the occasion and furnish food for the hungry, helpless multitude after the worthy ones and healthy helpers have volunteered their lives and gone.

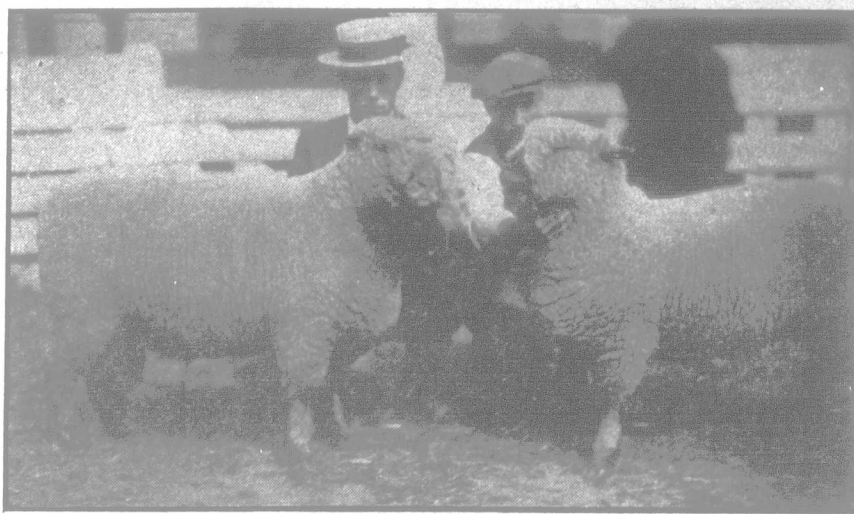
It appears that the non-farmers are united in the hallucination that they have a mission to educate the farmers. Maybe somebody else could stand a little more education too. Is it only the farm owners who can work from 5 a.m. till 7 p.m.? If not, then who else does?

During the busiest season my work took me through Guelph, Hamilton, St. Catharines, Niagara Falls, Toronto, etc. These cities were thronged and apparently not all transients, rushing through, like myself. Why, instead of hanging around, bemoaning the exorbitant charges imposed by the cruel farmer, didn't they whirl their little car out to some of those neglected fields, rent them, plant them, reap them, mow or hoe them and get their own farm produce, or get educated by their failures? Anything is better than standing around knocking somebody.

These writers have gotten in a rut, too. Can't they find fault with someone else for a rest? I was at a picture show once this summer. It was full. Were any of them farmers? They didn't look like farmers to



Dorset Pen.



A Pair of "Shrops."



me, and I can generally tell them by their work-worn look and weary walk. Of course, everyone needs recreation, but farmers are the only ones who have no summer holidays. I'll give these people who need objects to attack or subjects for copy a few suggestions. Go after the preachers, lawyers, school teachers or middlemen for a while. Then insist on these lecturers practicing some of the things they advocate—more than once. These reporters who give advice so fluently might try a week at real farming and then write from a different viewpoint. I saw a handsome, well-dressed lecturer carry a cradle, or a scythe once through the summer—but only once. I don't mean that way—just for something to brag about. It's amusing how proud unaccustomed people are of a feat like that, if they do it; but it's no stunt at all if the other fellow, i. e., the farmer, does the job. Why, he's just a critter of commoner clay and naturally does the trick easier. I don't mean to intimate that those implements are used often nowadays, but the illustration occurred to me and that is the only agricultural tool I saw used this year by anyone—not a farmer. I may have stirred up a hornet's nest, but I'll get my money's worth if I have.

Prince Edward Co., Ont.

S. L.

### Silo Filling by Auto Power.

The matter of power for silo filling is rather a difficult problem in some localities. A large outfit that does custom work is expensive, but few care to spend the money for machinery which is only needed a short time each year, so some farmers have to wait a considerable time before they can have their corn ensiled. Unless the weather is favorable this may mean a loss of nutritive

value. It takes a high-power engine to run a large cutting box and blower, but they are capable of filling a silo in short order if the corn is brought to them. On many farms a small gasoline engine is used for grinding, sawing, etc., and some are purchasing a small cutting box equipped with blower or carriers according to the power of the engine, so as to be independent. They fill the silo with their own regular help, or probably an extra man. It takes considerable time to harvest the crop this way, but they claim that they are able to ensile the corn at less cost than if they hired a large outfit and had the work done in a hurry. They would either have to hire a number of extra men or else change work. The latter would necessitate them being away from home for probably a couple of weeks and things would not receive proper attention at home. While they may be working at corn harvest as long when ensiling their own crop as when changing work, they are always at home and can quit the corn when they wish, to perform other necessary work. This is a consideration. Two or three men with a couple of teams and a cutting box driven by a comparatively small engine, will harvest a considerable quantity of corn in a day. It takes a lot more power to drive a blower than it does to run carriers or an elevator. Either of the latter are generally used when the five or six-horsepower gasoline engine or electric motor furnishes the power.

Some are using power generated by the engine of their pleasure car for filling the silos, cutting feed, grinding, etc. One method of harnessing the auto motor is by attaching a belt pulley to the crank shaft. The average motor engine is capable of developing sufficient power to drive most of the machinery used on the farm. One difficulty is that the car not being in motion the engine is likely to heat unduly if kept running for any great length of time. Dr. Shaw, of Middlesex County, successfully put his crop into a thirty-foot

silo this fall with power from an auto engine. He had an old car with thirty-two-horsepower engine for which he had no more use, so he offered it for sale but to his surprise the highest offer was \$40. Rather than take this price the Doctor decided to keep it and this fall it was put to good use. The rear part was jacked up and braced and one wheel substituted by a 20-inch pulley keyed to the axle. A nine-inch face cutting box with blower was used, and at the time of our visit large sheaves were being run through without any apparent decrease in the power. Of course the engine was a particularly strong one, but then in any make of car the engine usually has plenty of power.

Dr. Shaw had eight and one-half acres of corn which was a fair average crop, and two men and one team were cutting and ensiling it at the rate of a little over one acre a day, besides chores and other sundry work about the farm. The corn had to be hauled about three-quarters of a mile. There was a tendency for the engine to become quite warm if allowed to run too long, but cutting one load and then allowing it to cool while another load was hauled worked very satisfactorily. It required about one-and-one-half gallons of gasoline per acre, which, at present prices, would cost about fifty-four cents. Only an average amount of lubricating oil was used. Thus it will be seen that so far as power was concerned, silo filling was not an expensive job. Dr. Shaw is so well pleased with the power that he purposes setting the car in position for cutting feed this fall, and contemplates purchasing a small thresher next year as he is satisfied that the car engine will furnish satisfactory power for all kinds of work about the farm. We would not advise a farmer using his touring car for driving all kinds of farm machinery, but it sometimes happens that the body of the car becomes racked while the engine is in first-class condition. Instead of scrapping it, it might profitably be used for supplying farm power.

## Canada's Young Farmers and Future Leaders.

### Benefiting Myself and Helping the Fair.

"EDITOR THE FARMER'S ADVOCATE":

The local fair was the big event of the year in our community, and we boys looked forward to it for weeks and saved our nickels to spend on peanuts, popcorn, the merry-go-round, etc. We used to look through the agricultural hall to see how the pumpkins, apples and roots compared with what we had at home, but we never thought of showing anything—that was for other people. Then we would see the stock and probably watch one heat of a horse race, but most of our time was spent wandering around the grounds and watching those things which were supposed to amuse people. I cannot say that I got much of an educational value from the fair, but now I see that it was my own fault. My interest in the fair did not wane as I reached my late teens and early twenties, but after attending our fair this year I see much more to it now than I ever did in the past.

The change of attitude started last winter when our District Representative held a four-weeks' Short Course in our village, which I attended as regularly as I could. There we secured information about the growing of various crops, selecting seed for sowing, and also selecting grain, roots and fruit for exhibition. The lectures relating to feeding and care of live stock were especially interesting and resulted in more than one member of the class making an improvement in his methods of feeding. The practical work in judging appealed to all of us. I never missed a day when judging was on. As we never all saw the animals in the same light, there was, of course, some lively discussions, but these tended to bring the various points of difference in the animals to our attention. It was not so difficult to pick out what I thought was the best animal, but my troubles began when it came to giving reasons. However, by observation and practice it became easier. It appears to me that the judges at our fairs should give reasons, especially in close classes, so as to enlighten the exhibitor as

well as the spectators. The course last winter is connected up with my taking a greater interest in the fair in this way: It was while at the judging of stock, grain, roots and fruit that a desire was born to show stuff at a fair. I cleaned and graded our seed grain better than usual and was successful in persuading my father to purchase a couple of pure-bred females of the Black and White breed. We already had well-graded stock and used a pure-bred sire, but none of our females were registered. We had a couple of registered sows and kept pure-bred fowl so you see good stock was not foreign to us. The trouble was we were not aggressive enough with what we had or we would have been able to make a better showing to-day. The stock was kept looking good throughout the summer by changing pastures every two or three weeks, and by feeding a little extra in the stable during the drouth. Special attention was given our two registered cows and the heifer calf from one of them—the other lost her calf.

Instead of being merely an onlooker at things in general at our fair, this year I was a busy boy because I had three head of cattle, a sow with her litter, and several fowl to look after. Then I had oats, barley, turnips, mangels, potatoes and carrots entered in their respective classes.

The proudest moments of my life, so far, occurred during the afternoon of the second day of the fair when I held my four-year-old cow at the head of a class of eight, and again when I won first on her calf. The three-year-old cow didn't win her class. I got a first and a second on my pigs, and several prizes on my fowl. I was highly elated with the success of my first attempt. I thought the fair was the best I had ever attended, and it was from my standpoint; I do not mean the cash returns from the prizes only, but I got something of an educational value which helps me now and will be of use to me next year and the next.

After the judging in the ring was finished, a stock judging competition was conducted by our District Representative. Dairy cows and horses were the classes given the contestants to work upon. There were four

animals in each class and reasons had to be written for each placing. I entered the competition along with most of the boys who had attended the winter class. It was the first one the most of us had been in and we found it harder to make decisions than we had in our workouts during the winter. Of course prizes were offered this time, and we all wanted to be first, which probably made us a little anxious. I know the time was almost up in the horse class before I had started writing reasons. I then became a little excited I guess for I found it difficult to put on paper why one animal should be placed ahead of another. I hadn't paid as much attention to horses as I should have, and wasn't sure of myself. As it was, I was third highest in the competition. Another year I will be better prepared and will try to go about the judging in a more systematic manner.

When the competition was over it was getting pretty late in the afternoon and nearly time to collect my exhibits and start for home. There had been horse races, a merry-go-round, side-shows, etc., for which I had no time. In fact, I felt no desire to spend time on them; there were other attractions of more interest and value to me. Now, as I go fore and back in the field, seated on a riding plow and have time for retrospection, I see where I have been missing some of the bigger things in life. For instance, while I was enjoying myself at the fair in years past, other fellows were showing stock, grain, etc., and were probably having a better time than I was, although at the time I didn't see it that way. Here I am starting in the show game when I might as well have exhibited something ten years ago, if only a pair of chickens or a few apples. Thanks to the course in agriculture, the scales have largely fallen from my eyes and I see farming in a different light. From now on I purpose being an exhibitor at our local fair, and in time may try some of the larger fairs. If you haven't shown anything in the past, prepare something for next year. If live stock is your line, it will give you "fun" for weeks instead of just for an afternoon; at least that is the way I have found it.

FARMER'S SON.

## Automobiles, Farm Machinery and Farm Motors

### Save Your Gasoline.

Fuel controllers are making an effort to conserve the supply of coal and we motorists should put forward a similar effort towards the preservation of the gasoline supply. The very best authorities are confident that there is enough gasoline available to provide for war requirements and also to maintain the operation of automobiles. Motor cars constitute our greatest system of transportation and so are essential to the country's requirements. This fall, in particular, the automobile has done wonderful work in saving man power and horse power upon the farm. The idea of gasoline economy is simply based upon the general trend towards conservation. In peace time as well as war time you should operate your gasoline engine upon a basis that will keep expenses at a minimum.

When you purchase gasoline see that the nozzle is placed well within the opening of the tank in order that no liquid may be spilled and a loss result. Having filled the tank make sure that the cap over the inlet is securely screwed down. Do not cut or twist the threads, for if you do the jolting of the car will drive some of the gasoline through the small openings. If the cap does not fit perfectly rub some graphite around the thread. This makes for easier operation. On a

great many tanks there are gauges to indicate the amount of fuel. Follow the same system in screwing down the cap of the gauge. Perhaps you have noticed yourself that a great many cars have wet spots around the gauge and filler openings. This shows distinctly that gas is being wasted. It will also be well for you to look carefully over the fuel line and make sure that the connections are perfectly tight. If there is a vacuum system of feed attached to your engine look at it quite often and become positive that the pipe connection at the bottom is leak proof. A great deal of gasoline can drip from even the smallest hole anywhere around the bottom of the vacuum tank. This system of feed is well made by the manufacturers but, of course, requires the customary amount of attention from owners.

Up until the present time large quantities of gasoline have been used for cleansing of power plants in motor cars. Some people utilized a spraying machine operated by compressed air. With this contrivance they made a perfectly good job of cleaning the motor but they wasted a valuable amount of gasoline. We would suggest that this spraying device be not used in future but that instead you should rub down the engine with benzine or coal oil and do the job by soaking rags or waste. In this new manner you will not require as much liquid as previously and you will be saving the

difference in the price of benzine or coal oil and gasoline. Watch your carburetor and make sure that it is leak proof. Perhaps the greatest waste that any carburetor brings comes from one that contains sand holes.

The smoother your engine is running the less gasoline you are going to use. Do not forget this very important fact. You are going to save a lot of money if you can get complete combustion from the fuel that goes into the cylinders, but you are not getting thorough consumption if any part of the gas is being exhausted unburned, or deposited as a carbon. Keep your motor free from carbon at all times, the unclean power plant has a tendency to miss and to overheat and is not at any time giving you the mileage that you should have.

We also advise a careful inspection of the service and emergency brakes. If they are dragging you are losing some portion of the result you should be getting from your fuel. See to it that the brakes are perfectly free when the levers are disengaged. You should always examine the wheels of your machine, from time to time, and make certain that they are in perfect alignment. Wheels that are not true require more propelling power than those that are. By watching all these details you can save a considerable amount of gas in a season's running and so help along the economy propaganda that is now so popular and so necessary. AUTO.



## THE DAIRY.

### Shorts as a Feed For Dairy Cows.

Can a dairyman afford to feed shorts at \$42 per ton when milk is selling at \$1.75 per hundred pounds? Middlesex Co., Ont. J. P.

From our experience with different feeds it would be very little \$42-per-ton shorts that would be used to produce \$1.75-per-hundred milk. There are some dairymen feeding this class of concentrate who claim that it pays, while others who have fed it believe they did so at a loss. It will depend somewhat on what feeds it is combined with and whether or not the adding of the concentrate increases or maintains the milk flow sufficiently to pay for the extra feed. If it doesn't, then some other form of concentrate should be secured. Some cows respond to extra feed while others do not; thus it is necessary to make a study of the individuals in the herd before it can be decided whether or not it pays to buy expensive feed. The production limit of some cows is so low that they do not pay for ordinary roughage and home-grown concentrates. Shorts vary considerably in composition. Those secured from some mills appear to be superior in quality to the product of others. However, an average analysis is: Ash, 4.4 per cent.; protein, 17.4 per cent.; fibre, 6.0 per cent.; nitrogen free extract, or carbohydrates, 56.8 per cent.; fat, 4.7 per cent. Thus it will be seen that they have fairly high feeding value. But they do not make a desirable feed to give in quantity to dairy cows. Henry, in "Feeds and Feeding," says: "Mixed with various ground grains, shorts or middlings, are helpful with dairy cows, since they add crude protein and phosphorus to the ration, but they are less palatable than bran and are a heavy feed which should be fed to dairy cows only in limited amounts mixed with other concentrates." In order that a ruminant may get the most value out of shorts, they should be fed with coarse concentrates, as bran or oats. But then these two feeds compare favorably with shorts in all the constituents, except that oats contain about five per cent. less protein and that much more carbohydrates than shorts. When it comes to the digestibility a higher percentage of the carbohydrates but barely as much of the protein is digestible.

As it is nitrogenous feeds and something bulky which milk cows require, extra feeding of alfalfa or clover hay might be found to give better results than shorts. The idea of purchasing hay does not appeal to the average dairyman; in fact it should not, as he should aim at producing plenty of leguminous roughage on the farm, as a ton of hay can usually be grown for considerably less than the average market price, while the grains cost well up to the average price to grow and harvest them. Four pounds of good clover hay will furnish double the amount of ash, and practically as much protein, carbohydrates and fat, as three pounds of shorts. The latter is about sufficient of this class of concentrate to put in a day's ration, while four pounds of hay is only from one-quarter to one-fifth of a regular daily ration. A cow can be given all she will eat of clover hay; in fact, she could live and produce on it, while she would soon die if put on a ration of shorts alone. Consequently, on the basis of protein alone, with clover hay at \$12 per ton, shorts would theoretically be worth \$12.55 per ton, as a feed for dairy cows. Of course, there are other things to consider, and hay and shorts cannot very well be compared. The above places shorts in a poor light so far as price is concerned; however, the fact remains that if dairymen provide a liberal supply of legume roughage to feed with roots and silage in the winter, or to use as a supplement to pasture during drouth of summer, they would not need to spend so much on expensive concentrates to keep the milk flow up to normal. When feeding entirely on home-grown feeds the tendency is for the ration to be light on the protein side, which is not conducive to heavy production. In this case it will pay to purchase some concentrate which is high in protein. Considering the beneficial effect of bran on the system, and the fact that it is a safe feed, we prefer it to shorts for dairy cows, at the same price. It must be remembered that the other constituents entering into the ration may alter the feeding value of any given feed. For instance, bran would show better results when fed in combination with dry corn, straw and hay, than if fed with succulent feed, as roots or silage. Cottonseed meal contains more than twice as much protein as shorts and a little more fat but only half the quantity of carbohydrates. Linseed oil meal also contains about double the amount of protein found in shorts, but falls below in fat and carbohydrates. These latter feeds are considered by some to be too high in price, but if it is protein that is wanted in the ration they would be worth practically twice as much as shorts. About the same results would be ex-

pected in the milk flow with two pounds of cottonseed or linseed as with four pounds of shorts.

No matter what feed is used, it must produce results to be profitable. At the prices previously mentioned each pound of shorts would be expected to return one and one-third pounds of milk in order to break even; over this amount would be profit. It is possible that the addition of the shorts to the ration may prevent the animal losing in flesh, even if the milk flow is not increased. This has a value. While it may pay in some cases to feed shorts at \$42 per ton to cows, there are other feeds on the market from which we believe better results will be obtained. We would prefer bran, cottonseed meal or linseed oil meal, even if the latter two are considerably higher priced per ton than shorts. They contain more of the nutrients required for milk production. A concentrate that will give results with one herd may not with another, owing to a different class of roughage being fed and to the ability of the individuals to turn feed to good account, consequently attention should be paid to the actual increase or decrease resulting from the ration.

### Pasteurizing Increases the Value of Dairy By-Products.

The by-products of cheese and butter factories, as whey and skim-milk, have a value, the extent of which depends on the condition in which they are returned to the farm. However, they may be a source of danger as it has been definitely proven that they can be carriers of infectious disease, unless pasteurized to destroy the germs. The pasteurized whey has a considerably higher feeding value than the unpasteurized as the fat remains equally distributed so that each patron receives his share and in such a form that it does not foul his cans. In unpasteurized whey the fat rises to the top of the can where it forms a disagreeable scum and the

purchase, but the majority of the infected animals were known to have been raised on the farms. Only an infected skim-milk supply could account for such conditions.

"Ostertag reports that in advanced udder tuberculosis, the sections from the infected quarters may be virulent in a dilution of one to one billion. Cows with infected quarters are occasionally present in every dairy district and the admixture of their milk with good milk at a cheese factory infects the whole. Two recent publications report the presence of virulent tubercle bacilli in fresh unpasteurized whey.

"Within the past two years, a very strong argument for the compulsory pasteurization of all dairy by-products has been presented by the spread of foot-and-mouth disease throughout many dairy sections. In some instances the conditions surrounding outbreaks have indicated very clearly that the return of unpasteurized skim-milk has spread this infection. For these reasons pasteurization is being advocated in many places and several states have passed laws compelling the pasteurization of skim-milk, whey and similar products. The Pennsylvania law requires the heating of dairy by-products to a temperature of at least 178 degrees F., Iowa requires 185 degrees F., Minnesota requires 180 degrees F., while Michigan requires 185 degrees F., or 145 degrees F. for thirty minutes.

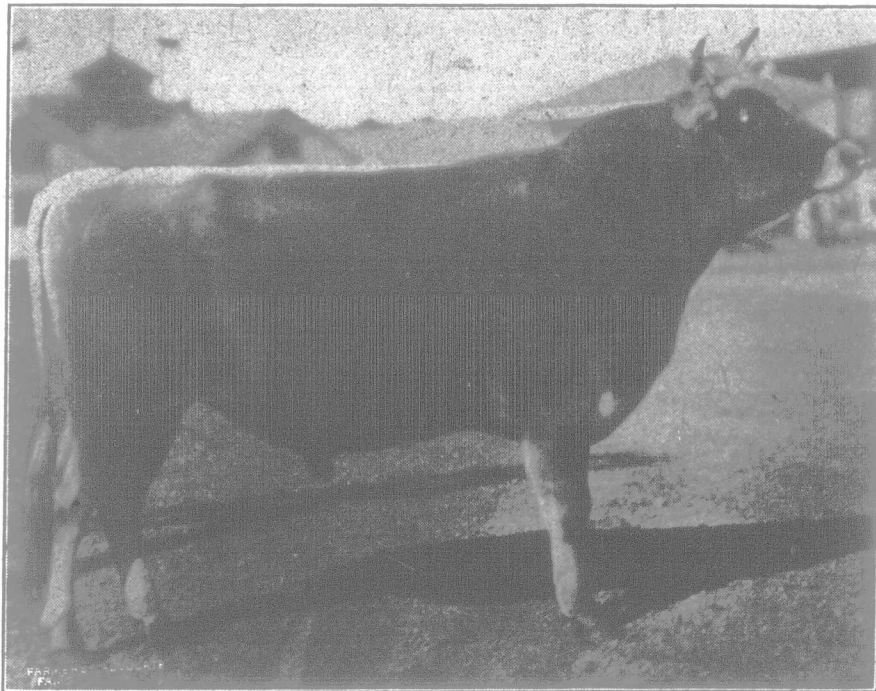
"The temperature to which milk or whey must be heated to kill tubercle bacilli has been the subject of much investigation. The available data have been summarized by Rosenau who verifies by his own work the conclusion that a temperature of 140 degrees F. for twenty minutes will prevent tubercle bacilli from producing the disease in inoculated animals. Russell and Hastings find that under ideal conditions 160 degrees F. for one minute will kill the tubercle germ, but that 170 degrees F. for the same length of time is more certain to do so under ordinary conditions. Other considerations than those just mentioned have caused the requirement of higher temperatures in the laws quoted above. A law with no means of enforcement is of little benefit, as some men will evade a law if possible. Therefore these laws, with the exception of the Michigan law, have required the use of a temperature of at least 178 degrees F., this temperature causing changes in the milk which are detectable by means of the Storch test. Such a temperature kills the tubercle bacillus and other disease-causing organisms with a sufficient margin of safety where flash pasteurization is used and provides a very wide margin of safety where the holding process is used.

"It is essential that the cost of pasteurizing dairy by-products be held at a much lower figure than that allowable for market milk because the final value of the product is much less. Available figures indicate that the cost of whey pasteurization does not exceed one cent per hundred pounds of whey. One manufacturer, who operates thirteen cheese factories, charges his patrons five cents per 100 pounds of cheese. This is approximately one-half cent per 100 pounds of whey. He states that he does not consider that this pays the whole cost but he is satisfied because of the decreased trouble with quality of the cheese produced. Another manufacturer, operating seventeen factories, charges one cent per 100 pounds of whey. No reports of investigations were found which showed the cost of pasteurizing skim-milk. This cost need not exceed that of whey pasteurization except in those instances where it must be carried on at the time when the maximum amount of steam is required for other purposes. This may mean that increased boiler capacity is needed and this raises the cost. Several of the factories which pasteurize skim-milk are using a method of holding pasteurization comparable to the methods of pasteurization used in this State for market milk. The cost of such is usually placed at from six to ten cents per hundred pounds."

