

JUNE 5, 1919

PUBLISHED EVERY WEEK. \$1.50 PER YEAR.



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

ENTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1876.

LIV.

LONDON, ONTARIO, JUNE 12, 1919.

No. 1394

**Purity Flour is a high-grade  
flour because every care is  
used to make it so.**

**PURITY  
FLOUR**

**"More Bread and Better  
Bread and Better Pastry"**

CANADA FOOD BOARD LICENSE NOS. FLOUR 15, 16, 17, 18; CEREAL 2-009.

**"Purity Oats Make Better Porridge"**

**WESTERN CANADA FLOUR MILLS CO. LIMITED  
TORONTO - ONTARIO**

67

city  
fle"

farmer is  
his herd  
you do  
entirely  
time you  
separ-  
not pay  
own a

ew

changeable  
feel free to  
without the  
providing a

capacity  
a bowl of  
50, 800 or  
ments; we  
urn to us

describing the  
changeable capacity  
its low supply  
easy running



ted  
SEX, N.B.

78

# LOUDEN

**Hay Tools  
Mean Quick Work  
—Less Help**



**You can Always Depend on a Full Day's Work  
—With More Hay in the Mow when Night Comes**

**BECAUSE**

Louden Hay Tools handle tremendous loads rapidly, are simple and strong, efficient in unskilled hands, free from complicated trouble-making parts, no kinking ropes, no delays or running to town to repair broken parts.  
It makes no difference what kind of hay you have, upland hay, dry, short clover or alfalfa, pea vine, prairie wool, threshed short straw, or corn or grain sheaves—Louden Tools handle them all perfectly and safely.  
Loads are carried right up to the track close to the peak of the roof—permits storing tons more hay in the same space—dropped exactly where you want it—saves half the labor in mowing back and saves all the backaches.  
The superiority of Louden Tools is recognized by practical farmers who investigate—“Our power hoists, slings, forks, carriers, track and pulleys are all Louden Hay Tools. Goods of other makes were all replaced because we found Louden goods more reliable and convenient.”  
Send us the length of your barn—whether you unload from the end or from centre drive, and width space between your rafters. Your local dealer will gladly quote you on Louden Equipment or we will direct.  
If you are building or remodeling, our 112-page Barn Plan Book (not a catalogue) will save you worry, time and money. Write for it, also our large illustrated catalogues giving full descriptions. We mail them free.

**LOUDEN MACHINERY COMPANY OF CANADA, LIMITED**

Head Office and Factory: 573 CRIMEA ST., GUELPH, ONT.  
Branches with complete stocks:  
Martin Ave., Winnipeg, Man. Fender St. West, Vancouver, B.C. St. John, N.B.  
Edmonton, Alta., Alberta Dairy Supplies, Ltd.  
Tear Off Coupon Now and Mail Us To-day.

The Louden Machinery Co. of Canada, Ltd.  
573 Crimea St., Guelph, Ont.  
My barn is.....ft. long, rafters are spaced.....ft.....inches apart, we unload from..... I prefer to use.....(state whether Grapple or Harpoon Fork or Slings). Please send me free, postpaid, your large illustrated books, marked below:  
...Barn Plan Book. ...Water Bowls.  
...Hay Tools. ...Horse Stable Fittings.  
...Grapple Hay Forks. ...Barn Door Hangers.  
...Feed and Litter Carriers. ...Garage Door Hangers.  
...Stalls and Stanchions.  
I expect to build new barns size.....x.....  
in month of..... I expect to remodel barns size.....x.....  
in month of..... I expect to equip present barns in month of..... I keep  
i.....Cows.....Horses.....Calves.  
I prefer to deal through.....  
My Name.....  
P.O..... Prov.....

**Louden Senior Hay Carrier**  
Guaranteed capacity 1,200 lbs.  
Draws load right up against track. Put it where you want it—roller bearing extra large rope wheels—no trouble—no bending on the track.