## POULTRY.

### Feed the Pullets a Liberal Ration.

It is aggravating to poultrymen to see prices high and production low. This is the "off" season for birds in most flocks. Pullets are not sufficiently developed to commence laying, and the yearling hens can hardly be expected to lay many eggs while they are donning their new dresses. However, present care may influence the egg yield this coming winter. It will not pay to stint the feed for pullets or hens. They require more now that inclement weather is coming on and they are developing or producing new feathers than they do at any other season. We know that it is hard to throw high-priced grain to poultry and have little or no returns coming in, but then, the future must be considered. An adequate ration while the chick is growing, and especially at this time of the year, will help to start production when eggs are highest in price. Better to dispose of the hens than to keep them on little more than a maintenance ration. As a rule the birds do not receive proper attention during the fall when they most require it. The pullets are allowed to remain in summer quarters, which, by choice, is frequently the trees, until the snow flies. Now, this treatment is not conducive to egg production, and besides it takes more feed to properly maintain a bird that is exposed than one which is housed in comfortable quarters. Pullets should have been in their winter pen the past month, but if they are still looking after themselves it is to your interest to place them in a dry, clean, well-ventilated pen, which is free from drafts, and to commence feeding them properly. But first examine the flock; there is likely to be a number of pullets with long, narrow,



Brampton Beauty Heir.

Junior champion Jersey bull at Toronto and London for B. H. Bull & Sons, Brampton, Ont.



anemic heads. They will not make profitable producers and it will pay better to fatten them. A few may have crooked breast bones or some other deformity. It is not advisable to place them in the laying pen. Pick out the strong, healthy birds that are brimful of vitality; they are the kind that pay for their keep and leave a profit besides, and they are the only ones you want to feed. Better a small flock of active, healthy birds than a large flock containing a number of weaklings.

Avoid undue excitement when examining or feeding the pullets. A bad scare may set egg laying back several weeks. Start early to get on good terms with the flock if you want the best results. By a little care you should soon be able to pick up any bird without it trying to get away.

Wheat is the best grain the year round, but owing to it being required for milling purposes, together with the high price, poultrymen are substituting other grains as much as possible. Oats can be used much more largely than they are, and at present prices are the cheapest grain. Buckwheat, barley and corn can all be used to advantage, but it is doubtful if results will be as favorable as if wheat composed from one-third to one-half of the ration. The dry and moist mashes are too often neglected. They are good for the birds and lessen the amount of grain required. Bran, shorts, cornmeal, gluten feed, etc., may be used in equal proportions, and the birds given about all they will eat; if the birds are inclined to have diarrhoea add low-grade flour to the ration. Don't forget green feed and meat food. Mangels, turnips or clover leaves will supply the former, while beef heads, lights, etc., which can sometimes be secured from the butcher, will furnish the latter. Beef scrap can be purchased on the market. Grit and shell are essential to production. Liberal feeding of one constituent of a suitable ration will not make up for lack of another. Green feed, meat, or shell may be the limiting factor to production where an otherwise liberal ration is fed. Pullets or hens will not lay when fed a light or one-sided ration.

## HORTICULTURE.

### Root and Vegetable Storage.

The season is already here when the roots and tubers must be lifted and stored for the winter. Full storehouses in some instances may necessitate extensions, improvements, or make-shift arrangements, and in other cases, perhaps, a new root-house which has long been under contemplation must be constructed. We reproduce herewith some ideas and illustrations from Extension Bulletin No. 17, of the Manitoba Agricultural College, which may suggest ways and means of meeting the situation. The Bulletin is entitled "Vegetable Storage", under which heading the authors, F. W. Brodrick and L. J. Smith, discuss storage facilities as well as the most favorable conditions and temperatures. The recommendations may not apply in all cases but they are capable of being modified and adapted to any circumstance.

#### Factors Favoring Successful Storage.

**A FAVORABLE TEMPERATURE.**—A temperature sufficiently high to protect from frost, yet low enough to retard decay is a favorable temperature. For most vegetables a temperature ranging from 34 to 38 degrees F. is most favorable. Potatoes can be stored most successfully in a temperature of about 38 degrees F.

**GOOD VENTILATION.**—In order that vegetables may be kept successfully, it is necessary that provision be made for ventilation. Dead air favors the development of decay and the accumulation of moisture on the roof and walls of the store-room, and tends to dripping, which is very objectionable. Ventilation can usually be secured by providing the storeroom with a number of vents of good size, which may be opened or closed as the condition within demands. Good ventilation will also keep the moisture content of the air more uniform.

**CONDITION OF CROP.**—Roots or tubers to be placed in storage should be mature and in an entire condition. Roots or tubers that have been bruised or injured by careless lifting are much more likely to decay than those that have been carefully handled. Such crops as carrots, beets and potatoes, especially if wet when dug are sometimes better stored temporarily under a slight covering in the field, rather than put at once into a permanent storehouse during warm or moderate fall weather. This gives them a chance to dry and "sweat." They must not, however, be permitted to freeze. Be careful that vegetable tops are not mixed with the tubers or roots, as these will set up decay.

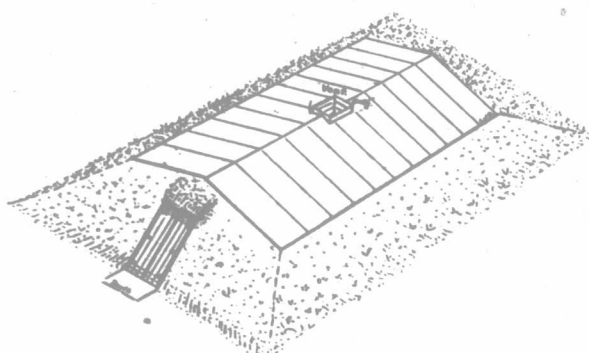
**AIR CIRCULATION.**—Good results are obtained if roots or tubers are stored in bins with slatted sides and floor. This will provide for a free circulation of air about the tubers, and will greatly retard decay due to sweating or overheating. Where large quantities

must be piled together, place large slatted ventilating shafts up through the piles of vegetables.

**SIZE OF BINS.**—It is not well to make the bins large, nor to pile the roots or tubers too deep. Where large quantities are piled together, they are much more likely to overheat than when put in smaller bins. Bins 6 or 8 feet by 10 feet are of a good size for root storage. A depth of 4 or 5 feet, with plenty of head room, will give better results than a greater depth.

**RACKS.**—Some vegetables, particularly onions and cabbage, will keep much better if stored in open racks. The rack should be constructed with slatted floor and sides so that the air may circulate freely all around the stored product.

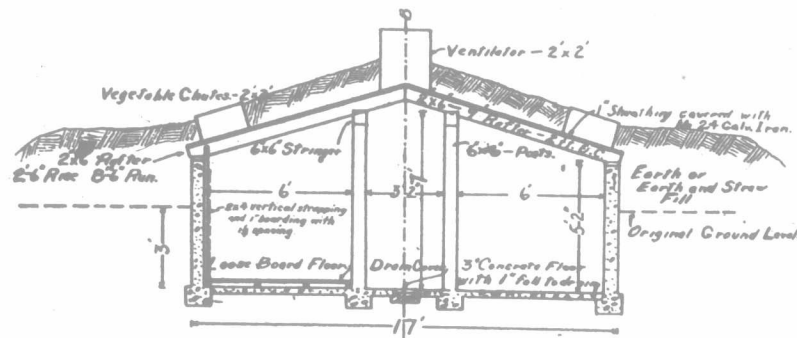
**GOOD DRAINAGE.**—The roothouse or storage-room should be so placed or located that perfect drainage will be provided. Excessive moisture on the floor or about the sides increases the humidity within the storage-room, and excessive humidity favors decay.



Cellar "A", Exterior View.

#### Different Types of Storage.

The type of storage needed is one in which vegetables or roots may be stored without danger of frost damage. It must also be such as may be easily constructed at a comparatively low cost out of materials that are readily available on practically every farm. In Ontario and East the earth-pit is most common for obvious reasons. Surplus roots or vegetables can be quickly put out of harm's way by the pit method; it is cheap and efficient, although not the most convenient for getting out supplies. A piece of high land, naturally well drained, is the best location. In some cases the required area is dug out to the depth of one foot, which saves throwing the earth up high on the pile of roots, but some consider it easier to cover the pile when made on top of the ground than to make any excavation. Unless the soil is dry and naturally well drained, it is better at any time to store the roots on top of the land entirely than to dig them in. Straw, strawy horse manure, fine brush, and earth are all used for a covering, the thickness of which should be increased as the weather gets colder. Three-inch



Cellar "D", End View.

field tile placed in the top every eight or ten feet will provide ventilation and this can be regulated in severe weather. Roots can be stored in any dry place, provided they have ample covering and sufficient ventilation.

In the Bulletin mentioned several types of root and vegetable storages are explained. We are illustrating and giving explanation regarding two of them.

**CELLAR "A"**—This type of construction, illustrated in these columns with three different views, can be built entirely of small timber, with the exception of the entrance and boarding covering the straw. The cellar is 21 feet wide and can be made any length desired. At 32 feet long, and allowing for a depth of 5 feet, it has a capacity of nearly 1,700 bushels of potatoes. This does not count the passageway up to the last pair of central posts at the back. The ground floor of the cellar has a 2-inch slope to a central drain (4 by 6), which in turn runs to a barrel in the entry of the cellar, from whence the water can be easily removed. There is a 3 1/2-foot entry which makes the entry to the root cellar warm, there being two sets of vertical doors at the entry level, in addition to the sloping double doors at the

outside. The plank steps have a 6-inch rise and 12-inch spread, which makes it easy to carry potatoes from the cellar. The roof consists of 4-inch poles covered with several inches of fine brush, which in turn is covered with about 2 feet of well-settled straw. The illustration published herewith shows the straw to be covered with 1-inch boards, 12 feet long, and the boarding protected by felt roofing. This system of protection ensures a warm cellar.

**CELLAR "D"**—If one desires a more permanent structure, the walls and floors may be made of concrete, as shown in the illustration called "Cellar D". This has a capacity of about 800 bushel, 4 1/2 feet deep. The concrete should be made in proportions of one part of cement to two parts of sand and four parts of gravel or crushed stone. A 1-2-4 mixture is practically waterproof if properly mixed and well tamped when put into the form. The concrete should be made quite wet. When it is mixed it should be wet enough so that it can be poured from a wheelbarrow, but the concrete should be thoroughly puddled after it has been put into the form to get rid of air bubbles. There is more danger from frost and moisture when concrete is used and therefore it is advisable to keep the roots away from the inside walls by means of 2 x 4 vertical strips placed 2 feet on centres with 1-inch boarding nailed horizontally to these strips. To allow the air to reach the roots, the boards in the horizontal boarding should be spaced about 1 1/4 inches apart. In a similar manner the concrete floor is covered with a loose board floor, which should be temporary and capable of being lifted in order to clean the cellar when empty.

A hillside is a very convenient place to construct a root cellar. With such an advantage the roots can be put in at the top and taken out on a lower level. There is also less danger from frost.

#### Storage Notes.

The most favorable storage temperature for the vegetables subsequently mentioned, except pumpkin and squash, is between 34 and 38 degrees Fahrenheit; from 40 to 45 degrees F. is recommended as the best temperature for pumpkin and squash. Following are a few notes regarding the storage of the different kinds of vegetables:

**BEETS.**—Though capable of standing a little frost, beets should not be severely frozen before harvesting. If for table use, the leaves of the beets should be twisted off rather than be cut off with a knife. They keep better if mixed in sand.

**CABBAGE.**—The heads demand a good circulation of fresh air. They are best piled not too deeply on slatted shelves, as so to permit of airing. Small numbers may be suspended from the ceiling, by hanging by roots. If in small numbers cabbages can be kept better with roots on; where quantities must be piled in bulk, put hollow, slatted ventilating shafts up through the centre of the pile. If cabbage freeze, thaw them very slowly. They are often kept in trenches in the field. A well drained place is selected and a trench wide enough to hold three heads in width is made. Two rows are next put upon these and the pile brought to a peak with another row. They are then covered with straw and earth sufficiently deep to prevent freezing. A tile opening through the ridge affords the necessary ventilation.

**CARROTS.**—These roots should be kept in a dark, cool place and they keep better when mixed in sand.

**CAULIFLOWER.**—The heads of cauliflower heat very quickly if stored in piles. The heads must not touch. Retain the leaves and pile on shelves.

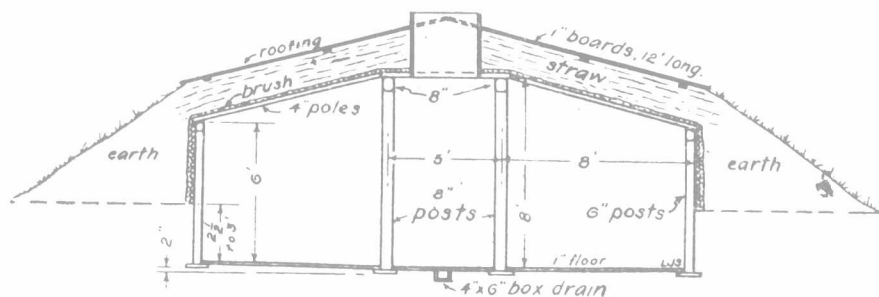
**CELERY.**—This crop is most successfully stored by standing plants on end in slightly dampened soil. Trim off leaves and outside roots before storing.

**ONIONS.**—These should be spread on slatted shelves so as to permit of free air circulation. Layers should not exceed ten inches deep. They will taint other vegetables if stored alongside. If they freeze keep them frozen as long as possible, as alternate freezing and thawing will cause rot. Immature onions or those with thick necks should not be stored. Dry onions well before storing.

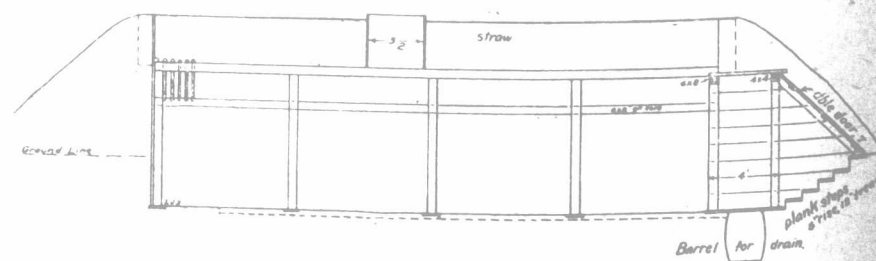
**PARSNIPS.**—For winter storage dig parsnips very late in the fall. They keep better if covered with moist sand so as to prevent drying. A few for spring use might be left in the garden all winter and dug in the spring before the tops have again grown two inches.

**SALSIFY.**—This crop may be handled in the same way as parsnips.

**TURNIPS, (Swedes).**—These may be piled in bulk. The atmosphere should not be too moist. They keep



Cellar "A", End View.



Cellar "A", Side Section View.



better if not cut or bruised and are one of the easiest roots to store.

POTATOES.—The tubers may be piled in bulk. A good ventilation is an advantage and the bin should be kept away from the outside wall. For proper storing there must be no unsound tubers which would spread decay. Avoid sunlight.

PUMPKIN.—Store in a dry place, leaving on the stem or stalk end. Do not bruise. The same method applies to squash.

Apple Prospects Not Improved.

According to the latest Fruit Crop Report interest centres in Nova Scotia where there is every prospect of harvesting a crop somewhat larger than that of last year, but possibly not quite equal to the Fruit Commissioner's last month's estimate of 750,000 barrels. The crop is generally clean and particularly highly colored. Conditions have not improved in Eastern Quebec and Ontario, which will not have more than 20 per cent. of a normal crop. What fruit there is, is a fine color, though very little will grade No. 1 owing to scab. Western Ontario will not have more than 10 or 15 per cent. of normal. British Columbia prospects remain about the same, although it is difficult to estimate the exact tonnage on account of the lack in size in many varieties. Some correspondents think this will bring the shipping crop down below that of last year. The United States Bureau of Crop Estimates places the commercial crop there at 21,300,000 barrels for this year, which is considerably below last year's output and quite a decrease on the average for 1911 to 1915.

FARM BULLETIN.

To Prevent Depletion of Breeding Stock.

The Hon. Martin Burrell, Minister of Agriculture, recently announced a co-operative plan which his Department has brought into being with the railways with a view to preventing depletion of breeding stock in Canada. Mr. Burrell outlined the plan as follows:

"The Canadian railways have agreed to issue a special tariff in connection with the transportation of carloads of breeding cattle and of breeding sheep. Under this tariff the railways will rebate twenty-five per cent. of the regular freight rate, while the Minister, on behalf of the Government, has agreed to pay the remaining seventy-five per cent. The tariff will be applicable in both Eastern and Western Canada, but not between Eastern and Western Canada, in connection with the return of carloads of breeding stock from the central stock yards to country points.

"The shipper will be required to make a declaration that he is a bona fide farmer, and that the stock so returned is for his own use, or that of his neighbors, and is for breeding purposes only.

"On presenting the certificate embodying this declaration and approved by the officer of the live stock branch at the stock yards to the railway company he will be entitled to the free shipment of the stock to its destination. The railway companies have agreed to forward such shipments prepaid, collecting from the Department that portion of the freight which the Minister has agreed to assume. Further inquiry regarding this special tariff on breeding stock should be addressed to the representative of the Dominion Live Stock Branch located at the several stock yards throughout Canada.

"A special tariff has been issued by the Canadian railways applicable in both Eastern and Western Canada, but between Eastern and Western Canada, which provides for a reduction of twenty-five per cent. of the usual freight tariff in connection with the shipment of carloads of feeding stock from the central yards to country points. This important concession has been applicable in Western Canada for the past year, and was confirmed as to its application in Eastern Canada at the regular monthly meeting of the Eastern Canada Freight Association held in Toronto on the 27th of September last.

"The most serious leakage through the exportation and slaughter of cattle is from the Winnipeg stock yards. This is due to feed conditions in Western Canada, resulting in premature liquidation from several areas in the Prairie Provinces. In view of the fact that feed conditions in Eastern Canada are so satisfactory and the demand for feeding cattle so general, the Minister has agreed to pay 50 per cent. of the freight rate in connection with the shipment of carloads of feeding cattle from the Winnipeg stock yards, consigned to country points in the Eastern Provinces. This concession will be applicable to both drovers and farmers alike. Shippers consigning to Eastern stock yards, however, will not be entitled to the reduction. Full details regarding this policy may be obtained from the representative of the Dominion Live Stock Branch at the Union Stock Yards, St. Boniface, Man.

"An arrangement has been effected between the Department and the Canadian railways, as a result of which carloads of breeding sheep and lambs from the Toronto and Montreal stock yards will be shipped to Western Canada, freight free. The general demand for sheep in the Prairie Provinces indicates that a satisfactory outlet may there be obtained for any surplus which now exists in Eastern Canada. It is believed that a free freight tariff in connection with this movement will divert in that direction the majority of any good breeding lambs now finding their way to the Toronto and Montreal yards, and which are now being purchased on export or packing house account. Persons desiring to

secure sheep in Eastern Canada will also be entitled to receive the benefit of the free freight policy as noted above.

"The car-lot policy, which has been operating in Western Canada for the past year, will be continued. Under its conditions, bona fide farmers or their agents desiring to obtain carloads of feeding and breeding cattle or sheep at the three Western stock yards will be entitled to collect from the department their reasonable personal and travelling expenses incurred in connection with the journey between their homes and the yards. Information regarding the details of this policy may be obtained from the representatives of the Dominion Live Stock Branch, at the stock yards in Winnipeg, Edmonton and Calgary.

"In connection with the concessions as granted by the railways and by the Department, the Minister is anxious that every facility possible may be afforded to shippers through the services of the officers of the Dominion Live Stock Branch stationed at the various stock yards throughout Canada. These men are in close touch with conditions at the markets, and are instructed to give every assistance in their power. They have been given full details regarding the freight concessions here enumerated, and inquiry regarding these should be made to them direct, or to the Acting Live Stock Commissioner, Department of Agriculture, Ottawa."

Five Tractor Demonstrations in N.S.

Nova Scotia is having five large plowing matches and tractor demonstrations at Kentville on Oct. 9th, Amherst the 12th, Antigonish 16th, Stellarton the 17th, Truro the 19th. At these demonstrations several tractor machines will be operated. Included among the number will be the now famous Ford Tractor which will only be exhibited at two points in Canada this year, i. e., at the provincial plowing match in Ontario and at the point mentioned in Nova Scotia. In fact, this machine has not been demonstrated at any tractor demonstration for some time in America, mainly owing to the fact that there have been received already orders for several times as many machines as can be turned out in the course of the next year. The Nova Scotia Government was particularly fortunate in interesting Mr. Ford in demonstrating his machine in this province, and people from all over the Maritime Provinces should not fail to take advantage of the opportunity offered at one or other of these demonstrations to see this machine and others in operation.

Besides the tractor demonstration there will be held at the same time plowing matches, for which very liberal prizes have been provided. These prizes are being provided by the Railway Management at Kentville, by the Board of Trade at Truro, by the National Service League and other organizations at Amherst, and by like organizations at Antigonish and Stellarton. At Kentville and Truro there are competitions open to plowmen all over the province, and there is a possibility of a man winning from \$50.00 to \$75.00 at each competition.

It is hoped that these demonstrations and competitions may lend an impetus to increased fall plowing in Nova Scotia during the current year, for there will be an even more insistent demand for crops in 1918 than in 1917.

East Middlesex Notes.

EDITOR "THE FARMER'S ADVOCATE":

Despite the comparatively heavy grain crop and shortage of help, this part of the harvest has been completed in good time for fall work. Fortunately the grain didn't "lodge" much this year, and the weather was generally favorable for cutting, drying and storing. Nevertheless, owing to the haste to have it in the barn we expect to hear of rather more "tough" threshing than is really necessary. When mowed without proper drying it is liable to heat and mold more or less, which makes the threshing a particularly irksome job. It is the worst job on the farm anyway, and since the blowers came into use putting all the dust into the barn it is a dirty job. The man who invents an efficient dust collector for a grain separator will make his fortune.

Most farmers in this locality use soft coal wholly or in part for threshing, so that the advance in price adds considerably to the cost of threshing. The dealers are asking \$9.00 per ton, which we think is far too much in view of the fact that President Wilson has fixed the price at the mines at \$2.00. This means, says the "Brooklyn Eagle," an average of \$3.65 in New York and other eastern cities, where the dealers have been charging in some cases \$6.50. If it is right for the Canadian Government to fix the price of wheat why isn't it right to fix the price of coal?

There was no rush in this locality of patriotic citizens to help the farmer harvest the crop. Those in the spring who were so fervent in their advice to the farmer to sow every available foot to crop and they would gladly come out and help harvest it for at least no more than harvest wages, got cooled off before harvest time, and those few who did venture out valued their services at \$3 per day and up, including board. It is well that very few were stampeded by this cry, for owing to the heavy reduction of stock last year there is likely to be more rough feed this winter than there are animals to consume it. We know some who because of this hue and cry, actually reduced their acreage because they anticipated that the others would increase it and weren't they wise? Again there was much advice from city people to sow more fall wheat, but whether the fixing of the price has anything to do with it or not we do not think the acreage

is increased much above normal. Those who had time and means to get it in in good time did so but those who couldn't didn't make any special effort or get excited about it. One crop still pays about as well as another anyway, and even with wheat at \$2.00 it is no more profitable than other lines of farming. Besides if the war ends before the crop is harvested there is no guarantee that it will realize \$2.00 per bushel, for while it is easy for a government to fix the price the producer shall receive it's not so easy for it to fix the price the consumer will pay.

Honey has been selling rapidly at 15 cents per pound for extracted at the apiary, which is not to be wondered at in view of the fact that the Allied governments are buying heavily in America. The Italian Government recently placed an order in New York for two thousand tons at 14 cents per pound, and inferior southern honey at that.

The frost on Sept. 10 stopped the maturing of the corn, beans and tomatoes, but hardier vegetables were uninjured. Apple picking time will be a blink this year. There might be an average of a barrel to an orchard but we doubt it.

Middlesex Co., Ont.

J. H. BURNS.

Zebra Caterpillars Attacking Turnips.

EDITOR "THE FARMER'S ADVOCATE":

In many localities in Ontario, especially in the southwestern portion of the Province, turnips are being attacked by caterpillars which feed upon and destroy the leaves. Where the greater part of the foliage is thus destroyed, the growth of the plants is checked or altogether stopped. Therefore as turnips should continue to grow for at least a month longer, this means a considerable loss to the farmer whose crop is affected.

The insect causing the damage is known as the Zebra Caterpillar, because of its brilliant markings. In the early stage while quite small, the caterpillar is pale yellowish-green with a black head and many small black dots over the body. In the later stages the head and underside of the body is reddish-brown, while the upper side is strikingly marked with alternate black and yellow longitudinal stripes.