**Louden Balance Grapple Fork**  
Handles clover—alfalfa—draw—as perfectly as timothy—guaranteed capacity 1,000 lbs.—grips and drops hay as it should be—built of special high grade steel—never fails to register.

**Louden Power Hoist**  
So simple a boy can operate it. All slack rope wound on drum—no wear on ropes.  
For use with 4 h.p. and upwards.  
Elevates load—draws it into the mow—pulls back empty carrier for next load.

**IMPERIAL SEPARATOR OIL**

**Close Skimming Depends on Proper Lubrication**

THE fine and delicately balanced mechanism of a cream separator gives accurate and completely satisfactory results only when it is kept correctly lubricated.  
Imperial Separator Oil is manufactured expressly for this service—to thoroughly lubricate the close fitting bearings and keep every part working easily. Does not congeal or gum. Makes the separator work faster, do more accurate work and last longer.

Sold by reliable dealers everywhere.  
In cans—sizes 1 pint to 4 gallons.

**IMPERIAL OIL LIMITED**  
POWER · HEAT · LIGHT · LUBRICATION  
BRANCHES IN ALL CITIES

**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

**LONDON COMBINATION MIXERS**  
Two machines in One—It mixes any kind of Concrete or Mortar, and does any kind of hoisting at the same time. Built in two sizes.  
A High Grade Outlet built to stand constant use. It is suitable for any kind of work, within its capacity. Any contractor who has both mixing and hoisting on the same job can save money by using a London Combination Mixer. Send for catalogue No. 1-H.  
London Concrete Machinery Co., Limited  
Dept. B. London, Ontario  
World's Largest Manufacturers of Concrete Machinery

Please mention Advocate

**QUEEN'S UNIVERSITY**  
KINGSTON, ONTARIO

**ARTS**  
Part of the Arts course may be covered by correspondence.

**MEDICINE EDUCATION APPLIED SCIENCE**  
Mining, Chemical, Civil, Mechanical and Electrical Engineering

**SUMMER SCHOOL NAVIGATION SCHOOL**  
July and August. December to April  
26 GEO. Y. CHOWN, Registrar.

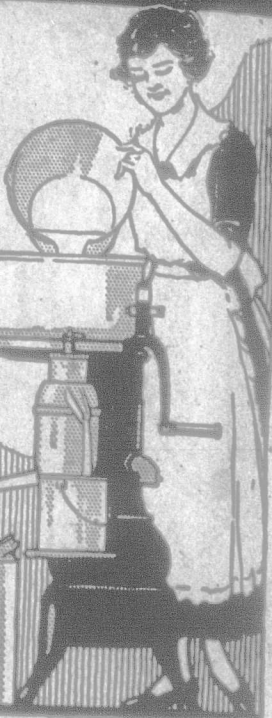
**HYLO SILO**

THE everlasting silo—yields 100% profit on the investment every season—sweet, fresh ensilage down to the last forkful.  
Exclusive patented features of great value—specially selected, imported material of the highest quality, and careful workmanship, explain why the Hilo is the choice of the most progressive and prosperous farmers in each community. Some territories still open for live agents.  
Write for free silo book today.

**GILSON MFG. CO., LTD. 849 York St. Guelph, Ont.**

**SAVES ITS COST IN SIX MONTHS**

PERIAL  
RATOR OIL



Skimming  
ds on Proper  
lubrication

and delicately balanced  
m of a cream separator  
te and completely  
results only when it is  
lubricated.

erator Oil is manu-  
essly for this service—  
lubricate the close  
gs and keep every  
easily. Does not con-  
Makes the separator  
o more accurate work

le dealers everywhere.

RIAL OIL  
IMITED

LIGHT LUBRICATION  
ES IN ALL TYPES

n Wanted

cream to us. We  
ress charges. We  
ns. We remit  
guarantee high-  
price.