Most of the caterpillars at the time of writing, (Oct. 4), are about half an inch long, but when full-grown they will become nearly two inches in length. In the early stages they feed in clusters of thirty or more, chiefly on the upper surface near the margin of the leaves, which is the place where the egg clusters are, as a rule, deposited by the moths from which these caterpillars come. Later, as they grow larger, they wander from leaf to leaf and plant to plant. So long as they feed in groups they remove the green tissues and leave the skin beneath, but later when they have begun to wander about they eat holes in the foliage, sometimes leaving only the main veins.

The insects feed on cabbage, cauliflower and many other cultivated plants as well as weeds, but turnips are the favorite food plants.

This insect is not a new pest by any means, as it has been present for many years. Ordinarily the caterpillars are so well controlled by natural enemies that they do very little damage.

Whether they will be troublesome again next year is a matter of conjecture; for there is not at present sufficient data to form a definite conclusion. Very frequently a pest of this kind is conspicuously present for only one year, and then is again controlled by its natural enemies.

METHODS OF CONTROL.—Unless the caterpillars are clearly numerous enough in any particular field to defoliate a considerable proportion of the plants, it would probably not pay to apply any treatment, but where they are so abundant as clearly to threaten to destroy much of the foliage and interfere greatly with the growth of the plants, it is wise to treat them.

The best remedy so far as the writer's tests at present indicate is to dust the plants with Paris green diluted with twenty or thirty times its own bulk of hydrated lime, air slacked lime, land plaster or any other fine powdered, cheap substance. Paris green alone would of course do, but would be too costly.

Dusting should be done in the same way as farmers treat their potatoes for Potato Beetles. A hand blower may be used or the dust may be put into a sack and this carried in the hand up and down the rows and shaken gently over the plants which are affected, those that are not affected being left untreated. A very light shake will usually send out plenty of dust to give a fine coat for the surface of the leaves. If rain comes soon after the dusting, it may be necessary to repeat the treatment.

Spraying with arsenate of lead or with Paris green in water is not likely to prove satisfactory unless the nozzle gives a very fine mist; for otherwise the liquid collects into large drops and fails to leave poison all over the surface. In any case, the arsenate of lead would have to be used at the strength of about four pounds to forty gallons of water, and the Paris green about two pounds to the same quality.

CAUTION.—Poisoned leaves must not be fed to cattle or sheep, or other stock, as there would be much danger of the death of these animals.—L. CAESAR, Provincial Entomologist, O. A. C. Guelph.



# Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending October 4.

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	Same Week
Oct. 4	1916	Sept. 27	Oct. 4	1916	Sept. 27	Oct. 4	1916	Sept. 27	Oct. 4	1916	Sept. 27
Toronto (Union Stock Yards)	8,065	7,496	7,440	\$11.00	\$ 8.25	\$11.00	569	713	640	\$16.00	\$12.00
Montreal (Pt. St. Charles)	1,871	1,275	2,130	10.50	7.60	10.40	897	653	774	14.00	10.50
Montreal (East End)	2,466	1,772	2,021	10.50	7.60	10.40	557	688	588	14.00	10.50
Winnipeg	11,196	7,123	7,921	10.10	6.50	11.00	526	285	268	11.00	7.75
Calgary		3,418	2,699		6.50	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	Same Week
Oct. 4	1916	Sept. 27	Oct. 4	1916	Sept. 27	Oct. 4	1916	Sept. 27	Oct. 4	1916	Sept. 27
Toronto (Union Stock Yards)	8,947	8,874	4,966	\$19.15	\$11.40	\$18.75	8,479	6,713	8,617	\$17.25	\$10.50
Montreal (Pt. St. Charles)	2,248	1,467	1,818	19.00	11.35	18.50	4,029	2,610	5,967	14.75	10.50
Montreal (East End)	1,054	2,155	1,141	19.00	11.35	18.50	2,620	1,614	4,518	14.75	10.50
Winnipeg	2,582	2,321	1,958	17.50	11.15	17.50	1,875	1,006	1,361	15.50	9.75
Calgary		841	1,554		10.50	17.00		269	367		9.25

## Market Comments.

**Toronto (Union Stock Yards).**  
 With total receipts of 4,700 head on Monday, of which 4,000 were on the open market, trading was active on all classes, the few loads of choice cattle offered commanding a premium over the previous week's prices. This demand for choice killers continued throughout the week. Common and medium cattle, which comprised the great bulk of the week's offerings, were steady and active. Stockers and feeders were in demand at slightly higher prices. No heavy steers of choice quality were on sale, but one load of medium quality sold on Monday at \$11.50 per hundred, while another reached \$11; one load was weighed up on Wednesday at \$11.90. The heavy cattle were all handled locally, but a few loads of butcher steers went to Buffalo abattoirs. Steers of 1,000 to 1,100 pounds of choice quality, were lacking, but a few lots of medium quality sold up to \$10.25 per hundred, with choice handy-weight butcher steers and heifers realizing \$9.50 to \$10.25. Few were of sufficient quality to reach this level, the bulk moving at \$8 to \$9. A small lot of baby beef steers of about six hundred pounds brought \$12.50 per hundred, this being the top price of the week. Choice young cows were in demand, with \$9 and \$9.25 being paid in one or two instances but the ruling range for this quality was from \$8.25 to \$8.75. However, the great bulk of the cows were weighed up at \$7 to \$7.75 with common bringing \$5.75 to \$6.50. A small number of choice bulls sold from \$8.25 to \$8.75, but the large proportion of bulls were of Bologna grading and sold from \$6 to \$7. A good demand continues for feeders and stockers. For choice feeders of nine hundred pounds, \$9 to \$9.50 is being asked, with lighter steers selling from \$8.50 to \$9. Good breedy stockers of seven hundred to eight hundred pounds are realizing from \$7.75 to \$8.50, and common lots from \$6.50 to \$7.50. A few shipments were made throughout the week to the States, but a large percentage went back to Ontario farmers. Choice veals were in good demand, with \$15 to \$16 being paid for the best quality, but few of these were on sale. Medium quality sold from \$12 to \$14, and common rough calves at \$9 to \$12, with grass calves selling at \$6 to \$8.

Lamb prices were a feature of the week's trading. On Monday top lambs were selling at \$15.65. On Tuesday \$16.10 was paid on a few lots followed by a \$1 advance on Wednesday, with best lambs reaching \$17.25, the bulk selling from \$16.50 to \$17. American buyers were operating extensively on the latter day and two thousand head were bought for American abattoirs. On Thursday trading was active at Wednesday's quotations and the lamb market closed with a steady undertone. Breeding ewes are in demand for country shipments, and for these \$10 to \$12 is being paid. For killing purposes light ewes are selling as high as \$11.

Hogs sold at \$19, fed and watered, on Monday and held steady at this advance on Tuesday, with \$19.10 being paid on a few lots. On Wednesday the market was weaker with prices ranging from \$18.75 to \$19, the bulk selling at \$18.75. On Thursday prices were steady at \$18.75 to \$18.85 per hundred.

Of the disposition from the Yards for

CLASSIFICATION	No.	TORONTO (Union Stock Yards)		Top Price	MONTREAL (Pt. St. Charles)		Top Price	
		Avg. Price	Price Range Bulk Sales		Avg. Price	Price Range Bulk Sales		
STEERS								
heavy finished	130	\$11.40	\$11.00-\$11.75	\$12.00				
STEERS good	471	10.25	9.75-10.50	11.00	10	\$10.35	\$10.25-\$10.50	\$10.50
1,000-1,200 common	69	9.50	9.00-9.75	10.00	76	9.50	9.35-9.75	10.25
STEERS good	913	9.68	9.00-10.00	10.25	34	9.50	9.25-9.75	10.00
700-1,000 common	568	8.35	7.75-8.75	9.25	303	8.15	7.75-8.50	9.00
HEIFERS good	475	9.75	9.25-10.50	10.50	18	9.33	9.00-9.35	9.75
fair	620	8.52	8.00-9.00	9.00	107	8.35	8.00-8.75	9.00
common	221	7.50	7.00-8.00	8.00	103	7.29	7.00-8.00	8.00
COWS good	533	7.52	7.00-8.00	8.50	4	8.25	8.25	8.25
common	1,404	6.26	5.75-6.75	7.25	73	7.22	6.50-7.75	8.00
BULLS good	39	7.25	7.00-8.00	8.50	1	8.75	8.75	8.75
common	286	6.25	6.00-7.00	7.50	753	6.48	6.00-6.75	7.75
CANNERS & CUTTERS	344	5.43	5.00-5.50	5.50	378	5.48	5.00-6.25	6.25
OXEN	30							
CALVES veal	552	14.16	13.00-15.50	16.00	242	11.48	8.00-14.00	14.00
grass	22	7.00	6.00-8.00	8.00	655	7.25	6.50-8.00	8.00
STOCKERS good	443	8.00	7.75-8.25	8.50				
450-800 fair	712	7.45	7.00-7.75	7.75				
FEEDERS good	316	9.15	8.75-9.60	9.50				
800-1,000 fair	491	8.50	8.25-9.00	9.00				
HOGS selects	8,094	18.94	18.75-19.10	19.15	1,837	18.52	18.25-18.75	19.00
(fed and watered) heavies	23	18.90	18.75-19.00	19.00	28	18.15	18.00-18.25	18.25
lights	626	18.62	18.00-19.00	19.00	271	18.28	18.00-18.50	18.50
sows	144	16.85	16.25-17.00	17.00	111	15.52	15.25-16.00	16.00
stags	60	14.33	14.00-15.00	15.00	1	14.00		
LAMBS good	7,458	16.14	15.25-17.25	17.25	1,115	14.60	14.25-14.75	14.75
common	543	13.52	12.00-15.00	15.00	2,606	14.02	13.50-14.50	14.50
heavy	17	9.00	8.50-9.50	9.50	30	10.02	9.75-10.25	10.25
SHEEP light	282	10.15	9.00-11.00	11.00	2	10.50	10.50	10.50
common	179	7.50	7.00-8.00	8.00	276	9.51	9.00-10.00	10.00

the week ending September 27th, Canadian packing houses bought 360 calves, 179 bulls, 70 heavy steers, 5,178 butcher cattle, 6,365 hogs and 6,353 sheep and lambs. Local butchers purchased 133 calves, 628 butcher cattle, 219 hogs and 864 sheep. Canadian shipments were made up of 88 calves, 28 milch cows, 53 butcher cattle, 1,270 stockers, 446 feeders, 56 hogs and 475 sheep and lambs. Shipments to United States points were made up of 182 calves, 67 heavy steers, 55 stockers, 325 feeders, and 2,802 sheep and lambs.

The total receipts from January 1st to September 27th, inclusive, were 193,274 cattle, 37,841 calves, 71,262 sheep and 319,019 hogs; compared to 194,381 cattle, 36,158 calves, 79,437 sheep and 343,580 hogs, received during the corresponding period of 1916.

**Montreal.**  
 Cattle receipts for the week totalled close to 4,400 head, at least half of which consisted of canning stock. Prices on the whole were slightly stronger than those of the previous week. Good butcher cattle were scarce and in good demand. One small lot of heavy butcher steers sold at \$10.50 per hundred, but very few cattle sold over \$10. The bulk of the butcher stock again consisted of light, unfinished steers, many of which would make good feeders and stockers.

This class sold mostly from \$7.50 to \$8.50 per hundred, and some of the common as low as \$6.75. Bologna bulls were again in good demand at about 15 cents per hundred above last week's level, the bulk going between \$6.25 and \$6.50. American buyers took about one hundred and fifty bulls for export. Canner cows, which are coming in more freely, sold from \$5 to \$5.50. Calves were mostly of the grass grade, and practically the whole run was taken for export to American points. Prices remained at last week's level.

Receipts of sheep and lambs showed a big decline. Some drovers report that most of the ram lambs have already been marketed, and that most of the ewe lambs are being retained for breeding, consequently lighter receipts are expected. Sales were rather slow on Monday, and a large number of lambs were held over until Tuesday when everything was cleaned up. Good lambs sold generally at from \$14.50 to \$14.75, with common eastern stock around \$14. Sheep held about steady. American buyers took 4,400 sheep and lambs during the week.

Hogs opened the week at \$18.50 to \$18.75 for selects off cars. Later in the week prices advanced and most short run hogs sold at \$18.75, and a few lots of long run stock brought \$19.25 off cars. The demand continues strong. Unless

prices here show advances, receipts will likely fall off, as prices at other points have been higher than those at Montreal for several weeks.

**PT. ST. CHARLES.**—Of the disposition from the Yards for the week ending September 27th, Canadian packing houses and local butchers purchased 403 calves, 277 canners and cutters, 747 bulls, 2 heavy steers, 1,043 butcher cattle, 1,818 hogs, 206 sheep and 2,932 lambs. Canadian shipments consisted of 1 calf, 2 milch cows and 105 lambs. Shipments to United States points were made up of 370 calves, 40 bulls, 154 sheep and 2,570 lambs.

The total receipts from January 1st to September 27th, inclusive, were 33,542 cattle, 47,046 calves, 39,835 sheep and 57,136 hogs; compared to 33,840 cattle, 37,244 calves, 36,958 sheep and 68,277 hogs, received during the corresponding period of 1916.

**EAST END.**—Of the disposition from the Yards for the week ending September 27th, Canadian packing houses and local butchers purchased 153 calves, 1,005 butcher cattle, 1,136 hogs and 411 sheep and lambs. Canadian shipments consisted of 55 calves, 185 butcher cattle and 5 hogs. Shipments to United States points were made up of 380 calves, 200 butcher cattle, and 3,141 sheep and lambs. The total receipts from January 1st to

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THE ROYAL BANK OF CANADA

Capital Authorized - - - \$ 25,000,000
Capital Paid up - - - 12,900,000
Reserve Funds - - - 14,300,000
Total Assets - - - 270,000,000

HEAD OFFICE; MONTREAL

Branches Throughout Every Province of the Dominion of Canada

Accounts of Farmers Invited
Sale Notes Collected

Savings Department at all Branches.

September 27th, inclusive, were 33,393 cattle, 36,271 calves, 26,306 sheep and 33,267 hogs; compared to 32,311 cattle, 36,700 calves, 30,006 sheep and 44,031 hogs, received during the corresponding period of 1916.

Winnipeg.

With cattle receipts 11,000 head and, in addition, through-billing of one thousand head, a record was established for the Yards. This was also an increase over the previous week of 4,500 cattle. On Friday, 3,500 cattle were on sale in a strong market, but owing to lower prices in the South, buyers were somewhat indifferent. On Monday, with a like number offered, prices were easier. The following day with only 1,300 cattle on sale, quotations were advanced 10 to 25 cents, and the markets on Wednesday and Thursday held steady at the advance. All classes met with a steady sale, and keen competition existed between feeders and butchers, southern buyers overbidding the packing houses and paying top prices for breedy steers of one thousand to thirteen hundred pounds for short-keep purposes. Some good sales and turnovers were made. One hundred and sixty head averaging eleven hundred and eighty pounds sold at \$11; these were shipped to a Chicago butcher. One hundred and thirty-four head averaging 1,260 pounds brought \$11.60, and were shipped south as feeders. Sixteen head averaging fourteen hundred and seventy pounds went at \$13.10. These were three extra lots. The bulk of the heavy steers sold from \$9.25 to \$11.20 per hundred. Those weighing from one thousand to twelve hundred pounds from \$9 to \$11. Rough medium-weight butcher steers brought from \$8 to \$9, and light medium quality, \$6.90 to \$7.75. A number of light steers and heifers, well suited for stocker purposes are going to eastern packers. No heifers are being shipped south. Prices are steady with top heifers realizing \$9.75 per hundred, and the bulk of the good from \$7.75 to \$9. Medium heifers sell from \$6.80 to \$7.50. Cows held firm with a top price of \$8.75, the bulk of the offerings selling from \$7.50 to \$8.20; those of medium quality sold from \$5.70 to \$6.60. Milch cows and springers were unchanged, the latter class being the best sellers, and realizing as high as \$90 each.

There was a good run of sheep and lambs during the week, and prices were slightly lower. Top lambs opened at \$15.50, but sold \$1 per hundred lower at the close of the week. The bulk of the sales were made from \$14 to \$15.40. Good breeding ewes sold as high as \$15 per head, young sheep from \$11.40 to \$12, and common and bucks from \$7.50 to \$8.50.

Twenty-six hundred hogs were sold during the week with prices steady at \$17.50 for selects, \$15.50 to \$16.50 for heavies, \$16 to \$17 for lights, \$14.25 to \$15.25 for sows and \$10.50 to \$12 for stags. The quality of the offerings was good.

Of the disposition of live stock from the Yards for the week ending September 27th, Canadian packing houses bought 113 calves, 3,454 butcher cattle, 1,863 hogs and 544 sheep and lambs. Local butchers purchased 78 calves, 585 butcher cattle, 292 hogs and 100 sheep and lambs. Canadian shipments consisted of 2 bulls 193 butcher cattle, 943 stockers, 249 feeders and 103 sheep and lambs. Shipments to United States points were made up of 38 calves, 1,936 butcher cattle,

500 stockers, 609 feeders, 50 hogs and 373 sheep and lambs.

The total receipts at the Yards from January 1st to September 27th, inclusive were 127,979 cattle, 6,261 calves, 8,999 sheep and 197,642 hogs; compared to 76,049 cattle, 7,249 calves, 11,552 sheep and 249,560 hogs, received during the corresponding period of 1916.

Buffalo.

Cattle.—Liberal receipts of cattle last week, together with continued observance of Jewish holidays, had the effect of lowering values on shipping steers from 15 to 25 cents, balance of the offerings selling at about steady prices. Included in the week's supply was a liberal run of Canadians, there being approximately seventy-five to eighty loads. Best shipping steers, of which there were very few on the good weight order—bulk running from 1,100 to 1,250 lbs., sold at \$12.85, prime weighty Canadians being quoted from \$12.50 to \$13.00. Receipts for the week figured 6,300 head, as against 7,275 head for the preceding week and 5,325 head for the corresponding week last year. Quotations:

Shipping Steers.—Choice to prime natives, \$14 to \$15; fair to good, \$12.75 to \$13.25; plain, \$11.50 to \$12.25; very coarse and common, \$10 to \$10.75; best grass Canadians, \$12.25 to \$13; fair to good, \$11 to \$12; common and plain, \$10 to \$10.75. Butchering Steers.—Choice heavy, \$11.75 to \$12.50; fair to good, \$11 to \$11.50; best handy, \$11.25 to \$12; fair to good, \$10 to \$10.75; light and common, \$8.50 to \$9.50; yearlings, choice to prime, \$13 to \$13.50; fair to good, \$12.25 to \$12.75.

Cows and Heifers.—Best heavy heifers, \$10 to \$10.50; best butchering heifers, \$9 to \$9.50; fair butchering heifers, \$8 to \$8.50; light and common, \$6.75 to \$7.50; very fancy fat cows, \$9.50 to \$9.75; best heavy fat cows, \$8.50 to \$9.25; good butchering cows, \$7.50 to \$8.00; medium to fair, \$6.75 to \$7.25; cutters, \$6 to \$6.50; canners, \$4.50 to \$5.50.

Stockers and feeders.—Best feeders, \$8.50 to \$9; common to fair, \$7 to \$8; best stockers, \$7.50 to \$8; common to good, \$6.50 to \$7.25.

Hogs.—Prices were generally lower the first of last week. Monday's top was \$20, however, good hogs were scarce and bulk had to go at \$19.75 and \$19.85, with commoner ones ranging on down to \$19.60. Tuesday, aside from a string of eleven decks of prime heavy hogs that brought Monday's top of \$20, the market was lower, buyers getting the same kinds that sold on the opening day from \$19.75 to \$19.85, down to \$19.65 and \$19.75 and other ranged on down to \$19.50. Wednesday nothing reached above \$19.85, with yorkers and light mixed grades selling around \$19.50 and \$19.60 and while nothing sold Thursday above \$19.75, the quality was not very good and market was quoted steady. Friday the range was from \$19.50 to \$19.75, with one deck at \$19.85. The week started with pigs selling at \$18.25 and the next few days they were lower, Friday's general market for these weights being \$17.75. Roughs ranged from \$18.25 to \$18.50 and stags \$17 down. Last week receipts were 16,400 head, as against 14,535 head for the week before and 33,800 head for the same week a year ago.

Sheep and Lambs.—Market in the lamb end of the deal, as a result of light receipts, was considerably improved. The week opened with tops selling at \$17.75 and culls from \$16 down and before the week was out or on Friday choice lots were bringing \$18.25 and best culls sold up to \$16.50. Top for yearlings was \$15, wether sheep are quotable around \$12 and ewes from \$11.50 down. Deck of very choice Canadian lambs sold Friday at \$18. Receipts last week were 8,600 head, as compared with 10,377 head for the week previous and 13,400 head for the same week a year ago.

Calves.—Market was slow last week and prices showed little change from day to day. Monday, Tuesday, Wednesday and Thursday top sold at \$16 and \$16.25 and Friday the majority landed at \$16.50. Culls went downward from \$15, according to quality; weighty calves, unless something on the vealy order, could not be ranged above \$12.50 and grassy kinds showed a spread of from \$6.50 to \$8.50. Receipts for the week were \$2,000 head, as against 2,245 head for the week before and 2,100 head for the same week a year ago.

Toronto Produce.

Receipts of live stock at Union Stock Yards, West Toronto, Monday, Oct. 8, consisted of 288 cars, 4,948 cattle, 225 calves, 1,951 hogs, 2,823 sheep and lambs. Good active market for all classes of cattle at steady prices. Lambs, strong \$16.50 to \$17.50; sheep, strong. Calves, steady. Hogs, \$18.75 to \$19, fed and watered.

Breadstuffs.

Wheat.—Ontario, No. 2, winter, new, per car lot, \$2.22, basis; (according to freights outside). Manitoba wheat, in store, Fort William—Including 2c. tax—No. 1 northern, \$2.23; No. 2 northern, \$2.20; No. 3 northern, \$2.17.

Oats.—(According to freights outside) Ontario, No. 2 white, 62c., No. 3 white, 61c., nominal. Manitoba oats, No. 2 C. W., 68 1/2c., (in store, Fort William).

Barley.—Malting, new crop, \$1.18 to \$1.20.

Peas.—According to freights outside; No. 2, nominal.

Corn.—American (track, Toronto), No. 3, nominal.

Rye.—No. 2, \$1.75.

Flour.—Manitoba first patents, in jute bags, \$11.50; second patents, in jute bags, \$11; strong bakers', in jute bags, \$10.60. Ontario winter, according to sample, \$9.80, Montreal; \$9.60, Toronto; in bags.

Hay and Millfeed.

Hay.—Track, Toronto, No. 1, \$12 to \$13 per ton; mixed, per ton, \$9 to \$11. Straw.—Car lots, per ton, \$7 to \$7.50, track, Toronto.

Bran.—Per ton, \$35.

Shorts.—Per ton, \$42; middlings, per ton, \$45 to \$46.

Good feed flour, per bag, \$3.25.

Hides and Wool.

Prices delivered, Toronto: City hides.—City butcher hides, green, flat, 20c.; calfskins, green, flat, 23c.; veal kip, 20c.; horse hides, city take off, \$5 to \$6; city lamb skins, shearings and pelts, \$1.50 to \$2.25; sheep skins, \$2.50 to \$4.

Country markets.—Beef hides, flat, cured, 18c. to 19c.; deacons or bob calf, \$1.50 to \$1.75 each; horse hides, country take off No. 1, \$5.50 to \$6; No. 2, \$5 to \$6; No. 1, sheep skins, \$2.50 to \$3.50; horse hair, farmers' stock, \$25.

Tallow.—City rendered, solids, in barrels, 13c. to 14c.; country solids, in barrels, No. 1, 12c. to 16c.; cakes, No. 1, 14c. to 16c.

Wool.—Unwashed fleece wool, as to quality, fine, 60c.; coarse, 58c., washed wool, 70c.; coarse, 65c.

Country Produce.

Butter.—Butter firmed slightly on the wholesales during the past week, selling as follows: Creamery, fresh-made pound squares, 45c. to 46c. per lb.; creamery solids, 43c. to 44c. per lb.; dairy, 37c. to 38c. per lb.; separator dairy, 42c. per lb.

Eggs.—Freshly gathered eggs were a little easier, selling as follows, wholesale, No. 1, 45c. to 46c. per dozen; selects, 49c. per dozen; in cartons, 53c. per dozen.

Poultry.—Spring chickens came in quite freely during the week, and declined slightly in price: Ducks continued to be quite scarce and kept firm in price; the fat hens easing off some—(live weight) spring chickens, 20c. per lb.; spring ducks, 17c. per lb.; roosters, 16c. per lb.; fowl 4 lbs. and under, 18c. per lb., fowl over 4 lbs., 20c. per lb.

Cheese.—Cheese remained practically stationary in price: Old cheese selling at 30c. per lb.; new at 24c. per lb., and new twins at 24 1/2c. per lb.

Wholesale Fruit and Vegetables.

Peaches ruled the wholesale fruit and vegetable market during the past week, arriving in such large quantities they completely overshadowed all the other offerings and held undisputed sway. In fact the shipments were so heavy that one lot no sooner was disposed of than another took its place, and this kept up from early morning to late at night, making one wonder where they all came from and realize the importance of Canada's great fruit district. During the first part of the week prices gradually weakened, and though the demand continued strong and prices kept to practically the same range, there were more sold at the lower rates. Towards the end, however, they showed a firming tendency; 6-qt. flat baskets sold at 25c. to 30c.; the 6-qt lenos at 25c. to 55c.; the 11-qt. flats at 30c. to 65c.; and 11-qt lenos at 30c. to \$1.00.

Apples are beginning to come in freely

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Especially at this time when increased production is so essential, our Managers will cheerfully discuss with farmers their financial situation.

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from both the extreme west and east, British Columbia and Nova Scotia both gallantly coming to the rescue, and helping out old Ontario in another lean year. The British Columbia offerings so far consisting of Gravensteins, Yellow Bell-flowers and McIntosh Reds, have been of choice quality and have found an active market at firm prices, selling at \$2.25 to \$2.75 per box—the McIntosh Reds commanding the highest price. The Nova Scotias sold at \$4.50 to \$5.50 per barrel; Ontarios mostly came in in 11-qt. baskets and the bulk were low grade, selling at 25c. to 50c. per 11-qt. basket an odd one bringing 65c.

Montreal Produce.

Dressed Hogs.—Dressed hogs held steady in price and butchers were free buyers of fresh-killed, abattoir-dressed stock at 25 1/2c. to 26c. per lb.

Honey and Maple Syrup.—The price of honey showed a slight advance last week, and white clover comb was quoted at 15 1/2c., while brown was 14 1/2c. and white extracted 15c., with buckwheat at 11 1/2c. Syrup was unaltered in price, and the range for good to choicest grades was from \$1.35 to \$1.75 per 13-lb. tin. Sugar was 14 1/2c. per lb.

Butter.—The market of butter is being well maintained, and the quality is also satisfactory. The price of creamery has advanced slightly, and finest was quoted at 45c. to 45 1/2c. per lb. while fine was 1c. under, and dairies ranged from 37c. to 38 1/2c. for good to best, and 1c. less for lower grades.

Cheese.—Country boards were cleared in Ontario at 21 5-16 cents. Commission prices here were 21 1/2c. for No. 1 cheese, 21 1/2c. for No. 2, and 20 1/2c. for No. 3.

Grain.—Very little change took place in the market for oats last week. No. 2 Canadian Western were quoted at 77 1/2c.; No. 3 and extra No. 1 feed, at 76c.; No. 2 feed at 74 1/2c. Ontario and Quebec No. 2 white oats at 72c.; and No. 3 white at 71c. per bushel, ex-track. Ontario barley sold at \$1.30 to \$1.33; Manitoba No. 4 barley at \$1.34; and rejected and feed barley at \$1.27; No. 2 yellow corn, new crop sold at \$1.41, ex-track, here, for December—January shipment.

Flour.—Awaiting further action by Food Controller, Manitoba first patents were quoted at \$11.60; seconds \$11.10; strong bakers at \$10.90 per barrel, in bags, while Ontario 90 per cent. patents were \$5.75 per bag, and about \$11.75 per barrel.

Millfeed.—Bran was rather firmer at \$35 per ton; shorts, \$40 to \$42; middlings, \$48 to \$50; pure grain mouille, \$58 to \$60; mixed mouille, \$55 to \$56 per ton, including bags.

Hay.—Car lots of No. 2 hay sold at \$11.50 to \$12 per ton, while No. 3 hay was \$10 to \$10.50; ex-track, being thus slightly firmer.

Chicago.

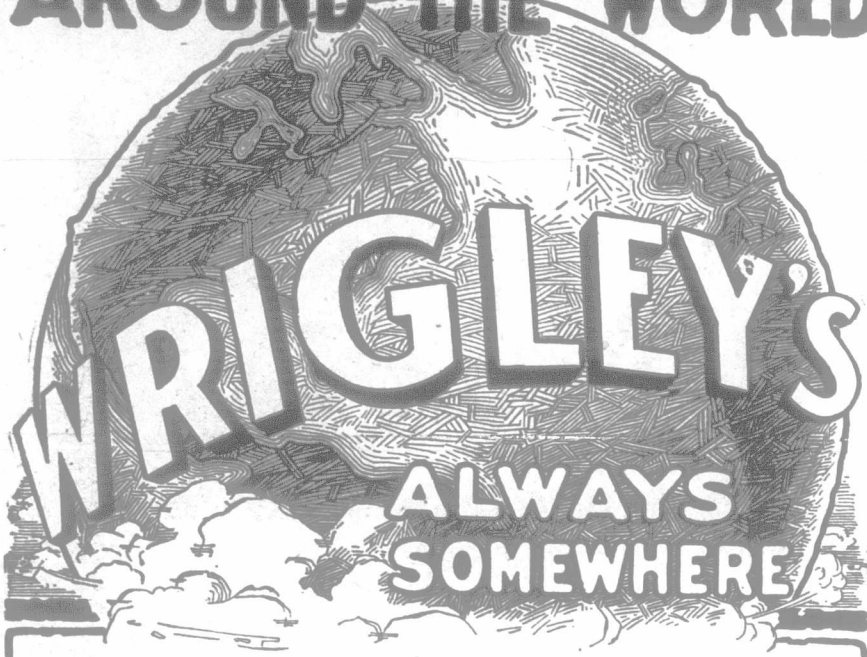
Cattle.—Beeves, \$7.10 to \$17.50; western steers, \$6.15 to \$14.50; stockers and feeders \$6.15 to \$11.40; cows and heifers, \$5 to \$12.25; calves, \$9.50 to \$16.

Hogs.—Light, \$17.70 to \$19.15; mixed, \$17.80 to \$19.65; heavy \$17.80 to \$19.65; rough, \$17.50 to \$18.05; pigs, \$13.75 to \$17.65.

Sheep.—Native, \$13.25 to \$18.40.



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is liked above all others.  
That its quality, lasting flavour and its sealed package are the kind most appreciated.  
And that its benefits to teeth, breath, appetite and digestion have been proven.



**The Flavour Lasts!**

PUT WRIGLEY'S IN YOUR FIGHTER'S CHRISTMAS BOX. It costs little but gives a lot of comfort and refreshment. Not only a long-lasting confection, but a nerve steadier, a thirst-quencher, a pick-me-up. Every Christmas parcel should contain some WRIGLEY'S GUM.

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Alsike, Red Clover, White Blossom sweet clover. If you have any of the above seeds to offer, kindly send us samples and we will quote you best price F. O. B. your station.

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SEED MERCHANTS, STOUFFVILLE, ONT.

Which buries self and setteth forth Thy Name.  
Deeds near, not dreams afar.  
For wouldst thou share the triumph of thy Lord,  
This simple task fulfil:  
Enter the hamlet lying close at hand,  
Forgetting self, do there thy Lord's command.

For Him do thou thy part."  
DORA FARNCOMB,  
52 Victor 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 stamped envelope ready to be sent on. (4) Allow one month in this Department for answers to questions to appear.]

LAST day we left off with the word "profiteering." One hears so much of it these days, that one can scarcely keep out of its way.

Certainly it exists. Certainly they exist—those men who care not for disaster to all the nations, to all the homes, provided they can build up their own fortunes. Men who, out of the wreck and smoke and blood of war are piling up for themselves heap upon heap of the "almighty dollar." Men who simply refuse, or are incapable of looking into any future save that marked out by their own money-bags.

But, just here, from somewhere in the great spaces, a question suggests itself: Will the "almighty dollar" be always almighty? Is there not just a possibility that its reign is even now on the verge of tottering? Will the dollar be the measure of values in the future as it has been in the era out of which, at the present time, we are passing?

The war has changed much. May it not also change this?

Every now and again, from the fresh young minds that are becoming strangely old over there in the trenches, there come mutterings, in hastily written letters, that "when the boys come home" things will be upset a bit. And these mutterings find louder voice in the articles of writers who have been studying conditions at home and abroad, some of them even at the very front of battle itself.

One of the latter, writing recently in the London Daily Mail says:

"What will be the lasting effect on those who pass through the furnace of war and survive? The sense of comradeship and fellowship that has grown up in the field will not vanish. But there may be trouble for profiteers at home."

And American Food Controller Hoover who, with his entire staff, is working for nothing, has said: "It appears to us that no right-minded man wants extra profit from the war. If he does he should be branded with the brand of Judas for selling the blood of our sons for profit."

Just one more quotation, this time from The Outlook:

"Courageous is the man these days who stands in the market-place and admits that he is a speculator. In the eyes of many the speculator in a time of war is an arch-profiiteer, the most evil of all the evil ones who attempt to enrich themselves out of the suffering of international conflict."

These quotations, perhaps, show the way the wind is beginning to blow.

Everywhere one hears it, the contemptuous word—everywhere one sees it, the contemptuous curl of the lip—directed against the profiteers. The people at last are finding gods other than the dollar god. And the profiteer becomes more, day after day, a hissing and a by-word.

Truly "courageous" is the man, nowadays, who confesses himself to be one of them. But his courage will avail him nothing. For it will not serve to bring him respect.

NOW that the fairs are over, what do you think of the side-show element, wherever it has crept into them? Are you satisfied with it?—the hideously fat women, the pale, drawn-out men long and thin as telegraph poles, the fire-eating poor fools and all the rest of them?

I don't believe you are. I want to tell you about an experiment carried out by Mr. Maurice Flagg, Director of the Minnesota Art Commis-

sion, and Mr. Dudley Crafts Watson, at similar fairs this year.

These gentlemen got their idea from noting the kinds of victrola records sold. They found out that, almost invariably, people without especial training in music who buy victrolas, begin their collection with rag-time and popular songs, and end by insisting on only the best records—those of the really great composers interpreted by the greatest modern musicians.

Messrs. Flagg and Watson reasoned from this that the taste of the public is really good in everything, and that all it needs is to be given a chance to see and hear the best things, to appreciate them. And so they turned first to art. They were especially interested in that, and besides they hated to see good, nice people apparently greatly interested in Mutt and Jeff and Mrs. Jiggs, and they worked out an experiment.

The experiment was this: They went to a big fair and took an art class with them, and some models. The models were posed out of doors, and the artists worked there. People were permitted to come and look on, and presently the "attraction" was found to be the most popular on the grounds. Afterwards an artist who "understands" undertook to explain to those interested the art-worth of some really fine pictures placed in a well-lighted gallery.

There seems to be an idea here that could be worked out in regard to many things besides art. Think out a few of them.—People love to see things in process of being done.

ONE of the startling revelations of the selective draft in the United States, says a news note, is the superiority of city young men over farm youths in the physical tests.

That is certainly a—"jolt." We have been accustomed to thinking of "strapping farmers" and somewhat "anemic city men." Yet there it is, in black and white.

Reading on down, however, one comes to the kernel of the matter. The farm youths are not being rejected because of inferior physique, but chiefly because of "bad teeth and bad eyesight."

And so the whole thing boils down to carelessness.

Yes, it must be admitted, that in regard to these things there is altogether too much carelessness on the whole, in the rural districts. In far too few places is there any regular professional examination of eyes and teeth in the schools. In far too many homes much-needed visits to the eye-specialist and the dentist are put off and put off until damage to the entire system is done. For bad eyes—yes and bad teeth—can undermine the whole health of the body.

In some homes, too—we hope not many—even decent use of the tooth brush is omitted; it does not seem to be understood that daily use of it is a necessity of health as well as of cleanliness, and that many diseases that masquerade under strange names are now known to be traceable to poisons generated by decaying molars and neglected gums.

What a pity, when a little personal care and a yearly visit to the dentist for examination, might prevent it all!

ALMOST I forgot the quotations promised you last day.

These are from Hickens' *The Dweller on the Threshold*, a very strange book that concerns two scientists interested in physical research, Malling and Stepton, and two clergymen, Harding and Chichester, who also begin investigating and stir up results that they have little bargained for. You may read these extracts on the surface without getting much from them, but if you think over them, taking up every side, you are sure to get an inkling of their real significance.

"Harm can never come from truth."

"The mystery that is us."

Upon one occasion Mr. Harding says: "Perhaps you may know, Mr. Malling, how the persistent attitude of one mind may influence another. For instance, if a man always expects ill of another—treachery, let us say, bad temper, hatred, fear, inducing trickery, perhaps, that other is turned toward just such evil manifestation in connection with that man. If some one with psychic force



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TORONTO CANADA





**Cotton Seed Meal**

Market has advanced since last week, but we have a limited quantity left which we are offering at the old quotations.

**MILL FEEDS**

We have a few cars of bran and shorts to offer at attractive prices.  
We are still in a position to handle butter, eggs and poultry. Highest market prices paid.

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CANADA

**How best to Serve****Every Canadian can help in the successful application of the Military Service Act**

**T**HE Military Service Act is the law of the land. It will be enforced sincerely and with firmness, but fairly. Reinforcements to be raised are limited to 100,000 men, who are being selected by the country, not by the military authority. Military control does not start until these men are chosen.

**The Men Called Can Help**

The first call is for men between the ages of 20 and 34 inclusive, who were unmarried or widowers without children on July 6, 1917. All these men should go immediately before a Medical Board in this district for examination as to physical fitness. If they are not placed in the Medical Category A., their present obligation ceases. If found physically fit and placed in Category A., they should, immediately after the issue of the proclamation calling out the first class, visit the nearest post office and report for service on a printed form-supplied. If reasonable ground for claiming exemption exists, an exemption form may be obtained from the Postmaster, and filled out. The Postmaster will forward this form to the Registrar appointed for the district, and the man seeking exemption will then be advised by mail when and where he should appear before an Exemption Board to have his case taken up.

**The Employer's Part**

Employers will find it to their advantage to see that all the men in their employ who are in the first class under the Military Service Act appear as soon as possible before a Medical Board for examination. Should an employer desire exemption for any one of his men who is found physically fit, he may seek it on the following grounds:

- (1) that the national interest demands that a man be left at his work rather than placed in military service.
- (2) that, instead of doing military service, a man should be used in work for which he has special qualifications.
- (3) that it is expedient in the national interest that instead of being employed in military service, he should continue to be educated or trained for any work for which he is then being educated or trained.

**Duty of Parent or Near Relative**

Parents or near relatives of men in the class called may apply for their exemption on the above grounds or because of some special domestic reasons. In this, as in other cases, delay is a grave mistake.

Issued by  
The Military Service Council

thinks all you do is wrong, soon you begin to do things wrongly."

At another, Chichester, when talking to Stepton, remarks: "Sometimes I think that men hate and dread nothing as they hate and dread facts which may upset the theories they cherish."—True enough, surely, in regard to many people, and disastrous, when the stubbornness, or sentiment, or whatever it is, stands in the way of progress.

In *In The Wilderness*, another strange book, by the same author, a book for mature minds only, "Rosamund" says: "I believe giving up nobly is a much finer thing than attaining nobly. And yet attaining wins all the applause."

And again on the hill of Drouva, in Greece, she says: "I'm quite sure the way to make life splendid, noble, what it is meant to be to each of us, is to press close against one's heart all that is sent to one, the sorrows as well as the joys. Everything one tries to keep at arm's length hurts."

There is much of love in this book. Dion, Rosamund's husband, speaks most often of it.

"A really great love, if it is to be worthy to carry the torch, must tread in the way of unselfishness."

Again, as he listens to a discussion in regard to Mrs. Clarke, the evil genius of the book, he realizes "what a driving terror, what a great black figure, almost monstrous, love can be—not only the sunshine but the abysmal darkness of life."

And Canon Wilton observes far-seeingly: "An unreasonable love is generally a love with something rotten at its roots."

But space is done for this time.

JUNIA.

**A Letter From "Leezibus."**

Dear Junia.—It is long since I last visited the Ingle Nook—No, that is wrong—for I join the Circle and listen to the chat each week, and never fail to find some food for thought, some helpful word from your pen. Your thoughts on the war and its workings give one courage and cheer in these dark times. Yes, much good has come of it—evil though it is.

Can you tell me what will dissolve the lime gathered around the inside of a tea-kettle? When at High School studying chemistry, I know we found something that would but I can't remember the name of it. I know I brought home five cents worth of a white powder and it cleaned the kettle perfectly and as if by magic.

Also can you or anyone tell me what will remove the musty taste from maple syrup that was moulded over? Boiling up did not seem to do it though we skimmed it well.

Here is something may be a help. This time of year when getting the churn ready for butter-making again after standing all summer, if it leaks, put a basinful of boiling water in it instead of putting the water into the churn to leak out. Cover tightly and the steam from the hot water will swell and soak up the churn with no muss whatever. Repeat several times if necessary.

I do enjoy the letters about the birds. I, too, am a bird lover. Our orchard is a great nesting place for them. I enclose a leaf of a large tree which grows in front of our house; think it is some kind of maple. Will you tell, please, what it is?

Are any of the Nookers interested in bees? I am only an amateur but like to work with them. Our beginning was a swarm which came to us three years ago.

Does "Minnie Myrtle" (I think that was the name) still live where "Anne of Green Gables" lived? My little girl has been enjoying the sequel to it not long ago.

Dear "Lankshire Lass"; how glad we are to see her name sometimes. Would like to hear how she is. What has become of "Margaret" and "Scottie" and Mayflower and many others who used to visit the Nook? We are all busy, no doubt. The home claims our time and strength. But, oh, be thankful if you are needed—wanted—constantly, by the dear ones in your home. The time may come when you would give anything for the priceless privilege of "waiting on" one of those dear ones.

Our tenderest sympathy goes out to all





## “Let Me Help You Carry the Burden, Mother”

*“If Canada fails us in October, we must curtail many of our activities.”*

SIR ARTHUR STANLEY,  
Chairman, Executive Committee,  
British Red Cross.

It now costs \$300,000.00 a week to carry on the work of the Society, or \$16,000,000.00 a year. Every minute of the day and night it costs \$30 to minister to the sick and wounded and dying. Last year Canada's magnificent contribution paid for the entire work of the Society for nearly seven weeks.

This year, in view of the greater need, it is earnestly and confidently hoped that Canada's contributions will be as great proportionately as the magnificent offering of last year. Our trust is, that the Citizens of Canada will give generously to this noble cause on

## “OUR DAY,” OCTOBER 18th

### A Few Facts About British Red Cross Work

The British Red Cross Society is the only institution which carries voluntary aid to the Sick and Wounded of the British forces on land and sea in every region of the war.

Its work is therefore the concern of all classes of British subjects, whether living in the British Isles, in the Dominions and Colonies beyond the seas, or in foreign countries.

### IN GREAT BRITAIN

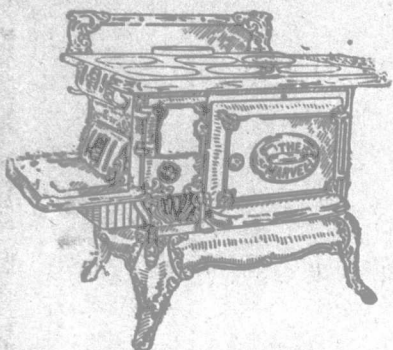
- 57,000 Hospital Beds found in the United Kingdom.
- 30,000 of these provided with Nursing Staff.
- 2,000 Trained Nurses working at home and abroad.
- 7,500 V. A. D.'s helping in Army Hospitals.

- \$220,000 spent on equipment of King George Hospital (1,850 beds) and \$130,000 a year contributed to cost of its maintenance.
- \$225,000 spent on building and equipping Netley Red Cross Hospital (1,000 bed); and
- \$625,000 spent on maintenance.
- \$175,000 for Orthopaedic Curative Workshops and Training Fund.
- \$185,000 for Facial Injury Hospitals.

Organization of Resources Committee, Parliament Buildings, Toronto



Your Credit's Good



Furnish Your Home By Mail

Toronto people say Burroughes is the best place to furnish the home. We offer mail-order customers just the same advantages as city customers, including our famous EASY-PAYMENT Plan.

Write for Big CATALOGUE!

Brimful of remarkable value in Dining-room, Bed-room, Living-room, Parlor and Kitchen Furniture, Rugs and Draperies.

BURROUGHES

Dept. C Toronto, Ontario

WE PAY FREIGHT to all points in Ontario, Quebec and Maritime Provinces on orders over \$10.00.



The Phonograph Sensation of the Age—Made in Canada.

Even professionals find it difficult to distinguish between the Phonola and the voice of living artists. With this new-type machine you will get those full, round overtones, the clear, vibrant "high C" and the mellow low notes in all their original purity—no blurring, clicking or scratching noises whatever. Plays any and all disc records. Prices range from \$15 to \$250.

FREE: We will mail you our illustrated catalog of Phonolas, also catalog of records and name of our local dealer, upon request.

DEALERS: We have a splendid proposition for dealers in unrepresented towns. Write for details.

The Pollock Mfg. Company, Ltd., Kitchener, Ontario

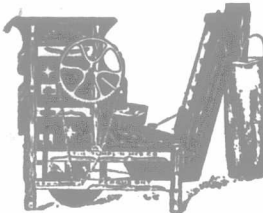
16



Model "Princess" \$135

BEESWAX WANTED

WE PAY THE HIGHEST MARKET PRICE IN CASH OR TRADE  
The Tillson Company, Ltd.  
TILLSONBURG, ONT.



PERFECTION Seed & Grain Separator (Patented 1901)

The best and latest mill for Cleaning and Grading all kinds of Seed and Grain.

See nearest Agent or write for Catalogue to THE TEMPLIN MFG. CO., FERGUS, ONTARIO.

the Nookers—for there must be many—who have sent their nearest and dearest to fight for the Empire. May God give them His peace.

"Peace, perfect peace, with loved ones far away; In Jesus' keeping we are safe, and they."

Now, I must close. I didn't mean to take up so much room, so will say good-bye.

"LEEZIBUS."

Scientific American says that 2 oz. of muriate of ammonia in a "boiler" (an engine boiler) of water will decompose the scale, so I suppose a pinch of it in a kettle would do the same. A small handful of carbonate of soda is also recommended. A simpler method that you might try is to boil potatoes (small ones that may be boiled a long time and so prevent wasting larger ones) in it, afterwards chipping off the scale.

Perhaps someone who reads this can answer your question about the syrup. The leaf enclosed is from one of the soft maples.

Tomato Catsup.

Requested by Mrs. M., Huron Co., Ont. Take 1 bus. ripe tomatoes. Slice them into a kettle and add a small measure of sliced onions. Boil all until soft, then put through a coarse colander and afterwards through a fine one, if very smooth catsup is liked. Put back on the stove and add 1 pint coarse salt, 1 pint sugar, 1 quart vinegar, 1 dessert spoon each of ground ginger and mustard. Add black pepper and cayenne to season as hot as liked, also cinnamon, cloves and mace to taste, and 2 red peppers. Boil till thick enough. The cinnamon and cloves should be tied in a bit of muslin. Catsup may be made with apples, crab-apples or grapes, but omit the onions. Bottle while hot.

Salt Beads.

For "A Subscriber's Daughter," Durham Co., Ont.

Dissolve 3 tablespoons salt in 3 tablespoons hot water. Add 2 tablespoons cornstarch, and stir the whole together until all the lumps are out, then add whatever coloring you want. Use a thimble to measure the paste so they will be all the same size. The paste should be squeezed in the hand until like putty. String the beads on a hatpin, or stick a pin in the middle of each one, pinning it to a cushion. Leave until quite hard and dry, then string by themselves, or with a tiny gold, steel or black bead between.

Stain.

Dear Junia.—Will you please tell me through your helpful column in the Advocate, how a stain in a silk poplin dress can be taken out? It was caused from a grasshopper being pressed against it from the inside. The color is rose pink. I have tried gasoline without result, also a little soap and water, but was afraid of the color coming out. Thanking you in advance.

Wellington Co., Ont. MOLLIE. It is just possible that the soap and water may have "set" the stain. You might try a little alcohol on it. Butter or glycerine, left on for a time, will often remove stains, but afterwards, of course, the whole dress would have to be sent to a cleaner's, or cleaned in gasoline. I always hesitate about recommending home cleaning with gasoline for fear of a terrible accident, as some people are so careless with it, forgetting that even the fumes will ignite and cause a serious explosion. I have cleaned dresses with it myself, over and over, but always out of doors. I would not even allow a can of gasoline in the house, or anywhere where there might be any chance of fire or lamp or lantern light. A safe thing to do in case of any stain, is to pour clear, cold water through it at once, holding the material over a basin or pail so that the water goes through the stain in a stream. If this fails stain remover may be applied. Soap and warm water may be tried on a grease stain, but on no other, as the alkali in the soap may only set the spot.

Such women as Clara Barton, Susan B. Anthony and Jane Adams have brought gifts of service to mankind far beyond what they would probably have given to their own homes.—Earl Barnes.