Creameries  
LIMITED

ONTARIO

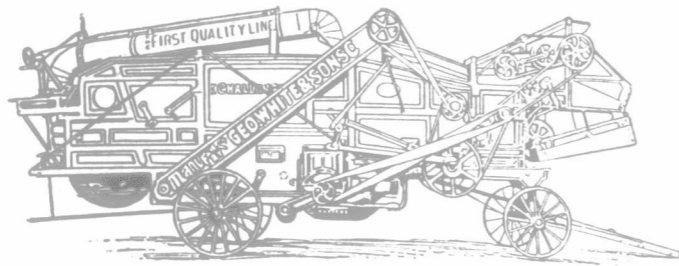
MBINATION MIXERS

Two machines in  
One—it mixes  
any kind of Con-  
crete or Mortar,  
and does any kind  
of hoisting at the  
same time. Built  
in two sizes.

A High-Circle  
Outlet built to  
stand constant  
use. It is suitable  
for any kind of  
work, within its  
operator who has both mixing and  
job can save money by using  
tion Mixer. Send for cata-

Machinery Co., Limited  
London, Ontario  
Manufacturers of Concrete Machinery

tion Advocate



More work for your Tractor

Here is a Threshing Machine designed specially for the man who owns a gas Tractor. If you own a tractor you will surely see the advantage of having your own threshing machine.

The White Challenge No. 1 has 24-inch cylinder and 40-inch body. It is a high-grade piece of work in every respect, and worthy of its place in "The First Quality Line" of White Threshing Machinery! Full details of how it is constructed are clearly shown in our illustrated catalogue. You will see there the many fine features and improvements that have been embodied in this machine. But, remember that this institution has specialized on Threshing machinery for two generations. Our whole busi-

ness depends on the quality of material and workmanship we put into our machines. We know better than anyone else the great need for extra strength and extra durability in every part of threshing machinery. We know that the most economical and most satisfactory machine is the one that is built with great over-strength in every vital part to stand up under severe strains.

And this organization realizes the importance to the owner of being able to get prompt service after he buys his machine. We stand behind every machine we sell to see that our customer gets the best deal we can possibly give him.

Orders for repairs are filled at any hour of the day or night.

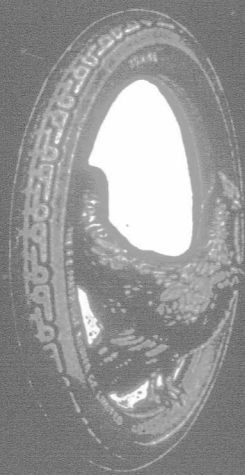
Write for descriptive catalogue and full information

The Geo. White & Sons Co., Limited

Moose Jaw, Sask. LONDON, ONT. Brandon, Man.

"THE FIRST QUALITY LINE"

Makers of Steam, Gas and Kerosene Tractors and Threshing Machinery



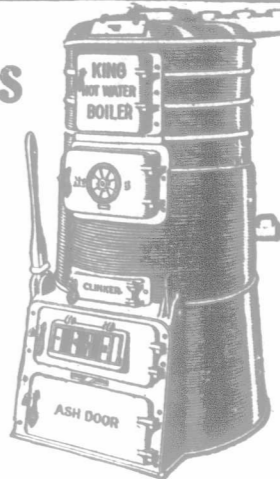
Partridge  
Tires

Game as Their Name  
Wear Down All  
Road Resistance

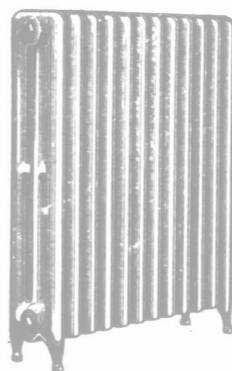
Made by The F.E. Partridge Rubber Company, Limited, Guelph, Ont.

Your Home Needs  
Hot Water Heating

Old fashioned heating methods are expensive, unsanitary, and unsatisfactory. Stoves and hot air furnaces are being abandoned. Real Estate men find it hard to sell houses that have not hot water heating because people will no longer put up with the inconvenience and inefficiency of old methods. If your house does not have Hot Water Heating, it will pay you in Health, Comfort and in Money to take out the old and put in the newer and better kind.