Luxurious Couches At Low Prices



Only \$20

The handsome Couch illustrated above is made of quarter-cut oak, in fumed or golden finish. Deep coil spring construction wire, tied, with soft felted top and full spring edge. Upholstered in fine grade Morocco line, either black or brown, diamond tufted top, as shown, or plain top, same price.

One example of the hundreds of pieces shown in our large Photo-Illustrated Catalogue No. 7

Everything in it priced freight paid to your nearest station in Ontario, Quebec or Maritime Provinces.

The Adams Furniture Co., Limited, Toronto

LAKEVIEW DUTCHLAND HENGERVELD 2nd

NO. 16259

Born January 17th, 1913

Weight 2,500 lbs.

CANADA'S GREATEST SHOW BULL

1st. prize 2-year old, Canadian National Exhibition, 1915. Grand champion, Canadian National Exhibition and Western Fair, London, 1916. Grand champion, Canadian National Exhibition and Western Fair, London, 1917. His dam has a record of 27.41 lbs. butter, 35 days after freshening, and pasturing on grass in July and August, with the thermometer at over 100 degrees, and an average test of 4.69% fat. He has 75% the blood of Lakeview Dutchland Artis, Can. Champ. Sr. 3, with 34.66 lbs.

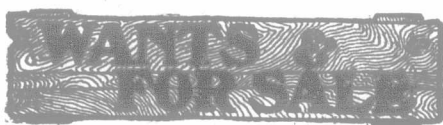
By AUCTION, October 26th, 1917

At Oak Park Stock Farm, Paris, Ontario, Canada. Sale commences 1 p.m. For catalogues apply: W. G. BAILEY, PARIS, ONT.

IMPORTANT! IMPORTANT!! IMPORTANT!!! AUCTION SALE OF

Pure-bred and Grade Jerseys—Pure-bred and Grade Oxford Sheep. BRAMPTON, ONT., WEDNESDAY, OCTOBER 17, 1917

FIFTY JERSEYS—30 grade Jersey cows, (15 milking, 15 springing). 3 pure-bred bulls, 2 yearling bulls imported this year, one Canadian-bred R. O. P. yearling bull. THREE HUNDRED SHEEP—30 registered Oxford ewes, 20 yearling and ram lambs, 100 grade ewes. All ewes young and sound. JAS. R. FALLIS, BRAMPTON, ONT.



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted and Pet Stock. TERMS—Three 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 50 cents.

FIRST-CLASS FARM, ELGIN COUNTY, FOR sale. 200 acres; brick house and first-class buildings; plenty of water, good bush and good orchard. Apply Box 142, Springfield, Ont.

FARM FOREMAN—A WORKING FOREMAN to take charge of a 200-acre mixed farm. House, furniture and food supplied—wife to do the cooking for extra hired help. Employment of daughter or son, age 12 yrs. up, or position open to a single man. Answer, giving full information regarding your experience, age, family and salary per year. E. E. Wallace, Glen Dhu Farm, Whitby, Ont.

PATENTS Trade Marks and Designs procured in all countries. Special attention given to Patent Litigation. Pamphlet sent free on application. RIDOUT & MAYBEE Crown Life Bldg TORONTO, ONT.

Patent Solicitors—Fetherstonhaugh & Co. The old established firm. Patents everywhere. Head Office Royal Bank Building, Toronto; Ottawa Office, 5 Elgin Street. Offices throughout Canada. Booklet free.

Plaster Hill Shorthorns Two 2-year-old bulls, one yearling bull, one bull calf. Heavy-milking families. F. Martindale & Son, Caledonia, R.R. 3, Ont.

TRAPS AND GUNS AT FACTORY COST. We pay highest prices for Furs and sell you guns, Traps, Supplies, etc., at factory prices. Write for Free Catalogue, Trappers' Guide, and Fur Price List. E. W. BIGGS & CO., 172 Biggs Buildings, KANSAS CITY, MO.

We ship and export FARMER'S BRAND Cotton Seed Meal Wholesale Carlots to feeders. Mill G. J. E. Bartlett Co. Jackson, Michigan

Poultry and Eggs.

Condensed advertisements will be inserted under this heading at three 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 50 cents.

WANTED—BUFF INDIAN RUNNER DUCKS State price each; also one drake. Address Jas. H. Davey, Larchwood, Ont.

WINTER-LAYING STRAIN RHODE ISLAND Reds (single-combed). A few splendid cockerels cheap. Dr. Hendry, Delhi, Ont.

LEICESTERS

Ram Lambs for sale at right prices, all good individuals, some prizewinners among them. Write for prices if interested. W. E. N. Hodgins, Box 46, Shawville, Que.

THREE BRANDS OF

Cotton Seed Meal

That EVERY Buyer of COTTON SEED MEAL Should Buy, and THREE GOOD REASONS WHY:

1. Because they are manufactured in our own Mills and you can depend upon the quality.
2. Because they are packed in sound ONE HUNDRED POUND NET WEIGHT sacks, and you get what you buy.
3. Because they are sold by a reliable manufacturer, who can give you the SERVICE and guarantee SATISFACTION.

AMERICAN RED TAG Protein, 38 1/2%, Fat 6%

SURETY BRAND Protein 36%, Fat 5.50%

CREAMO FEED MEAL Protein 20%, Fat 5%

Mills conveniently located in every cotton-growing State in the South. Prices on application, in car lots or less.

FRED SMITH

Mail and Empire Bldg. TORONTO



# Canada's Greatest Consignment Sale of Pure-bred Holsteins

BY AUCTION ON

October 26th, 1917, at Oak Park Stock Farm, Paris, Ont., Can.

This sale will be held the last day of the Provincial Plowing Match, Oct. 24, 25, 26. All cattle will be on exhibit during these dates.

## 40 Head 40

of the best in breeding and individuality. All cattle over one year tuberculin-tested, and all females in milk will have official seven-day or yearly records, and all calves from tested dams. Included in the offering is Lakeview Dutchland Hengerveld 2nd, No. 16259, first-prize two-year-old at C.N.E., 1915; Grand Champion at C.N.E., Toronto, and Western Fairs, London, 1916, 1917. Also many prominent winners at the leading exhibitions and dairy tests.

**TRANSPORTATION.**—All G. T. R. trains will stop at the farm during the Plowing Match, with reduced rates. Make use of this for the sale. Electric lines leaving Galt, Port Dover, Brantford and Paris, also stop at the farm.

FOR CATALOGUES APPLY

Sale commences at 1 p.m.

T. MERRITT MOORE, Auctioneer.

W. G. Bailey, Paris, Ont., or  
N. P. Sager, St. George, Ont.

### Current Events.

Lord Reading, Lord Chief Justice of England, and Lord Northcliffe, visited Ottawa last week to confer with Canadian leaders in regard to important matters.

Rev. Dr. Gordon of Queen's University, resigned owing to ill health, and is succeeded by Rev. Dr. R. Bruce Taylor of Montreal.

The first draft under the Canadian Military Service Act is to be issued on October 13th. It includes men from 20 to 34, inclusive, unmarried and widowers without children.

Hugh Guthrie, M. P. for South Wellington (Lib.) has been appointed Solicitor-General of Canada, and C. C. Ballantyne of Montreal succeeds Hon. Robert Rogers as Minister of Public Works.

Prohibition has been carried in Quebec City by a majority of 3,000.

A Chinese steamer was sunk off the coast of Ireland last week by a German submarine.

Kerensky's coalition government has been formed and the names of the members announced.

A big Arab revolt against the Turks in Palestine, is aiding British operations in that province.

The United States has decided to refuse coal to neutral ships carrying supplies from South America to the northern countries of Europe. This will prevent quantities of provisions from filtering through to the Germans.

Count von Luxburg, former German Minister to Argentina, has been given his passports and will go to Paraguay, the only country in South America in which he can find refuge.

London and the south eastern coast of England was raided on four consecutive days recently by German airplanes, and the people call more insistently for reprisals. The greatest attack yet attempted was on Oct. 1st., when four groups of planes came to the city, some succeeding in getting through the terrific barrage which was set going to prevent them.

The further publication of the telegrams between the Kaiser and the Czar show that a plot existed between them to do to Denmark what Germany afterwards carried out in Belgium.

The United States on Oct. 1st extended a further credit of \$50,000,000 to Great Britain, making a total so far of \$1,240,000,000 to Great Britain and \$2,516,400,000 to all the Allies.

A funeral 3 miles long, with more than a dozen bands, followed the remains of Thomas Ashe, the Sinn Fein leader, to the grave.

A Japanese Mission headed by Viscount Ishii has arrived in the United States to confer in regard to the war. Japan has decided to protect her interests by a Monroe Doctrine of the East, aimed chiefly at Germany, who was pushing into all branches in China.

On Oct. 4th Gen. Haig's men gained a great battle in Flanders, east of Ypres, taking some important positions and 4,500 prisoners. Splendid work is also being done by the airmen, both British and French. On Oct. 1st French airmen bombed Stuttgart and brought down 12 German planes along the west front. The British fliers, meanwhile, dropped 11 tons of bombs on the German airdromes at Gontrode, and near Cambrai. In the far east, during the past fortnight, Maj.-Gen. Maude's army gained another battle in Mesopotamia, north-west of Bagdad, taking a number of guns and great quantities of ammunition.

### The Dollar Chain

For the soldiers and all who are suffering because of the war.

Contributions from Sept. 28 to Oct. 5: Mrs. C. T. W., R. 1, Niagara Falls, \$1.00; "Toronto", \$2.00.

Previously acknowledged.....\$4,935.30

Total to Oct. 5th.....\$4,938.30

Kindly address contributions to The Farmer's Advocate and Home Magazine, London, Ont.

### Gossip.

#### Sale Dates.

Oct. 12, C. F. Jackson, St. Thomas. —Horses, cattle, sheep.

Oct. 17, Jas. R. Fallis, Brampton. —Jerseys and sheep.

Oct. 24, H. Oestriecher & Sons, Crediton, Ont.—Shorthorns.

Oct. 25, Col. R. J. St. art, Orono, Ont. —Registered and grade Shorthorns, Tamworths, horses and Farm.

Oct. 23, W. G. Bailey, Paris, Ont.—Holsteins.

Oct. 26, A. E. Currie, Guelph, Ont.—Shorthorns, Yorkshires and Leicesters.

Oct. 31, Dr. C. A. Cline, London, Ont.—Holsteins.

Nov. 1, O. A. C., Guelph, Ont.—Pure-breds.

Nov. 7, Western Consignment Sale, London, Ont.—Shorthorns.

Nov. 8, Elgin County Pure-bred Breeders' Association, St. Thomas, Ont.—Shorthorns and Herefords.

Nov. 28, H. Bollert, R. R. 1, Tavistock, Ont.—Holsteins.

Dec. 12, Oxford District Holstein Breeders' Club Consignment Sale, at Woodstock, Ont., W. E. Thomson, Secretary.

Dec. 19, Southern Counties Ayrshire Breeders' Club Consignment Sale, at Woodstock, Ont. John McKee, Norwich, Secretary.

In a letter advising a change of advertisement, Henry Arkell & Son, of Guelph, Ontario, write: "We are sold out of ewes and yearling rams, but have a number of strong ram lambs to offer. We have sent sheep from the Atlantic to the Pacific. We sold about 300 head since the first of June. In our forty years of business we never had such good sales. There has been a splendid demand at good prices."

### The College Sale.


On November 1, 1917, at the public sale of surplus pure-bred live stock belonging to the Ontario Government, Shorthorns (beef and dual-purpose), Holsteins, Jerseys and Ayrshires, also Yorkshire and Berkshire swine will be sold. These cattle and swine are of first-class breeding and have been kept in good condition. Good sires have always been in use and no one need be skeptical regarding the usefulness and good quality of the offering. See the advertisement and write to A. Leitch, Ontario Agricultural College, Guelph, for a catalogue and full information.

### Bruce A. McKinnon's Oxfords.


There are few flocks of pure-bred Oxford Down sheep in Ontario more widely known than that owned by Bruce A. McKinnon, of Elm View Stock Farm, Hillsburg, Ontario. A most creditable record has been made by this flock exhibiting at the local shows, winning the majority of flock and lamb classes. The Elm View flock is headed by the champion two-year-old Brantwood's 14 (74313), and by Stewart's 257 (5787), the latter being champion ram lamb at local shows, and also winning first at Guelph Winter Fair last fall. The majority of the breeding ewes are from imported stock purchased from the late Alex. Stewart. The flock was never in better shape to supply up-to-date type sires for flock headers at reasonable prices. See the advertisement.

The people you call cranks are the only ones who take an interest in anything but themselves.—Jane Wardle.





**Get Your Hens Ready for Strong Winter Laying**



**DR. HESS POULTRY PAN-A-GE-A**

**Will Start Your Pullets and Moulded Hens to Laying**

The moulting season is on. It's the most trying time of all the year for poultry. You know it takes a good deal of extra strength to grow all those new feathers. Pan-a-ge-a is a great help to your moulting hens because it enriches the blood, gives better appetite, aids the digestion, which gives them the extra strength required to force out the old quills and grow the new feathers.

Then, when the moult is over, you want your hens to start in promptly to laying again. There is a dealer in your town that will supply you with Dr. Hess Poultry Pan-a-ge-a for your flock. It's to help your poultry through the moult—it's to start your pullets and moulded hens to laying, otherwise he will refund your money.

Packages, 35c, 85c and \$1.75. 25-lb. pail, \$3.50.

**DR. HESS & CLARK**  
Ashland, Ohio

**DR. HESS STOCK TONIC**  
Keeps Hogs Healthy. Drives Out the Worms.

**Dr. Hess Instant Louse Killer Kills Lice**

**LIFT YOUR CORNS OFF WITH FINGERS**

Tells How to Loosen a Tender Corn or Callus so it Lifts Out Without Pain.

A noted Cincinnati chemist discovered a new ether compound and called it Freezone, and it now can be had in tiny bottles as here shown for a few cents from any drug store.

You simply apply a few drops of Freezone upon a tender corn or painful callus and instantly the soreness disappears, then shortly you will find the corn or callus so loose that you can just lift it off with the fingers.

No pain, not a bit of soreness, either when applying Freezone or afterwards, and it doesn't even irritate the skin.

Hard corns, soft corns, or corns between the toes, also toughened calluses, just shrivel up and lift off so easy. It is wonderful! Seems magical! It works like a charm! Your druggist has Freezone. Ask him!

**EARN \$1 TO \$2 A DAY AT HOME**

Help to meet the big demand for Hosiery for us and your Home trade.

Industrious persons provided with profitable, all-year-round employment on Auto-Knitters. Experience and distance immaterial.

Write for particulars, rates of pay etc. Send 3 cents in stamps.

Auto-Knitter Hosiery (Can.) Co. Ltd.  
Dept. 525 E. 257 College St., Toronto

**We Want RAW FURS**

OUR PRICE LIST ISSUED NOV 1st. MAILED ON REQUEST.

WE PAY EXPRESS AND POSTAGE.

**E. T. Carter & Co.**  
82 Front St. E., TORONTO

When Building—specify

**MILTON BRICK**

Smooth, Hard, Clean-Cut. Write for booklet.

MILTON PRESSED BRICK COMPANY  
Milton, Ontario

BE SURE AND ASK FOR THE

*Maxwell*

Line of WASHERS, CHURNS, BUTTER WORKERS, FOOD CUTTERS, GAS ENGINES, etc. Write for Catalogue.

MAXWELLS LIMITED, St. Mary's, Ont.

**Imported Shorthorn Bull**

for sale, Royal Baron (Imp) 101814; two years old. Write for particulars to J. G. FIFE, Wingham, Ont. North Huron Phone 11 on 618.

**Wheat Prices.**

Fixed Prices on Wheat, 1917 Crop. United States—Basis Duluth and Minneapolis.

- 1. Dark Northern.....\$2.21
- 2. " ".....2.18
- 3. " ".....2.15
- 1. Dark Hard Winter.....2.21
- 2. " ".....2.18
- 3. " ".....2.15

Canada—Basis Fort William and Port Arthur.

- 1. Manitoba Northern.....\$2.21
- 2. " ".....2.18
- 3. " ".....2.15
- 1. Alberta Red Winter.....2.21
- 2. " ".....2.18
- 3. " ".....2.15

The Board of Grain Supervisors for Canada carried on inquiries during the weeks between the date of its creation and the date on which the United States authorities fixed prices for United States wheat with the view of being in a position to fix fair and just prices for Canadian wheat.

The Board heard a very considerable amount of argument turning on such important matters as the cost of producing wheat in Western Canada, the increase in the cost of production since the war broke out, the shortage of labor, the increased cost of living and more especially, the increased cost of flour and bread, the shortage of the supply of wheat available for Great Britain and her Allies, the necessity of stimulating production for next year and the probable effect of the cessation of war upon the price of wheat.

The commission appointed by President Wilson to fix the price of wheat in the United States undoubtedly took into consideration such matters as these, and the prices set by that commission embody their conclusions on all such matters.

When the Board of Grain Supervisors met to decide the price for Canadian wheat, they considered that they had there a definite starting point. It is needless to illustrate the argument that the prices of Canadian wheat, if fixed by law at all, should be fixed with close reference to the prices fixed in the United States. Even in normal times producers of grain in Western Canada seemed to think that if they got the prices that obtained in the United States, they should be satisfied. Under the present conditions there is, however, an argument that is perhaps even stronger than that, namely, the advisability of setting prices that would not make it impossible for the United States Government to assist Great Britain and her Allies in financing the war, should assistance be desired in the matter of financing wheat supplies.

The Board of Grain Supervisors consider that the prices fixed in the United States could not be seriously objected to from the point of view of the producers, and the endeavor of the Board of Grain Supervisors was to adopt as far as possible the prices fixed in the United States to Canadian grades and Canadian conditions of handling.

United States Guaranteed minimum Price for 1918.

The United States Congress has enacted a minimum price of \$2.00 per bushel for the wheat crop of 1918. Congress also enacted that the President may impose a duty upon foreign wheat imported into the United States while that minimum price is guaranteed.

So far, therefore, as the price of wheat in the United States is concerned, the position is that a price has been fixed for the present crop and that a minimum price has been guaranteed for next year's crop.

The Board of Grain Supervisors for Canada consider that the fixing of a minimum price by the United States for the 1918 crop is a matter which should be considered by the Government of Canada.

**Federal Grading in the United States.**

Hitherto, the inspection of wheat in the United States was subject to the State legislature, chambers of commerce, boards of trade of grain exchanges. This resulted in a lack of uniformity in the standards by grain inspectors. It has long been a commonplace in Canada that the federal system that obtained in the Dominion secured a greater uniformity and a closer application of the standards than existed in the United States, and that one result of this was that, grade for grade, wheat in Western Canada was better and, therefore, worth more than in the United States.

An examination of the standards en-

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1682—No wind that blows can disturb my lady's comfort when protected by this beautiful full fur lined Grey Canadian Wolf Cape—very wide on shoulders and across back, fastens closely at the throat, giving greatest comfort and warmth. Finished with natural head, tail and paws, lined with grey corded silk poplin. Value unsurpassed. Price \$15.50, delivered to you.

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acted by the United States Congress indicates that the new Federal Inspection Act will result in considerable changes so far as wheat inspection in the United States is concerned. There will be greater uniformity, but in addition to that, the standards set approximate more closely to those set in the Canadian Grain Act, and provided the grain inspectors in the United States apply the standards enacted by the United States Congress, there would not be the same disparity between corresponding grades in Canada and the United States that has hitherto existed.

There is a difficulty, however, arising from the fact that according to the new grading system in the United States there is a distinction made between Dark Northern Spring wheat and Northern Spring wheat, and the Dark Northern commands a premium, grade by grade, of four cents over the Northern in the prices fixed recently at Washington.

The Board of Grain Supervisors consider that the words "Dark Northern" denote a type of wheat rather than a grade, and that the type of wheat thus called Dark Northern is the type of Hard Spring wheat grown in Western Canada. Practically all the Hard Spring wheat grown in Western Canada is Hard Red Fife; in other words, it is what in the United States is now called Dark Northern Spring wheat. The Board of Grain Supervisors, therefore, consider that in the fixing of prices between United States and Canadian wheat, as far as Western is concerned, the comparison should be between our Hard Red Fife and the United States Dark Northern Spring wheat. The Board also consider that the specification of No. 1 Dark Northern in the new United States standards is about equal to the specification of the Canadian No. 1 Hard and No. 1 Northern.

### Prices Paid by Allies and Millers to United States Grain Corporation.

Taking the terminal point, Duluth, in the United States, as corresponding with the terminal point Fort William, in Canada, the United States millers and the Allies must pay to the United States Grain Corporation for No. 1 Dark Northern Spring wheat the price of \$2.21 per bushel. In addition to this, both the United States millers and the Allies must pay to the United States Grain Corporation one per cent. or a little over 2 cents a bushel more, on the grain they purchase, this assessment being mainly to defray the operative expenses of the United States Grain Corporation, although some of it may be utilized for the purpose of meeting carrying charges on wheat. In addition to this the United States Food Controller's Department has a written contract with the Allies according to which, amongst other things, the Allies must pay a further amount not specified to meet any deficits that may arise. In other words, the Allies and the United States millers must pay the United States Grain Corporation at Duluth for No. 1 Dark Northern wheat \$2.23 per bushel, and the Allies a further sum not specified.

### Terminal Prices in the United States.

The United States Grain Corporation will pay for No. 1 Dark Northern wheat at Minneapolis and Duluth a sum of \$2.21 per bushel.

### Prices Paid to Farmers in the United States.

It is difficult to ascertain what the farmers will receive in the United States for No. 1 Dark Northern wheat if they sell it to the country elevators. So far as the Board of Grain Supervisors can learn, there has not been fixed by the United States anything in the way of a stated spread between street and terminal prices. The contract above referred to between United States authorities and the Allies would seem to give the United States Grain Corporation power to assess the Allies in order to create or enlarge a fund from which carry-over charges from the country might be paid wholly or in part by the Allies, together with the 1 per cent. levied on the mills. It would appear, however, from conferences that the Board had with Julius Barnes, that the plan being followed by the United States Grain Corporation is to let competition regulate the price of wheat at country points and thus to let competition fix the spreads between street and terminal prices, the United States Grain Corporation, however, reserving the right to investigate complaints should such be made.

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## NOTICE

TO

# Stallion Owners

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October 17th, 1917

The stallion enrolment report, containing route of stallion inspectors has been mailed to owners of enrolled horses. Any owner of stallions who has not received a report should write at once to the Secretary.

**R. W. Wade, Secretary**  
Ontario Stallion Enrollment Board  
Parliament Buildings, Toronto

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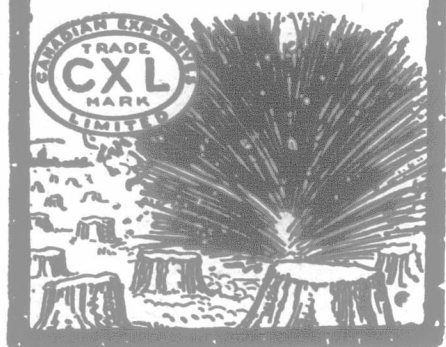
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Rams and ewes. Heifers in calf to Queen's Edward. 1st Prize, Indiana State Fair.

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with calves at foot and bred again. Bulls of serviceable age, females all ages, a few Shearling Oxford Down ram lambs.

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A grand lot of calves for sale; also in the new school of 7 months. Victor of Glencairn at head of herd.

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### Parity of Prices.

It is easy to say that there should be a parity of prices as between the United States and Canada, but it is not so easy to define what parity means. The Board of Grain Supervisors cannot aim at anything like arranging a minimum for the crop of 1918, and as applied to the crop now being harvested, parity may mean, first, what the millers and the Allies pay to the Wheat Corporation, namely, \$2.23 (plus an indefinite amount so far as the Allies are concerned); second, what the United States Grain Corporation will pay at Duluth, namely, \$2.21; and third, what the farmer will receive at the country point in the form of street price. The Board of Grain Supervisors decided, as intimated above, to regard the Dark Northern Spring wheat of the United States as equivalent to Manitoba Northern. They decided next that as the United States Grain Corporation would pay \$2.21 at Duluth for No. 1 Dark Northern Spring wheat, so buyers in Western Canada should pay on the basis of \$2.21 at Fort William. The Board further decided that as the United States millers and the Allies were paying an additional 1 per cent. so Canadian millers and the Allies should pay an additional 2 cents a bushel, this amount to be paid to the Board of Grain Supervisors and to be utilized for the purpose defined later. In addition, as the Allies are under contract to pay an unspecified amount to the United States Grain Corporation, the Board of Grain Supervisors decided that the Allies should pay a further amount, not exceeding 2 cents a bushel, to the Board of Grain Supervisors to be added to the other assessment of 2 cents per bushel.

### Carrying Charges on Wheat.

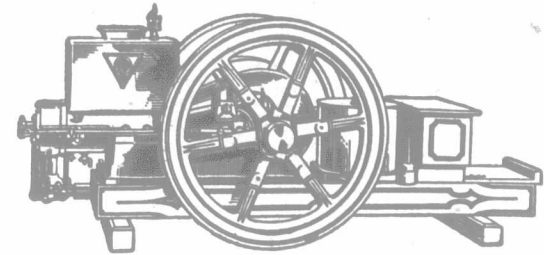
The matter of carrying charges on wheat in Canada is a much more important one from the point of view of the producers than it is in the United States, and a system of fixed prices that did not take into account the carrying charges at country points might easily work out a great injustice to the producers. The Board have had under consideration the advisability of adding an increment period by period to the fixed prices at the terminal point. Julius Barnes, however, who has charge of the wheat operations of the United States Grain Corporation, took very strong objections to that method of meeting the charges. He did not object to the charges being met, but he objected to that particular method on the ground that it would put the terminal price at Fort William entirely out of line with the price at Duluth and Minneapolis, and would thus lead to discontent and agitation among producers in the United States. He suggested, therefore, and indeed strongly advocated that a fund be created by the Board of Grain Supervisors for Canada out of which the carrying charges on street wheat should be met, and that that fund be created by an assessment upon the Allies for the wheat they purchase. He pointed out that the United States Grain Corporation was levying a tax of 1 per cent. upon the United States millers and the Allies, and also had a contract which enables it to levy a further assessment upon the Allies, thus creating a fund out of which to pay administration expenses and any other necessary expenditures. To meet the objections of Mr. Barnes the Board of Grain Supervisors, therefore, decided to adopt this method, hence the Board decided to collect from the Canadian millers and the Allies the 2 cents per bushel above referred to, and further, a sum not exceeding 2 cents per bushel from the Allies, and the Board proposed to meet the carrying charges on street wheat out of this fund thus created.

The expenses of the Board of Grain Supervisors will be small, so that nearly the whole of the funds so created will be devoted to meeting the carrying charges on street wheat at country points during the coming year.

### Stabilized Street Prices.

If the price of grain at the terminal point be fixed by law, it would seem to follow that consideration should be given to street prices at country elevators. So long as the price of wheat is left to free and open competition, there may be no necessity for state regulation of street prices, but "fixed" prices at one point would seem to require that due care be taken that prices at country points should not be unduly depressed. The proposal of the Board of Grain Supervisors so far as street prices at country elevators is

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I can spare a couple of cows, imported or Canadian bred with calves at foot and in calf again to Imp. Dalesman. I can also give one the choice of fifteen bulls from five months to two years old. About half are Imp. They are priced to sell. Write or come and see me. A. G. Farrow, Oakville, Ont.

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Offers for sale, (Imp.) Loyal Scot, conceded to be one of the best stock bulls in the country. Also good young bulls and females with the best of individual merit and breeding. Inspection invited. Geo. Amos & Sons, Farm 11 miles east of Guelph, C. P. R. Moffat, Ontario.



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concerned, is that there should be a recognized margin at which country elevators could purchase, this margin to be defined as closely as possible and also that the carrying charges on the wheat sold to country elevators, that is to say, storage, interest and insurance, should be paid out of the fund created as above. Under this system, the producer would get the maximum amount he is entitled to in relation to the fixed price at the terminal point, and if he could not ship his grain immediately through lack of cars, he would not be taxed the carrying charges. Putting it in another way, under this system a farmer can take his wheat to the shipping station and if he get a car, load it over the platform and ship it to Fort William, thus securing the whole of the fixed price at the terminal point minus freight and commission. Or he can sell to the country elevator at a spread regulated by the Board of Grain Supervisors, and on the principle that if his grain lies in the elevator for three months, he (the farmer) does not pay the storage, interest and insurance, this being paid for out of the fund created as above intimated. If he is not satisfied he can store his grain in the country elevator and pay storage upon it.

No system of fixing prices on Canadian wheat could be devised that would work out to the satisfaction of every individual, but it does appear to the Board of Grain Supervisors that the above system would work less injustice than any other. About the only objections to this whole system are: First, that this is a rather cumbersome way of meeting carrying charges, and that it would be simpler to add to the fixed price at the terminal point from time to time say 1/2 cent per bushel every ten days. This objection is a strong one, but the reply is simply that our friends in the United States are very much opposed to it on the grounds indicated above, and it is advisable to endeavor to satisfy them in this respect.

Second, that if the spread at which country elevator operators purchase is regulated by the Board, and if the carrying charges on the wheat sold on the street are met in this way, Canadian farmers will be receiving relatively more for their wheat than United States farmers. The Board believes this to be correct, because practically all the money assessed on the Canadian mills and the Allies would be devoted toward the purpose of defraying the carrying charges, and to this extent the Canadian farmers who sold their wheat to the country elevators would be in a relatively better position. The Board do not consider, however, that it is an objection to the scheme; indeed, the Board consider that this is an argument in its favor. The farmers who must sell to the elevators are the farmers who grow small quantities of wheat, say less than car lots, or farmers who live far from the railway stations, or farmers who are pressed to pay their bills, and it appears to the Board that where the state fixes the prices, these farmers have a claim to special consideration.

Third, it may be objected further that if the carrying charges on street wheat are met, the carrying charges on stored grain should also be met. The Board consider, however, that the line must be drawn somewhere, and that if the farmer does not choose to sell his grain to an elevator, he can ship it to a terminal point. If he desires to hold it in storage for a term, he should do so at his own expense.

[Note.—The above article written by Robert Magill, Chairman of the Board of Grain Supervisors, appeared in a recent issue of "The Farmer's Advocate and Home Journal," Winnipeg.

**National Dairy Show.**

The time at which the National Dairy Show is to be held in Columbus, Ohio, is drawing near. Preparations are almost completed for this big event in dairy history. The people of Columbus have made provision to ensure every visitor having a comfortable bed and plenty to eat. Are you planning to accept their hospitality and to see the best of everything produced in the dairy line? The Show will be an inspiration to all interested in dairying. This big exposition will be held from October 18 to 27. Monday, October 22, is Jersey cattle day; Tuesday, October 23, Guernsey day; Wednesday, October 24, Holstein day; Thursday, October 25, Ayrshire and Brown Swiss day. Plan to attend and see your favorite breed judged.

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at the farm, four miles from Exeter, five miles from Centralia

**24 Cows** **6 Young Bulls**

**Wednesday October 24, 1917**

In writing for a catalogue remember that this is an out and out breeders' sale of high-class, choicely-bred cattle, showing in good field condition only. A number of the cows will have calves at foot at sale time, and others will be freshening in November and December. The families are Lovelys, Wimples, Vanitys and Miss Ramsdens. Many of these are exceptionally good milkers. The bulls too are a rare good lot, several just old enough for reasonably heavy service.

Catalogue sent on request.

TERMS: CASH, or seven months' credit will be given on bankable paper, bearing interest at 6% per annum. Trains will be met at both stations on day of sale.

**H. OESTREICHER & SONS, Props., CREDITON, ONT.**

**Blairgowrie Shorthorns and Shropshires**

I have 25 imported shearing rams as well as a number of Canadian-bred ones. These are a rare, good lot, priced right. Can also spare a few more ram and ewe lambs (Canadian-bred.) Usual offering in Shorthorns.

JOHN MILLER, ASHBURN, ONT. Myrtle Sta., C. P. R. and G. T. R.

**SPRING VALLEY SHORTHORNS**

Herd headed by the two great breeding bulls, Newton Ringleader (imp.) 73783, and Nonpareil Ramsden 83422. Can supply a few of either sex.

KYLE BROS. DRUMBO, ONT. PHONE AND TELEGRAPH VIA AYR

**Glengow Shorthorns**

We have a choice offering in young bulls, fit for service. They are all of pure Scotch breeding and are thick, mellow fellows, bred in the purp...

WM. SMITH, Columbus, Ontario. Myrtle, C.P.R.; Brooklin, G.T.R.; Oshawa, C.N.R.

**SALEM SHORTHORNS**

Herd headed by Gainford Marquis, (imp.), undefeated in England and Canada. Sire of the winning group at Canadian National, 1914, 1915, 1916. Can supply cattle, both sexes, at all times.

J. A. WATT, ELORA, ONTARIO

**BURNFOOT STOCK FARM**

An offering a fine 15-mos.-old red bull whose grandam has an official record of 10,486 lbs. of milk testing 4.92. Write for prices or come and see.

S. A. MOORE, CALEDONIA, ONT

**CREEKSIDE FARM SHORTHORNS**

We have for sale, at present, a number of young things by our former herd sire, Clan Alpine (the Claret-bred bull, by Proud Monarch). We like them—so will you. If it's young bulls or a few females you need, we would welcome a visit from you. Write or phone. Visitors met by appointment.

Geo. Ferguson, Elora, Station, C. P. R., G. T. R.

**IMPORTED SHORTHORN BULLS**

We have several newly-imported bulls of serviceable age. Cruickshank, Marr and Duthie breeding, as well as a number of choice, home-bred young steers, got by our noted herd sire, Proud Monarch, by Royal Blood. Get our prices before buying elsewhere.

RICHARDSON BROS., Columbus, Ont.

**WILLOW BANK STOCK FARM**

Shorthorn Cattle and Leicester Sheep. Herd established 1855—Flock 1848. The great show and breeding bull, Brown Dale =80112= by Avondale, heads the herd. Extra choice bulls and heifers to offer. Also a particularly good lot of Leicester rams, mostly from imp. ewes.

JAMES DOUGLAS, CALEDONIA, ONT.

**OAKLAND---50 SHORTHORNS**

A herd of feeders, breeders and milkers that give satisfaction wherever they go. One bull for sale, 12 months, white, extra milk strain. Also females, any age. Priced so you can buy. One of the finest bulls in Ontario heads this herd.

J. O. ELDER & SON, Hensall, Ontario

**SPRUCE GLEN SHORTHORNS**

of such popular strains as Minas, Fames, Miss Ramsdens, Florences, Emilys, etc. Have still a few young bulls—thick, mellow fellows, fit for service.

DUNDALK, ONTARIO JAMES McPHERSON & SONS

**Shorthorn Cattle and Lincoln Sheep**

Young cows and heifers of the best Scotch families. Sire in service, Sittytton's Selection =86508=. The winning pen of long-wool lambs, all breeds competing at 1916 Guelph Winter Fair, came from this flock. Imported and home-bred rams and ewes for sale. New importation home from quarantine in September.

R. S. ROBSON & SON, Denfield, Ont.

**Maple Shade Farm—SHORTHORNS**

An importation consisting of forty-three head now in quarantine will be home about September 30th.

Myrtle, C.P.R., Brooklin, G.T.R., Brooklin, C.N.R. Will. A. Dryden, Brooklin, Ontario Co.

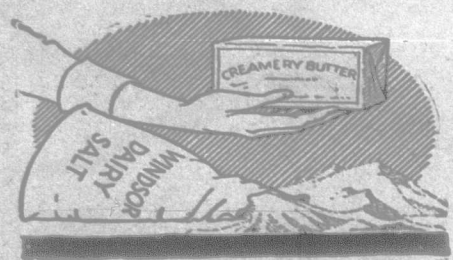
**1854 MAPLE LODGE STOCK FARM 1917**

SHORTHORNS AND LEICESTERS

Three Shearing rams, some lambs and ewes for sale.

R. R. 1, CLANDEBOYE, ONT. MISS CHARLOTTE SMITH





Adds Quality to Every Pound of Butter

**Windsor Dairy Salt**  
Made in Canada  
THE CANADIAN SALT CO. LIMITED

A Sample Pair sent to Your Dealer on request



The Best is none for the good Farmer

**BOB LONG**  
UNION MADE GLOVES & OVERALLS  
Known from Coast to Coast  
**R.G. LONG & CO. LIMITED**  
TORONTO ONTARIO

**CREAM**

We are open to buy cream both for churning and table use.  
**ASK ANY SHIPPER**  
about our service and prompt returns.  
Ask for Prices.

The figures of yesterday may be **TOO LOW** for to-morrow. We furnish cans.  
**The Toronto Creamery Co., Limited**  
Church Street, 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, Limited**  
London, Ontario

**Harab-Davies Fertilizers**

Write for booklet.  
**THE ONTARIO FERTILIZERS, LTD.**  
WEST TORONTO

**Pure Cottonseed Meal**  
"Dixie Brand".....41% protein, fat 5.50%  
"Forfat Brand".....38.55% protein, fat 5.00%  
"Danish Brand".....36% protein, fat 5.00%  
"Creamo Brand".....20 to 25% protein, fat 5.00%  
Mills conveniently located in every cotton-growing State in the South.  
Prices on application in car lots or less.  
Fred. Smith, 32 and 34 Front St. W., Toronto

**Questions and Answers.**  
Miscellaneous.

**Trees on Roadside.**

1. What is the law in regard to trees planted along the roadside? If they are planted on the roadside and take strength from my land so that nothing will grow for 20 feet within the line, can I have these trees removed?

2. One of our cows has a cough and belches every once in a while, especially after bawling. What is the matter? She looks thrifty and acts all right except for this cough.

Ans.—1. You may have difficulty in having these trees removed. See your township council, as they have jurisdiction over the roads.

2. It is rather difficult to diagnose the case from the symptoms given. The cow may have an irritation in the throat which would cause the cough. Cows affected with tuberculosis frequently have a cough. Belching is frequently noticed after bawling, but we cannot associate it with the coughing. It would be advisable to have your veterinarian examine the cow in order to determine whether the cough was due to an irritation or to an affection of the lungs or bronchial tubes. If the cow is thrifty there cannot be very much wrong with her constitution.

**Concrete Tile—Soreness in Horse's Foot.**

1. I have a four-year-old mare which is tender on the front feet, especially when travelling on stony roads. One foot is white. Is a white foot as tough as a black one? How can she be shod so as to favor her feet? She is a little flat-footed.

2. How much cement should be used in making cement tile? Will they crumble in the ground if properly made?

3. Will orchard grass grow and do well on low, wet land?

4. Are continuous doorways in concrete silos satisfactory if properly built?

Ans.—1. As to whether a black hoof is as tough as a white one is a debatable question. Hoofs of the same color vary in texture. If there is any difference between the two colors it would be in favor of the dark one being a little more brittle than the other. Care should be exercised in paring down the hoof. The treatment depends largely on where the soreness is located. Some use the bar shoe, others a leather or rubber pad. As to which to use should be left largely with the blacksmith, who can determine the tender spots on examining the feet.

2. Concrete tile have not been used for any great length of time, but when properly made they prove satisfactory. The proportion of one of cement to four of sand makes very good tile. Care should be taken that they are not dried in the hot sun as there is then a tendency for them to crumble to pieces.

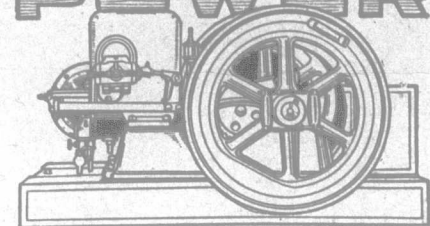
3. Orchard grass should give a certain amount of feed on low land; in fact, it may do as well as any of the grasses. Red top and alsike are two seeds which are generally recommended to sow on low land, especially if it is to be left for pasture. A small proportion of other seeds ought to be mixed with these if putting down a permanent pasture.

4. It is not customary to leave a continuous door in a concrete silo, as it is essential that the re-enforcing wire or rods extend across the space to hold the silo together. However, it is not absolutely necessary that the concrete extend right across although we prefer to have it so as it gives added strength. When having a continuous door, one method used is to imbed 1½ inch angle iron on each side of the doorway, to which the re-enforcing material is fastened, and then 1 by 1-inch angle iron is bolted or riveted to the uprights which not only tends to prevent the silo from spreading but serves as a ladder as well.

"Is that a Landseer, Mr. Cræsus?" asked a visitor, pausing before a painting of a cow, executed with great skill and fidelity.

"No," replied the host. "Reckon it's a Durham. See how broad it is between the horns, and see the color and curl on its forehead. That's a genuine Durham, sure. That ain't no Landseer."

**Better - Cheaper POWER**



A Page Engine (gasolene or kerosene type) saves time and money on the farm. We have reached the very apex of value in the producing of engines that are low in price and that furnish the greatest power with least fuel.

Then there's the matter of convenience—these engines are easy to understand and manage. The gas engine is made in five sizes—1½ h.-p., 1¾ h.-p., 3 h.-p., 5 h.-p., 7 h.-p. The three larger sizes burn either kerosene or gasolene. The Page costs less to own and less to run than any other farm engine on the market. This is particularly true of our new Kerosene Oil Engine, which has many new and distinctive features that we'll explain if you'll just sign your name to a post card and send it to us.

**THE PAGE WIRE FENCE COMPANY LIMITED.**  
WALKERVILLE, ONTARIO

**HIGHLAND LAKE FARMS**

Herd sire, AVONDALE PONTIAC ECHO (under lease) a son of MAY ECHO SYLVIA, the world's record cow. Only one other 41-lb. bull in Canada. We have young bulls for sale whose two nearest dams (both Canadian champions) average as high as 35.62 lbs. butter in seven days; another whose two nearest dams are both 100-lb. cows; and one ready for service from a 41-lb. sire and an 18,000-lb. two-year-old dam. Send for our BOOK OF BULLS. A few females for sale. Satisfaction guaranteed.

R. W. E. BURNABY (Farm at Stop 55, Yonge St. Radial) JEFFERSON, ONT.

**ROYCROFT FARM HOLSTEIN-FRIESIANS**

The home of Het Loo Pietertje, the world's record junior two-year-old, and Mildred Pietertje Abbecker, the world's milk record four-year-old. Records were both made on the farm this year and we have young bulls of the same breeding. Get your next herd sire from a herd that is best by test. Regarding individuality—pay "Roycroft" a visit and see for yourself. Take Yonge Street cars from North Toronto.

W. L. SHAW, Newmarket, Ont.

**Hospital for Insane--Hamilton, Ont.**

Present offerings are 4 grandsons of Dutchland Colantha Sir Mona, and high-testing, large-producing R. of P. dams of Korndyke and Aaggie DeKol breeding. Born during April and May, 1917. Apply to Superintendent.

**SUMMER HILL HOLSTEINS**

The only herd in America that has two stock bulls that the dam of each has milked over 116 lbs. a day and their average butter records are over 35 lbs. a week. We have 50 heifers and young bulls to offer by these sires, and out of dams just as well bred. We invite personal inspection.

D. C. FLATT & SON, R. R. 2, Hamilton, Ont. Phone 7165

**CLOVERLEA HOLSTEIN-FRIESIANS**

Stock for sale, all ages, from choice, high-testing dams—75 head to choose from. Our special offering is a few choice heifers, due to freshen in September or October. Personal inspection is invited.

GRIESBACH BROS. L.-D. Phone COLLINGWOOD, ONT.

**SILVER STREAM HOLSTEINS**

Just now we are offering our two junior herd bulls, aged 2 and 3 yrs. Individually as good as their breeding; sired by King Lyons Hengerveld and King Lyons Colantha. Personal inspection is invited.

J. Mogk & Son, R. R. No. 1, Tavistock, Ont.

**EVERGREEN STOCK FARM - Registered Holsteins**

Just now we are offering a very choice young bull, five months old, whose five nearest dams average over 30 lbs. of butter in seven days and 100 lbs. milk in one day. Also another bull whose dam was the top-price cow in the Woodstock Sale. Bell phone.

A. E. HULET, NORWICH, ONTARIO

**MAPLE SOIL STOCK FARM HOLSTEINS**

Fine quality, typey, heavy-producing Holsteins—forty head to choose from. The females are sired by Idaline's Paul Veeman and King Segis Pietertje, and are in calf to FINDERNE King May Payne. Two bull calves, about ready for service, sired by the latter bull and out of heavy-producing cows, for immediate sale. Females in milk have made high records and sires used have the backing and are proving good. Correspondence solicited, visitors welcome. H. C. HOLBY GLANWORTH, ONT.

**Pioneer Farm Holstein Herd**

With big yearly records and high average butter-fat test, and headed by Canary Hartog, grandson of Royalton Violet at 10 years, 30.39 lbs. butter, 735 lbs. milk in 7 days; 29,963 lbs. milk, 1,300 lbs. butter in 1 year. Sire's dam, Royalton De Kol Fern, 34.60 lbs. butter in 7 days, 116 lbs. milk in one day. Bull calves for sale, born after Jan. 25th, 1917; dams over 11,000 lbs. milk up to nearly 16,000 lbs. milk in 1 year, at 2 years old.

Walburn Rivers, R. R. No. 5, Ingersoll, Ontario. Phone 343L, Ingersoll Independent Line.

**Riverside Holsteins**

Herd headed by "King Johanna Pontiac Korndyke" a brother of Pontiac Lady Korndyke, 38.02 lbs. butter in 7 days, 156.92 in 30 days—world's record when made. His ten nearest relatives have official record that average 34.94 lbs. butter in 7 days. His daughters have made good in official test. The present R. of P. cow of Canada was bred here. Choice young bulls for sale.

J. W. RICHARDSON, R. R. No. 2, CALEDONIA, ONT.

**WILLOWBANKS HOLSTEIN-FRIESIANS**

Herd headed by King Walker Pride (C. H. B., 17362) (A. H. B., 207261) who is a son of the famous King Walker and the great show cow, Pride Hengerveld Lennox 30.12, who is a granddaughter of Blanche Lyons De Kol 33.31 and King Segis, who is a grandsire of world-champion cow, also of the two highest-priced bulls of the breed. Young stock for sale.

C. V. ROBBINS Bell Phone WELLANDPORT, ONT.

**Record Breeding and Great Individuality**

are combined in the young sons we are now offering from daughters of Lewis Prilly Rouble Hartog, and sired by Baron Colantha Payne. They will improve most herds. Several are of serviceable age. See these.

T. W. McQUEEN, Oxford County, TILLSONBURG, ONT.

**Low Banks Farm Holsteins**

Fairview Korndyke Boy, our senior herd sire, is the same sire, and is proving his relationship to his noted sire in his daughters, 4 of which have made over 20 lbs. butter each in 7 days. Only 2 sons of Fairview left, nice, straight, deep-bodied fellows. Have 2 sons of Sir Echo, ¼ brother to May Echo Sylvia—beautiful individuals. K. M. Dalgleish, Kenmore, Ont.



### The Good Farmer Made Good, The Poor Farmer Failed.

EDITOR "THE FARMER'S ADVOCATE":

In the report of Dr. Creelman's address at the Ontario Corn Growers' Annual Convention last year occurs the sentence at the head of this article. Never, in my opinion, were truer words spoken. It is ever thus. The good workman is the one who makes good, the poor workman is the one who fails. We farmers are prone to blame the weather, the soil, the government—anything or anybody rather than to place the blame for failure where it usually belongs—"myself." A poor crop is—

with rare exceptions—the result of failure on our part to fulfil the conditions necessary to make a good crop. We sow or plant poor seed, too early or too late in the season, on poorly-prepared ground; we fail to harvest the crop in proper time and condition, neglect to keep the hoe and cultivator going, or in some other way fail to co-operate with nature to raise the 100-per-cent. crop. Nature is bountiful if we obey her laws and do our part of the work.

The different amount or quality of crop on adjoining or neighboring farms is by no means always due to difference of land; it is oftener due to difference of man. Yet, while the inspirational talk and lecturing is true, to the point and the purpose, may I be permitted to suggest that this form of help be occasionally supplemented by something more strictly practical. That if—during the hoeing season—the lecturer should once in a while climb down from his pedestal of paid position, take off his coat, put on a pair of overalls, and with hoe in hand make a bee-line for the corn field, there give an expert demonstration of the effectiveness of this "food-producing" instrument, and incidentally help the farmer with his work. Despite Edwin Markham's scathing characterization of "The Man with the Hoe," he is yet needed, and there is room for skill in his work. He may not care nor does he need to "trace the stars and search the heavens for power." His concern is to search (or till) the earth for food. The stars are too remote for him. Markham himself would have lacked potatoes for breakfast if they had to come from the stars.

Kent Co., Ont. W. J. WAY.