KING HOT WATER BOILERS  
AND  
IMPERIAL RADIATORS



The most improved ideas in generation and radiation of heat are combined in King Boilers and Imperial Radiators. If you are interested, let us send you our descriptive literature. We will be pleased to supply you with information as to size and cost, without obligation. Write us NOW.

STEEL AND RADIATION, LIMITED

Manufacturers of Hot Water and Steam Boilers and Radiators, Fenestra Steel Sash and Concrete Reinforcing  
123 Fraser Ave., Toronto

The "Outhouse" Must Go!



MODERN farmers need not put up with the disagreeable, unsanitary outhouse one day longer. They can have INDOOR toilets. Upstairs or on the ground floor.

DEALERS  
Live men should  
write for our  
proposition.

Kaustine Waterless Toilets bring the same standard of comfort, cleanliness, sanitation, privacy and efficiency to the farm that the water closet brought to the city.

Only a few hours' job to install. Needs no more than two hours' attention each year. Absolutely trouble-free. Absolutely odorless. The bright, washable china bowl is thoroughly ventilated. And Kaustine chemical is the most efficient known.

But don't confuse the Kaustine system with a mere chemical commode. It is a real sewage DISPOSAL system.

A quality job throughout—yet surprisingly low in price. And sold under a positive long term guarantee.

Over 50,000 Kaustine Waterless Toilets are in use. There's an installation near you—in a school, factory or farm home. Our literature tells the whole story. Contains scores of genuine testimonials. Write for it. See how simple it is to replace the unpleasant old outhouse with a modern, convenient sanitary indoor toilet. Send the coupon NOW.

KAUSTINE CO. Limited - - Toronto, Ont.



Kaustine  
Waterless Toilets

KAUSTINE CO., Toronto

Gentlemen: I want to read your booklet about sanitation and indoor toilets. This places me under no obligation to buy.

Name .....

Address .....

Give Nearest Town

# This Handy En-ar-co Oiler FREE To Automobile and Tractor Owners

Send the coupon for a long, slim can with a long spout that reaches all hard-to-reach places on your machine.

This oiler is intended to remind you that when you buy

## En-ar-co Brands

you get the best that money can buy. Made by graduate workmen, trained to their tasks and skilled in Scientific Refining. For this reason En-ar-co brands, for nearly forty years, have enjoyed a reputation for dependability.

## En-ar-co National Motor Oil For Automobiles and Tractors

An oil of the right body to protect the moving parts with a soft, velvety cushion or film, strong and tenacious, so as to permit that necessary smooth movement of the motor to develop its greatest strength and power.

## En-ar-co National Motor Oil

goes through a Scientific Refining process, wherein it is distilled many times, vaporized and filtered until a clear, clean oil, containing no free carbon, is produced. An oil that will prolong the life of your motor, giving it increased power and save, in cold cash, many times its cost in preventing lubrication trouble.

## National Light Oil

The most economical fuel for oil-burning tractors. Best for lamps, insuring a bright, clear light without charred wick or sooted chimney. No soot or smell when used in oil stoves. Its uniform heat makes it most desirable for incubators, as it emits no fumes to clog eggs shell pores or kill live chicks in the brooder. Buy it by the barrel.

## Black Beauty Axle Grease

for the wagon. Insures a friction-free axle, as it contains no compounds to clog and gum.

### Buy of Your Local Dealer

If he cannot supply you, write us for prices and location of nearest distributing point.

**Economy Ready Mixed Paint** For all outdoor and indoor painting.  
**Longwear Barn, Bridge and Roof Paint** For lasting satisfaction.  
Put up in barrels and half-barrels. Write for color cards and prices.