### Gossip.

#### Breeders' Sale of Thirty Shorthorns.

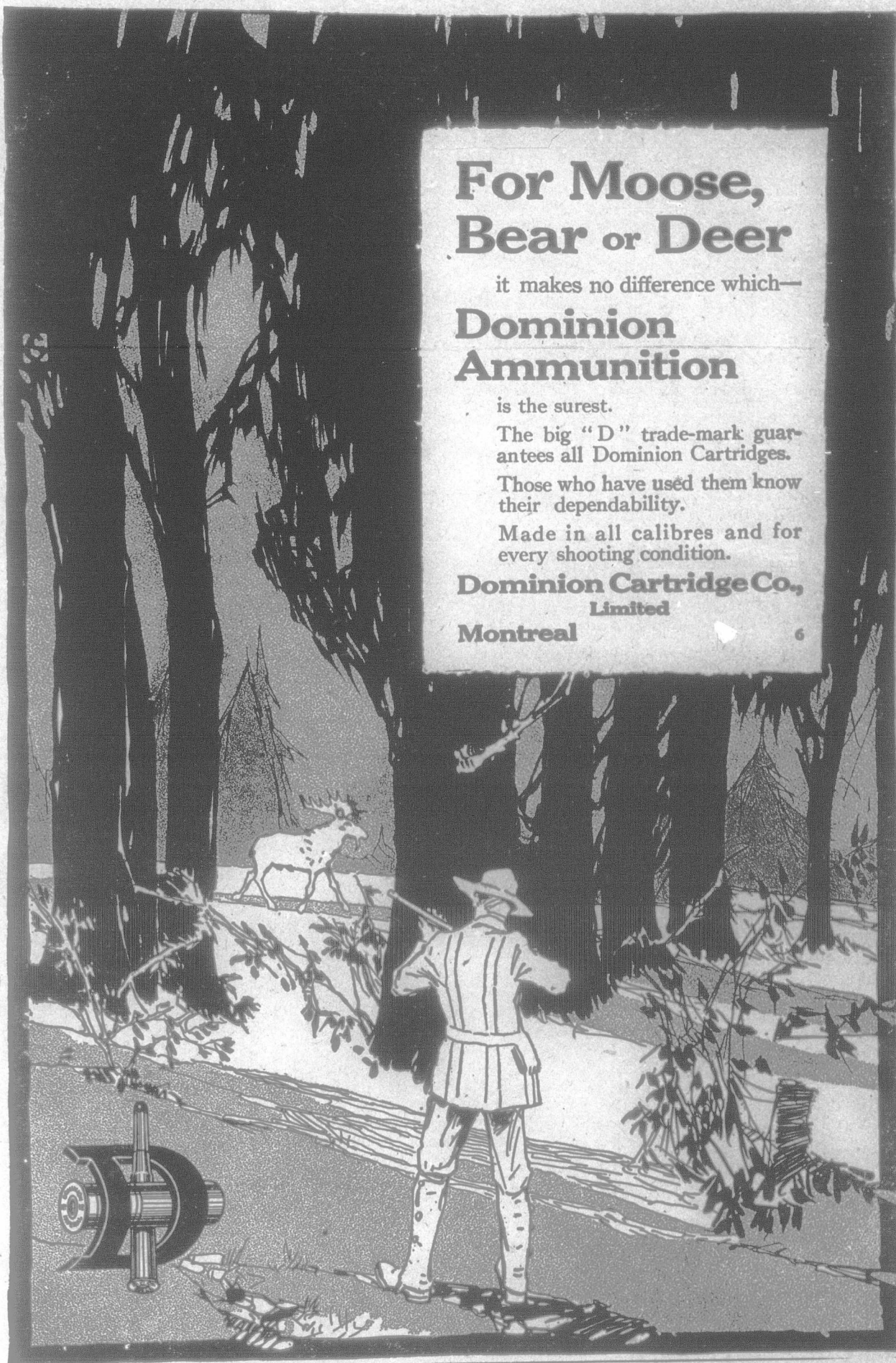
A very promising and important breeders sale of pure-bred Shorthorns is advertised elsewhere in this issue, for Wednesday, October 24. The owners are Messrs. H. Oestreicher & Sons of Crediton, Ont., and the number to be sold are twenty-four females and six young bulls. They are as the catalogue indicates a choicely-bred lot of breeding cattle, showing in the very best of field condition and breeders who are at present understocked will do well to keep the date in mind and make a request for a catalogue at once. The families are all mentioned in the advertisement and are the kinds that are sought after now. It might also be stated that the chief sire used in this herd up until this season was the noted bull, Excelsior, seen out at the shows this year. He is got by the noted champion, Gainford Marquis, and several heifers and two of the young bulls in the sale are got by him. Most of the cows to freshen around sale time are calving to the service of the promising young son of Excelsior, Cloverdale Marquis. A full brother to Cloverdale Marquis, one year younger, will also be among the six young bulls to be sold. Write for catalogue which gives full particulars including breeding, ages, terms of sale, train connections, etc.

Doctor (to wounded soldier who is on "low diet")—Is there anything you want, my lad?

Irishman.—Och, doctor, if ye'd be givin' me a nice fat goose for me dinner, now?

Doctor.—Ah, and I suppose you'd like it stuffed with something special, eh?

Irishman.—Indeed and I would. I'd like it stuffed with another wan.—Punch.



## For Moose, Bear or Deer

it makes no difference which—

## Dominion Ammunition

is the surest.

The big "D" trade-mark guarantees all Dominion Cartridges.

Those who have used them know their dependability.

Made in all calibres and for every shooting condition.

**Dominion Cartridge Co., Limited**  
Montreal

# SOLD

"King Johanna Rauwerd", the son of our 25,000-lb. cow, "Calamity Johanna Nig", (9076) advertised last week, goes to head the herd of W. B. Poole, Ingersoll, Ont.. We have a half brother of this bull, fit for service, that we are offering at a very reasonable price. Write us for breeding, etc.  
**JOSEPH O'REILLY, R. R. No. 9, PETERBORO, ONT.**

## SUNNYBROOK FARM OFFERINGS

A few choice yearling bulls and heifers. Fine individuals, beautifully marked and highly strained in the blood of the world's record cattle.  
1 Clydesdale stallion, "Coming Star". Fine type, excellent breeding. Rising 5 yrs. Write for particulars.

JOS. KILGOUR, EGLINTON. Toronto Phones: Bel. 184, Adel. 3900.

## DUMFRIES FARM HOLSTEINS

175 head to choose from. Special offering—bulls from one month to one year old. Grandsons of Prince Aaggie Mechthilde. Visitors always welcome. **ST. GEORGE, ONT.**

S. G. & ERLE KITCHEN **HOLSTEINS**

Present offering: a number of yearling heifers by Butter Baron, a son of the 33-lb. champion cow, Queen Butter Baroness. Also some choice young cows due to freshen this fall and early winter. A few young bulls by the herd header will be sold right. Get of Butter Baron was first at Toronto and London this year. **M. H. Haley, Springford Ont.**

**REGISTERED HOLSTEINS**  
Pontiac Segis Avondale: Brother to the \$9,000 bull "Sir Pontiac Waldorf Pletertje", sired by a brother to K.P. Lam, 44.18; K.P. Diona Pletertje, 40.15 lbs.; from a brother to dam of "Pontiac Josie" 40.14 lbs. His dam 29.89 lbs. at four years, sired by a brother to sire, "Duchess Lucy Mercedes," 46.83 lbs., from a 31.71 lb. sister to sires Segis Fayne Johanna, 50.68 lbs.; Fancher Farm Maxie, 46.54 lbs.; Mabel Segis Korndyke, 40.32 lbs. Her dam from sister sire is "Pauline DeKol Ophelia," 44.51 lbs. Stock for sale. **Wm. A. Rife, Hespeler, Ont.**

### Manor Farm Holsteins

Those wishing a young sire from high-record dams and sired by King Segis Pontiac Poach will do well to write for pedigree and prices before buying elsewhere.  
**SATISFACTION GUARANTEED**  
**Gordon S. Gooderham**  
CLARKSON, ONTARIO

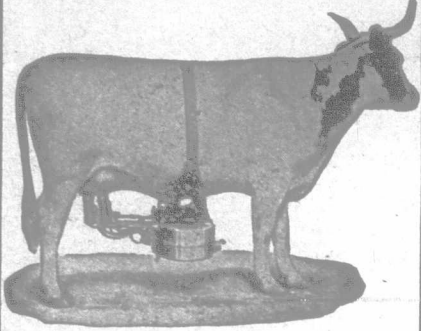
### Record Holsteins

We have the only two sons in Canada of the 46-lb. bull, Ormsby Jane King, only mature son of the world's most famous cow. One of them for sale. Also a 30-lb. calf, whose dam and 2 great grandams average 38.4 lbs. butter in 7 days. Eleven bull calves of lesser note and females all ages.  
**R. M. HOLTBY R. 4, Port Perry, Ont.**

## Advocate Ads. Pay



## THE OMEGA Milking Machine



has been installed in the private dairy of H. M. King George V., at Windsor Castle, and also at His Majesty's private estate at Sandringham. The OMEGA, in a 17-day test on ten cows (against 17 previous days) at the O. A. C., Guelph, increased the milk flow 206 lbs., or 3 per cent.

### Cleanly and Efficient

The OMEGA is the only machine that draws the milk from the teats through stiff, transparent, celluloid tubes to the pail which is suspended from the cow. (See cut.) The pail cannot be kicked over, and the teat-cups cannot fall to the floor and suck up straw or manure. There are no rubber tubes in the OMEGA to crack and harbor germs. The OMEGA is simple in design and easily cleaned.

### Write to-day

for free booklet describing the many exclusive and desirable features of the OMEGA.

**C. RICHARDSON & CO.**  
St. Mary's, Ontario



Cure the lameness and remove the blemish without scarring the horse—have the part looking just as it did before the blemish came.

**FLEMING'S SPAVIN CURE (Liquid)** is a special remedy for soft and semi-solid blemishes—Dog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be imitated. Easy to use, only a little required, and your money back if it ever fails.

**Fleming's Vest-Pocket Veterinary Adviser** describes and illustrates all kinds of blemishes, and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.

**75 FLEMING BROS., Chemists**  
Church Street, Toronto, Ont.

## FEEDS

Cotton Seed Meal	Linseed Oil Cake Meal
Corn Oil Cake Meal	Gluten Meal
Digestive Tankage	Distillers' Grains
Bran	Shorts
Crushed or	Ground Oats
Feed Wheat	Re-cleaned Screenings
Scratch Feed	Laying Mash
Fattening Mash	Mill Feed
Vim or Oat Feed, etc.	

If it is anything in the feed line, we have it. In car lots or less. Write or phone for prices.

**CRAMPSEY & KELLY**  
Dovercourt Road, Toronto, Ont.

## Fernbrook Ayrshires

Young bulls for sale (out of R.O.P. dams) from one to fifteen months old; tracing closely to the world's champions, Clough May Mischief and Jean Armour.

**COLLIER BROS.,** Beachville, Ont.  
(OXFORD COUNTY)

**Glencairn Ayrshires** Herd established 40 years. Producing ability from 8,600 to 11,022 lbs. If that sort of production appeals to you, we have heifers all ages and young bulls for sale. **Thos. J. McCormick,** Rockton, Ont., Copetown, Stn., G. T. R.

**Choice Offering in Ayrshires** At Special Prices. Several young bulls of serviceable ages. All from R. O. P. sires and dams. Come and see them.  
**Jno. A. Morrison,** Mount Elgin, Ontario.

## CITY VIEW AYRSHIRES

We want a new herd bull. A short description; give numbers of sire and dam; must have official records. **James Begg & Son, R. R., St. Thomas.**

## Questions and Answers. Veterinary.

### Fatality in Lamb.

I castrated a lamb 4 months old taking careful antiseptic precautions. It did all right for 8 or 9 days, I then found him stretched out stiff. I could not get his mouth open. He died in the afternoon. Upon skinning him I found one side badly bruised. The wound was healing nicely.

1. Was his death due to castration?  
2. In castrating lambs should the cords be cut or scraped or should they be pulled? **L. G. M.**

Ans.—1. The lamb died of tetanus (lock jaw). This is a disease that may follow castration in any male, notwithstanding the fact that the operation has been skilfully performed and all possible antiseptic measures have been observed. It is due to a germ that enters the wounds.

2. In large lambs it is well to sever the cords by a scraping motion of the knife. In lambs not over 4 months old most operators, after severing the non-vascular portion (that is the portion that contains no blood-vessels) pull steadily on the testicle until the cord breaks. **V.**

### Wintering Bees Outside.

Experiments in wintering bees outside, placing four colonies together in a case, were started at the Central Experimental Farm, Ottawa, in the winter of 1912-13, and have been continued every year since. Compared with bees wintered in the cellar, the out-door-wintered bees have, on the average, come out in spring in better condition, judged by the proportion of colonies found to be living in the spring and the number of combs in each hive found to be covered by bees at the first examination, made towards the end of April.

The wintering cases employed were large enough to take four 10-frame Langstroth hives with a space for three inches of planer shavings at the sides between the hives and the walls of the case, and also three inches underneath the hives, and ten or twelve inches on top. The top packing was placed in bran sacks for easy removal.

The outside entrances to the hives, cut in the case as far apart as practicable, measured about 8 inches long by 1½ inches high. A piece of wood revolving on a screw reduced each entrance to ¾ of an inch wide by 1½ inches high during the cold weather.

Sheltering the apiary during winter from wind was found to be very important. At Ottawa the wintering apiary is thus protected by a close board fence 6 feet high—8 feet high would be better for an apiary of fifty or one hundred colonies—and Norway spruce trees have been planted close to the fence to take its place in years to come.

An important advantage of outside wintering over cellar wintering was found in the protection afforded by the wintering case and packing during the spring. The colonies thus protected always built up much faster in the spring than those that were brought out of the cellar and given little or no protection. The hives were left in the wintering cases until June, the cases being deep enough to take one super.

There was a somewhat greater consumption of stores during the winter in the colonies left outside than in those wintered in the cellar, and breeding commenced earlier in the outside wintered colonies. Young bees were usually emerging at the date (average, April 11th) that the cellar-wintered colonies were brought out, these latter colonies having eggs only at that time.

The bees got their first good cleansing flight about the middle of March, three or four weeks earlier than the date the cellar wintered bees were brought out. From the date of this flight onwards they did exceedingly well.

The arrangement of four colonies together in each case is a particularly good one, because they keep one another warm. They are placed back to back with the entrances on the two opposite sides.

Bees have also been successfully wintered out of doors at the Experimental Farm at Brandon, Man., where the cold is still greater and steadier than at Ottawa, and at the Experimental Stations at St. Anne de la Pointe, Que., and Fredericton, N. B.—Experimental Farms Note.

## Sydney Basic Slag

will be unprocurable in Ontario during Spring, 1918, on account of the impossibility of getting transportation.

Farmers who have been using Sydney Basic Slag during the last few years are respectfully asked to place their orders for their requirements for spring crops right away, and take delivery ex-car on arrival. We cannot secure transportation in January, February and March, 1918, as the various railways will be taxed to their utmost capacity in carrying troops, munitions and coal. Help out, therefore, as a patriotic duty, even at some inconvenience, and take your fertilizer when you can get it.

**The Cross Fertilizer Co., Limited**  
Sydney, Nova Scotia

## AUCTION SALE

OF

## PURE-BRED STOCK

Under instructions from the Minister of Agriculture, there will be held at the

**Ontario Agricultural College**

GUELPH, ONTARIO

ON

**THURSDAY, NOVEMBER 1st, 1917**

A Public Sale of Surplus Pure-bred Stock belonging to the Ontario Government and comprising Shorthorn (Beef and Dairy), Holstein, Jersey and Ayrshire cattle; Yorkshire and Berkshire Swine.

For catalogues apply to

**A. LEITCH, Ont. Agricultural College, GUELPH, ONT.**

THE WOODVIEW FARM  
**JERSEYS**  
LONDON, ONTARIO  
John Pringle, Prop.

CANADA'S MOST BEAUTIFUL JERSEY HERD  
The foundation of this herd is made up of very high-class cows, imported from the Island of Jersey, most of them in the Record of Performance, and while we have, at all times, a few mature cows for sale, we make a specialty of in-calf heifers and young bulls. Write us your wants, or better still, come and see the herd. We work our show cows and show our work cows.

## Young BRAMPTON JERSEYS Bulls

For the next fortnight we are making a special offering of young bulls, bred from the highest producing families ever introduced into Canada. Brampton Jerseys and their descendants hold all Jersey R.O.P. records, save one. Females, all ages, also for sale. **B. H. BULL & SON, BRAMPTON, ONTARIO**

Every farm should have

an

**AYRSHIRE**

**The Cow for Profit**

WRITE

**Canadian Ayrshires Breeders' Association**

W. F. STEPHEN, SECRETARY-TREASURER

HUNTINGDON, QUE.

TWENTY FIVE YEARS BREEDING

**Registered Jerseys and Berkshires**

We have bred over one half the world's Jersey Champions, for large yearly production, at the pail. We bred and have in service, the two grand Champion Berkshire boars. If you need a sire for improvement, write us for literature, description, and prices.

HOOD FARM, LOWELL, MASS.

SPRING BANK R.O.P. AYRSHIRES

Herd Sires, Netherton King Theodore, Imp. and Humeshaugh Invincible. Grand Champion, London, 1917. Our herd at present holds the Canadian records for both milk and butter in the two-year, three-year and the mature classes. Let us tell you about the daughters of Netherton King Theodore. We have sons of both bulls for sale—all have R.O.P. dams. Visitors met at Hamilton by appointment. **A. S. Turner & Son** (3 miles from Hamilton) **Ryckman's Corners, Ont.**

**Glenhurst Ayrshires** For 50 years I have been breeding the great Floe tribe of Ayrshires; dozens of them have been 60-lb. cows. I have lots of them get 60 lbs. a day on twice-a-day milking. Young bulls 1 to 10 months of age, females all ages. If this kind of production appeals to you, write me.  
**James Benning, Williamstown, Ont.**

**RAVENSDALE AYRSHIRES**

We have a number of exceptionally good bulls as well as a choice lot of young heifers that we can offer at present. They are all sired by Auchenbrain Sea Foam (Imp.) or cherry Bank Fair Trade 44413. We can also spare a few young cows with the best of type and breeding. Come and see the Ravensdale herd. Correspondence solicited.  
**W. F. Kay, Phillipsburg, Que., St. Armand Station, C. P. R.**

## Edgeley Stock Farm

The home of Canada's greatest producing Jersey, SUNBEAM OF EDGELEY, the Sweepstakes Dairy Cow at the recent Fair. This famous cow improve your herd? We have them. Write for particulars. **JAMES BAGG & SON,** WOODBRIDGE, C. P. R.—CONCORD, G. T. R. **EDGELEY, ONT.**



**THE MARTIN DITCHER AND GRADER**  
DIGS YOUR DITCHES  
GRADES YOUR ROADS  
EASILY QUICKLY CHEAPLY  
REVERSIBLE ADJUSTABLE  
PAYS ITSELF IN ONE DAY  
**DOES THE WORK OF 50 MEN**  
SEND FOR FREE BOOKLET  
THE PRESTON CAR & COACH CO LIMITED  
97 DOVER ST. PRESTON CANADA



Our Breeding and Quality



CHAMPION OXFORDS OF AMERICA  
Summerhill Stock Farm

For size, quality and breeding, our Oxfords cannot be excelled. Our flock has won the Chicago championship yearly, since 1910 and the championships at all the leading fairs of Canada since the flock was established, in 1879. We have for sale 20 yearling rams and 30 ram lambs (flock headers), fifty yearling ewes and fifty ewe lambs all sired by the best rams obtainable. Write and let us know what your requirements are. Prices reasonable.

Peter Arkell & Sons, R.R.No.1, Teeswater, Ont.  
H. C. Arkell, W. J. Arkell, F. S. Arkell.

### SOUTHDOWNS

Special offering of shearing rams, ram and ewe lambs. This stock is by the great Gatton Park, imported ram, and the foundation are descended from the noted flock of the late John Jackson. Ram from this flock stood reserve champion at Toronto and champion at London.

J. W. Springsted & Sons, Calstor Centre, Ont.  
Phone—Smithville.

### COTSWOLDS

15 choice ram lambs, breeding unexcelled.  
Donald Sutherland, R. R. No. 2,  
Ingersoll, Ont.

Kelsey's Shropshires.  
This flock won both flock prizes at Toronto and all flock prizes but one at London this year in strong competition. Specially fitted yearling rams and a few ram and ewe lambs for immediate sale.  
John R. Kelsey, Woodville, Ont.

Leicesters, Shorthorn Cattle,  
and Berkshire Pigs, Ram lambs and ewes at reasonable prices. Two bull calves, 5 and 6 months. A few Berkshire sows.  
Dunnet Bros., Lythmore, Ont.

Cloverdale Shropshires and Berkshires—40 shearing rams, 70 shearing ewes, an exceptionally choice lot; true to type and well grown; nearly all sired by the show ram, Nock 16 Imp. In Berkshires, the usual strong offering, including sows just bred. C. J. LANG, Burketon, Ont.

OXFORDS AND SHROPSHIRE  
A choice lot of ram lambs of both breeds. Also six shearing Shrop. ewes, twenty Shrop. ewe lambs. A few Oxford ewe lambs, also shearing and two-shear ewes.  
Adam A. Armstrong, Box 402, Fergus, Ontario

Leicester Sheep  
RAMS AND EWES FOR SALE  
C. E. WOOD, FREEMAN, ONT.  
Burlington Sta., G.T.R.

Leicesters and Shorthorns  
A fine lot of shearing rams and ram lambs for sale. Also a number of Shorthorn heifers of breeding age.  
Geo. B. Armstrong, R.R. No. 1, Teeswater, Ont.

SHROPSHIRE  
30 YEARLING RAMS—12 YEARLING EWES  
W. H. PUGH, MYRTLE STATION, R. R. 1  
Farm 2 miles from Claremont.

OXFORD DOWN SHEEP  
Pedigreed ram and ewe lambs for sale. Weight 140 lbs. Apply:  
A. L. Fulmer, R. R. No. 1, Kingsville, Ont.

Elm View Oxford Downs  
Fifteen yearling rams and ewes including Winter Fair prize ram; 50 ram lambs and 25 ewe lambs. Prices reasonable. Visit or write.  
Bruce A. McKinnon, Hillsburg, Ont.

### Gossip.

#### Holby's Holsteins.

If desiring a herd header, or a few choice females to increase the herd, see H. C. Holby's advertisement in another column of this issue and write him for description and prices of his animals. The females are big, strong, typey individuals with every indication of being heavy producers. Many of them have made good under test. Four mature cows in the herd have a seven-day record of over 24 pounds of butter, while one exceeded the 30-pound mark as a four-year-old. The heifers are sired by King Segis Pietertje, whose dam made a seven-day record of 30.51 pounds, her test being 4.7 per cent. fat. Many of his sisters and daughters have made a name by their performance at the pail. The present herd sire is Finderne King May Fayne, whose ancestors on both sides have made exceptionally high records. His dam made 33.96 pounds of butter in seven days, with a test of 4.37 per cent. His sire King Hengerveld Aaggie Fayne has sired a number of noted producers, and his great grandsire has 85 A. R. O. daughters, one of which has a record of over 35 pounds. Mr. Holby has two bull calves, ten and seven months old respectively, and a few females for immediate sale. He will put a price on any female in the herd, thus giving those desiring cows with a record an opportunity of securing them. The females in the herd are officially tested as they come in milk. If requiring a herd sire with milk behind him, or a few heifers or cows, get in touch with Mr. Holby, Glanworth.

### Questions and Answers. Miscellaneous.

#### Cistern Water Has Bad Odor.

I have a cistern made of brick and cemented on the inside. It was not in use for five years previous to last fall, when it was cleaned out. The water now has a very bad odor. The cistern is practically airtight. Would placing a conductor giving it air help it? Is there anything I can use in washing it out to purify it?

2. How is mildew taken out of white sheets?  
C. G. W.

Ans.—1. It is not uncommon for water in a cistern to take on a foul odor, especially where only a small quantity is used. It is possible that some organic matter was left in the cistern at the time of cleaning. A little lime thrown into it would possibly improve conditions. However, we would advise pumping the cistern dry and allowing it to fill up afresh. An air supply would possibly improve it, but if the cistern is filled from the eave-trough there is already an opportunity for an interchange of air.

2. We have heard that soaking the article in buttermilk would partly remove the mildew. Salts of lemon will make the best job. Mildew is rather hard to remove entirely.

#### Trash Makes Fires.

A pile of trash that has been lying around all season is usually as dry as tinder. A spark and a little breeze are all that is necessary to start trouble. A spark, however, is not always necessary. There is such a thing as spontaneous combustion. Lots of people don't realize that inanimate objects can set themselves on fire. A lump of sodium dropped into a pan of water bursts into flame in a few seconds. Common unslacked lime heats when it comes in contact with moisture, and wet lime has been the cause of the burning of many a lumber yard.

In piles of trash or old rags a process of decay sets in that, under certain conditions, is quite likely to produce heating and sometimes fire. Greasy or oily rags are especially susceptible to this process. Every pile of trash and every accumulation of old clothes or rags, whether in the attic, the cellar or the yard, is a constant menace to the home.—Safety Engineering.

#### Farm for Sale.

A very desirable farm is being offered for sale through these columns, namely, that of H. Bollert, Tavistock, Ont. See the advertisement and correspond with the owner.

### Why You Should Invest Your Funds in Mortgage Corporation 5 per cent. Debentures

The Standard Reliance Mortgage Corporation is registered under the Loan Companies' Act of Ontario, and makes a yearly return of their affairs to the Government, by whom their accounts are published for the information of the public each year.

Mortgage Corporations are one of the classes of financial institutions, selected by the Government of Ontario, in which the uninvested funds of Provincial Insurance Companies may be deposited. The others are the Post Office Savings Bank and the Savings Department of Chartered Banks of Canada.

Stocks and Bonds fluctuate in value with the state of the money market and other causes. Thousands of people have invested their savings in these debentures without the loss of one dollar invested.

The debentures are issued in amounts of \$100 and upwards. Interest at 5% is paid in cash on the day it is due.

Write for our booklet about "PROFITS FROM SAVINGS." It explains what these Debentures are and why they are so good a security.

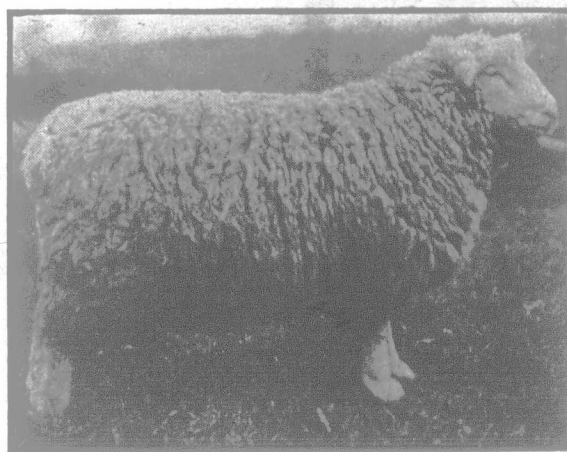


**STANDARD RELIANCE MORTGAGE CORPORATION**  
Head Office, 82-88 King St. E. Toronto

Branch Offices:  
AYR BROCKVILLE CHATHAM  
ELMIRA NEW HAMBURG

### THE BIG IMPORTATION OF ROMNEYS

WERE ALL SOLD IMMEDIATELY UPON ARRIVAL AT THE FARM



A New Importation of 100 Yearling ewes will leave England October 15th next. These ewes have been bred to the best rams and are from the best Romney flocks of England.

We are offering also a number of SHORTHORN HEIFERS, ages 28 to 36 months, of some of the best families of the breed—Clementinas, Minas, Clarets, Lancasters, Village Girls and Marthas. All are bred to our choice Bruce Rosewood bull. These will be sold right.

J. H. Patrick & Son, Ilderton, Ontario



### ANOKA FARM SHROPSHIRE

won 11 firsts, two champions at Toronto, 1916. War conditions prevent an extensive exhibit this year, but can supply rams and ewes of same breeding at breeders' prices  
F. W. Gurney, R. R. No. 3, Paris, Ont., Brant CO

### FARNHAM OXFORD DOWNS

Ewes and yearling rams all sold. We have still a number of strong ram lambs to offer. Also a few Hampshire lambs, rams. Henry Arkell & Son, (Phone 355, R. 2.) Guelph R. R. 2, Ontario.



# "PEDLAR" Means "Permanence"

NOW'S the time, when the harvest is all gathered in and fall work about completed, that the wise farmer considers what improvements are needed in his buildings.



BEGIN with the idea that any improvement you make will have the character of permanence—proof against fire, lightning, storm and every form of decay.

## PEDLAR'S "PERFECT" SHEET-METAL PRODUCTS

### FOR THE BARN

Use Pedlar's Galvanized, corrugated Steel Siding and Pedlar's "George" Shingles. No waste whatever—you can figure down to the last foot. And you'll have a barn that will last a lifetime without repair.

### FOR YOUR HOME

You'll never need to spend much money on repairs if you cover the exterior walls of your house with Pedlar's Stone or Plain Pattern Siding. It is handsome, durable, fire and weather-proof.

### SAVE YOUR IMPLEMENTS

By housing them in a Pedlar Steel Building. Implements cost money—a Pedlar Steel Building will keep them in good condition and always easily accessible. Build now, before the snow comes.

### FOR THE SILO

Use Pedlar's Silo Covers. Proof against fire, lightning and storm. Will never rust. Have a perfect automatic ventilator, a wired glass window, and a specially designed blower hole that means the utmost convenience in filling.

### FOR INTERIOR FINISH

There is nothing equal in beauty and durability to Pedlar's "Perfect" Metal Ceilings and Walls. 2000 handsome patterns. Easy to put on, will never need repair and will outlast the house itself.

### FOR YOUR CAR

Keep your automobile in a Pedlar's "Perfect" Metal Garage, either metal-clad or all-metal. Comes in interlocking sections, ready to erect. You can build it yourself in a very few hours.



### GET THE FACTS

Let us send you full particulars concerning Pedlar's "Perfect" Sheet Metal Products.

WRITE FOR BOOKLET "LF"



### THE PEDLAR PEOPLE LIMITED

ESTABLISHED 1861  
EXECUTIVE OFFICE AND FACTORIES, OSHAWA, ONT.  
BRANCHES: MONTREAL, OTTAWA, TORONTO, LONDON, WINNIPEG, VANCOUVER.

## Yorkshires

Young sucking pigs, both sexes; also young sows.

ADDRESS  
**WELDWOOD FARM**  
Farmer's Advocate  
LONDON, ONTARIO

### PROSPECT HILL BERKSHIRES

Young stock, either sex, for sale, from our imported sows and boar; also some from our show herd, headed by our stock boar, Ringleader. Terms and prices right. **John Weir & Son, Paris, Ont., R. R. 1.**

**SPRINGBANK CHESTER WHITES**  
Young sows bred and more ready to breed. Young pigs, pairs not akin. A number of them are sired by **Curly King—9997—**, who has been a winner at Toronto and London the last several years.  
**Wm. Stevenson & Son, Science Hill, Ont.**

**DUROC JERSEYS.**  
Our herd won all champion prizes at Toronto and London, 1916 and 1917. Pairs not akin. Young stock all ages for sale. Visitors welcome. For further particulars write:  
**Culbert Malott, No. 3, Wheatley, Ont.**

**Lakeview Yorkshires** If you want a brood sow or a stock boar of the greatest strain of the breed, (Cinderella), bred from prizewinners for generations back, write me. Young sows bred and boars ready for service.  
**JOHN DUCK, PORT CREDIT, ONTARIO**

## Tamworths

Young sows and boars from several litters just weaned.  
**HEROLDS FARMS, Beamsville, Ont. (NIAGARA DISTRICT)**

**BERKSHIRES**  
My Berkshires for many years have won the leading prizes at Toronto, London and Guelph. Highcleres and Sallys, the best strain of the breed, both sexes, any age.  
**Adam Thompson R. R. No. 1, Stratford, Ont., Shakespeare Station, G.T.R.**

**Morrison Tamworths and Shorthorns**  
bred from the prize-winning herds of England. Tamworths, both sexes, boars from 2 to 12 months. Shorthorn bulls from 5 to 10 months old, reds and roans, dandies. **Chas. Currie, Morrison, Ont.**

**Meadow Brook Yorkshires**  
Sows bred for Sept. and Oct. farrow, and a few choice boars fit for service. Young pigs, both sexes and all ages. Prices right. **G. W. MINERS, R. R. No. 3, Exeter, Ontario. (Huron County)**

**ELMHURST LARGE ENGLISH BERKSHIRES**  
From our recent importation of sows, together with the stock boar, Suddon Torredor, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed.  
**H. M. VANDERLIP, Breeder and Importer, R. R. 1, BRANTFORD, ONT., Langford Station on Brantford and Hamilton Radial**

**ENGLISH LARGE BLACK PIGS**  
We have for sale at present, some young pigs of a breed new to Canada but standardized and very popular in England, from our pure-bred imported **LARGE BLACKS**. Stock excellent for crossing with other breeds. Their English reputation is that they grow large and fast. Also for sale, pure-bred English Berkshires.  
**Lynnore Stock Farm, F. Wallace Cockshutt, Brantford, Ont.**

## Polands, Durocs and Berkshires

Young stock at all times, both sexes and all ages. Can also supply anything in Dorsets or South-downs. Everything priced to sell.  
**Cecil Stobbs, Leamington, Ont.**

**Yorkshires, Oxfords and Collies**—sexes. Choice young pigs, both sexes. One of our sows has farrowed 101 pigs in 6 litters. A few good ram lambs.  
**B. ARMSTRONG & SON, Codrington, Ont.**

**TAMWORTHS**  
Young sows bred for Fall farrow, and a nice lot of young boars for sale. Write  
**John W. TODD, R. R. No. 1, Corinth, Ont.**

**OAK LODGE YORKSHIRE HOGS**  
We have a large selection of extra-good boars and sows of different ages. We are selling at prices that make it attractive for the purchaser. Write for what you want.  
**J. E. Brethour & Nephews, Burford, Ontario**

**BEAVER MEDI CHESTER WHITES**  
won over 75% of the prize money at Toronto this year with three herds showing. Write us for bred sow or young boars. *We guarantee satisfaction.* We also have Percherons.  
**Wm. Roberts & Sons, Peterboro, Ontario**

## Questions and Answers, Miscellaneous.

### Lump Jaw.

What is the cure for lump jaw? A. S.  
Ans.—If the lump is not attached to the bone it may be dissected out and treatment applied as to an ordinary wound. Internal treatment for lump jaw consists of administering iodide of potassium three times daily. Commence with one-dram doses and increase the dose by one-half dram daily until food and water is refused, 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.

### Catarrh in Sheep.

I have a flock of 50 sheep and some of the lambs and sheep have a kind of distemper. They have a cough and a discharge from the nostrils. Is this contagious? What is a good remedy?  
M. C. S.

Ans.—The symptoms indicate a slight attack of catarrh, which is frequently brought on by exposure to wet and cold. Place the affected sheep in comfortable, well-ventilated quarters and give 4 to 6 ounces of raw linseed oil. Steam the nostrils, and if the appetite be lost drench three or four times a day with boiled flaxseed. One dram nitrate of potash, placed well back on the tongue, four times daily is recommended for catarrh.

### Gas from Straw.

Is there any good preservative for a hemp hay-fork rope that will keep it from drying and thus fraying?

2. Can gas for lighting and heating purposes be economically obtained from wheat straw and is there a generator for same on the market?  
W. F. S.

Ans.—1. We do not know of any satisfactory preservative for a rope. We know of ropes which have been tared that have lasted for a number of years, but this material makes them rather bad to handle.

2. Experimentally, it has been proven that gas from wheat straw for lighting and heating is practicable but it has not been tried out on a commercial scale. We are not aware of generators being placed on the market as yet.

### Diarrhoea—Caked Udder.

I have some lambs which have the scours. Some have got over the trouble, but one does not seem to get better though it apparently feels all right, but is a little thin. They have had access to salt all summer till about a month ago. This lamb has improved a little since I quite giving them salt. They have grazed on the road side or pasture at will. What is a good remedy?

2. I have a yearling ewe which has a pair of twins. About a month ago one side of her udder got caked and seemed very painful. The milk from this quarter was thick. Would you advise keeping her over for breeding, or is there any danger of her going dry on one side? E. C.

Ans.—1. An overfeed of salt might cause the trouble but if the sheep have access to salt at all times they are not likely to take too much. Too much succulent feed, water of poor quality, or foreign bodies in the stomach or intestines, might be the cause. If the patient is not to weak give six ounces of raw linseed oil and follow up in twelve hours with 2 drams of laudanum and 1 dram each of catechu and prepared chalk every four or five hours until diarrhoea ceases. Add a little limewater to the drinking water.

2. This is a case of mammitis which might be brought on by exposure to cold, a bruise, or failure of the lamb to draw milk from the teat. Drawing off the milk frequently and bathing with hot water, and afterwards rubbing with hot camphorated oil, should bring the udder back to normal. Unless the ewe is predisposed to this trouble we believe it would be safe to keep her for breeding purposes. There is not so very much danger of her going dry in that part of the udder, although if conditions which brought it on before again prevail the same trouble might occur.



Answers,

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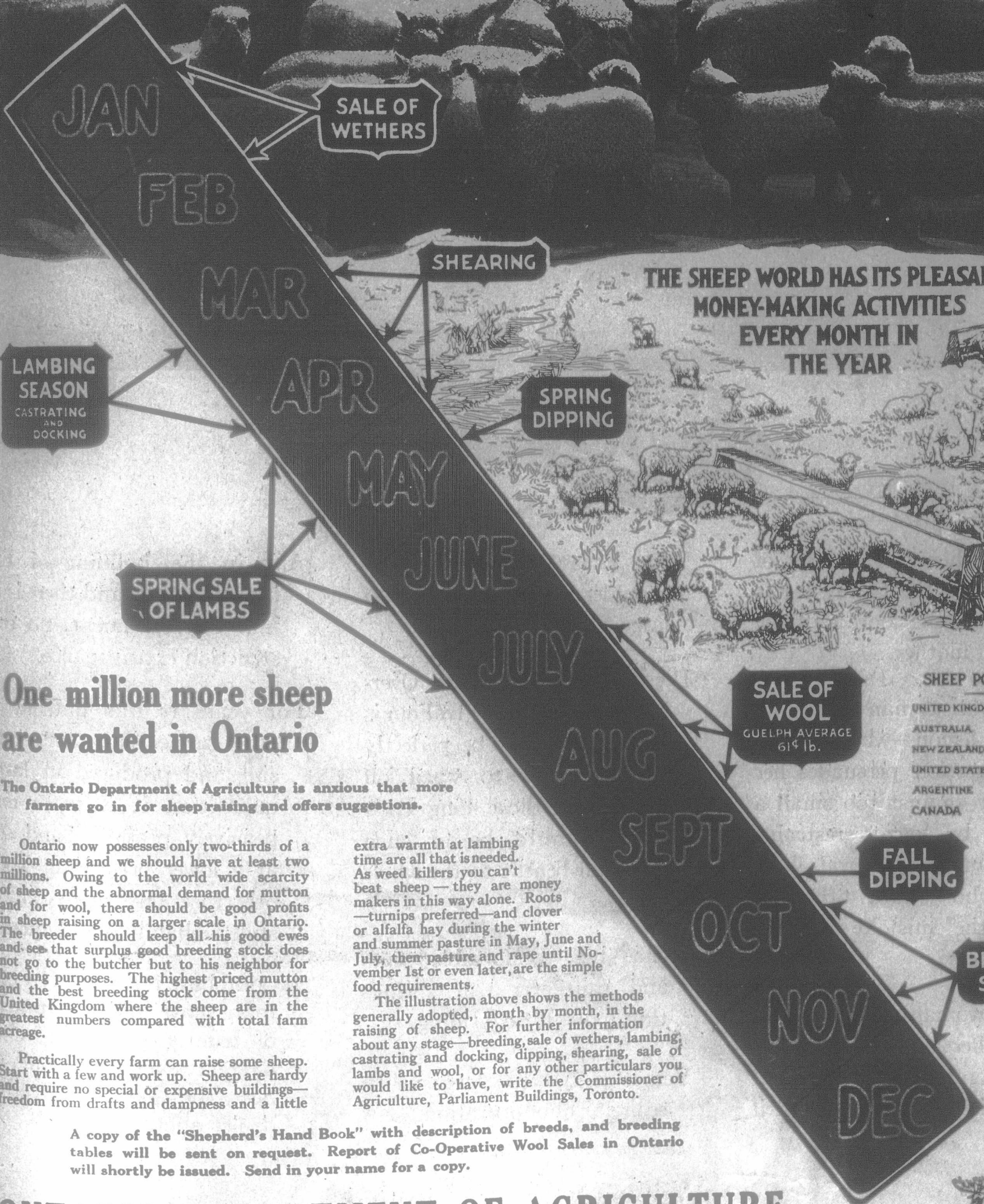
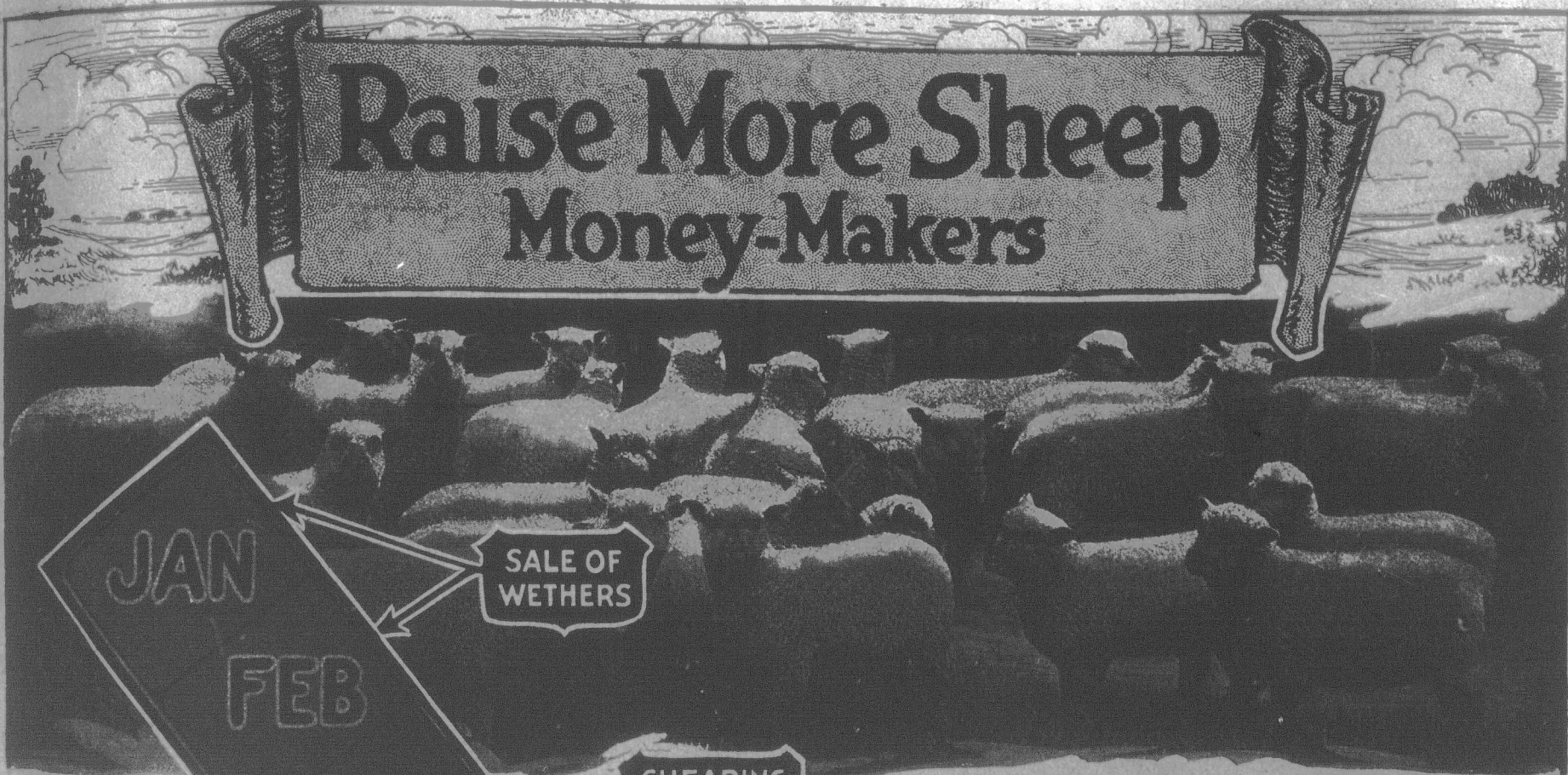
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# Raise More Sheep Money-Makers



THE SHEEP WORLD HAS ITS PLEASANT MONEY-MAKING ACTIVITIES EVERY MONTH IN THE YEAR

## One million more sheep are wanted in Ontario

The Ontario Department of Agriculture is anxious that more farmers go in for sheep raising and offers suggestions.

Ontario now possesses only two-thirds of a million sheep and we should have at least two millions. Owing to the world wide scarcity of sheep and the abnormal demand for mutton and for wool, there should be good profits in sheep raising on a larger scale in Ontario. The breeder should keep all his good ewes and see that surplus good breeding stock does not go to the butcher but to his neighbor for breeding purposes. The highest priced mutton and the best breeding stock come from the United Kingdom where the sheep are in the greatest numbers compared with total farm acreage.

Practically every farm can raise some sheep. Start with a few and work up. Sheep are hardy and require no special or expensive buildings—freedom from drafts and dampness and a little

extra warmth at lambing time are all that is needed. As weed killers you can't beat sheep—they are money makers in this way alone. Roots—turnips preferred—and clover or alfalfa hay during the winter and summer pasture in May, June and July, then pasture and rape until November 1st or even later, are the simple food requirements.

The illustration above shows the methods generally adopted, month by month, in the raising of sheep. For further information about any stage—breeding, sale of wethers, lambing, castrating and docking, dipping, shearing, sale of lambs and wool, or for any other particulars you would like to have, write the Commissioner of Agriculture, Parliament Buildings, Toronto.

SHEEP POPULATIONS

UNITED KINGDOM	22 MILLIONS
AUSTRALIA	83
NEW ZEALAND	24
UNITED STATES	50
ARGENTINE	80
CANADA	2

A copy of the "Shepherd's Hand Book" with description of breeds, and breeding tables will be sent on request. Report of Co-Operative Wool Sales in Ontario will shortly be issued. Send in your name for a copy.

## ONTARIO DEPARTMENT OF AGRICULTURE

SIR WM. H. HEARST  
Minister of Agriculture

Parliament Buildings, Toronto

DR. G. C. CREELMAN  
Commissioner of Agriculture





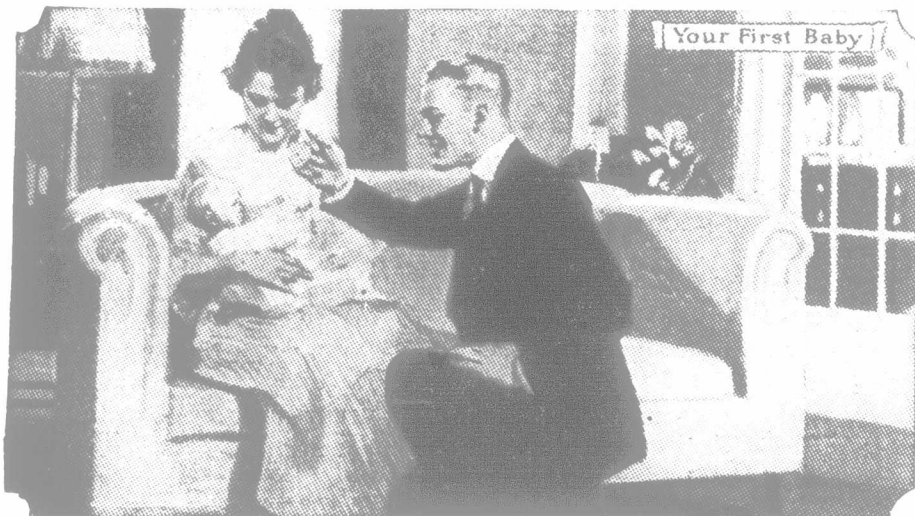


Getting Married



Buying Your Home

## The Four Greatest Events of Your Life



Your First Baby



-and Buying Your Overland

**Overland**

Model Eighty-Five Four

Like the other great events of life, buying the family car is very much the concern of the wife and mother.

Happy that woman—and her name is legion—who by helpful suggestion persuades her provider against too small a car or by loving restraint checks an over-generous husband who would otherwise make the mistake of too large a car.

It is the woman of the family that suffers most the fatigue and inconvenience of too small a car—her's the self denial if

too great an expense is shouldered in operating too large a car.

The thirty-five horsepower Overland Model Eighty-Five Four is roomy enough to be perfectly comfortable—to ward off fatigue on those long trips which should be of such healthful benefit to the whole family.

It has big, comfortable seats and cantilever rear springs that make it easy riding.

Yet it is not too large to be economical of operation.

*Circle 10 on request. Address Dept. 110.*

**Willys-Overland, Limited**

Willys-Knight and Overland Motor Cars and Light Trucks and Wagons  
Head Office and Works, West Toronto, Ontario

And in the building of this beautiful Overland there is no hint of experiment, no construction extravagance.

For years it has outsold all other cars of such comfortable size, and produced in larger quantities, it is more inexpensively produced and sold at a lower price than would otherwise buy such comfort, style, reliability and quality.

Its purchase is dictated by common sense and the practice of true economy—it will be a great event in your life. See the Willys-Overland dealer about it now.