## Canadian Oil Companies, Limited

1322 Excelsior Life Bldg. Toronto, Ont.



For Better Service Use  
**White Rose Gasoline**

Pure and Dry  
Develops Greater Power

**En-ar-co Motor Grease**

One Grease for All Friction Points

Made in Canada

Canadian Oil Companies, Limited  
1322 Excelsior Life Building  
Toronto, Ontario

I own (Give name above) \_\_\_\_\_  
automobile or tractor and enclose two 3-cent stamps. Send me handy oil can FREE. Please give nearest shipping point and quote prices on items I have marked. I will be in the market about \_\_\_\_\_

(Give date above)  
I use \_\_\_\_\_ gals. Gasoline per year  
I use \_\_\_\_\_ gals. Motor Oil per year  
I use \_\_\_\_\_ gals. Kerosene per year  
I use \_\_\_\_\_ gals. Tractor Oil per year  
I use \_\_\_\_\_ lbs. Motor Grease per year  
I use \_\_\_\_\_ lbs. Axle Grease per year

My name is \_\_\_\_\_

Past Office \_\_\_\_\_

County \_\_\_\_\_

Province \_\_\_\_\_

NOTE—This can will not be sent unless you give make of your auto or tractor.

**Tear or Cut Out—Mail To-day**

JUNE 15  
mo  
I  
aut  
in f  
E  
age  
ind  
mo  
his  
V  
goo  
deli  
tha  
typ  
the  
1.  
2.  
3.  
4.  
5.  
(The  
of R  
show  
in o  
Mar

VLIT MFG. CO.  
SHELL SUPPL  
Exclusive repre  
How  
TR  
Our complete p  
construction, sp  
kinds of Gas an  
home course, als  
mobile construct  
free literature.  
Canadian C  
Limited, De



"How Many Miles to the Gallon?"

HOW FARMERS ARE FINDING THE ANSWER

This is getting to be one of the most frequently asked questions.

Every farmer who operates an automobile or tractor is interested in fuel consumption.

He wants to know, because mileage per gallon, or acreage per gallon, indicates closely what his automobile or tractor is returning on his investment.

When the engine is apparently in good mechanical condition, and still delivers less power per gallon of fuel than some other engines of the same type, size and equipment, look to these points for your answer.

- 1. Are you using the spark correctly?
2. Do you use an engine lubricating oil that forms and maintains a perfect piston-ring seal?
3. Do you, at regular intervals of operation of your car or tractor, drain the used crank-case oil (which invariably is diluted by the fuel) and replenish with new oil of the correct body and character?
4. Are you expecting more of the engine than it was ever designed to do?
5. Doesn't the other engine that gives better service use the correct grade of Gargoyle Mobiloils, as specified in the Chart of Recommendations?

(The Automobile Chart of Recommendations is shown at the right.)

Often the answer lies in Point Five.

The importance of correct lubrication cannot be emphasized too much.

The correct oil for your automobile or tractor engine must meet the lubricating requirements of your engine with scientific exactness. It must be of the correct body and character to withstand the heat of operation, furnish maximum lubrication to all friction surfaces, and maintain at all times a perfect piston-ring seal. It must be distributed readily and freely by the system of lubrication.

There is a grade of Gargoyle Mobiloils that is correct for your engine. This correct grade prevents carbon deposit. It withstands high temperatures, and furnishes maximum lubrication to all friction surfaces. It conserves power by keeping the piston rings tightly sealed—these are the big reasons for "more miles or more acres to the gallon."

Gargoyle Mobiloils are put up in 1 and 4-gallon sealed cans, and in wood half-barrels and barrels.

Write for our booklet "Correct Lubrication," which contains complete automobile and tractor charts and other valuable data.



Mobiloils

A grade for each type of motor

In buying Gargoyle Mobiloils from your dealer, it is safer to purchase in original packages. Look for the red Gargoyle on the container.

IMPERIAL OIL LIMITED

Manufacturers and Marketers of Polarine Motor Oils and Greases
Marketers of Gargoyle Mobiloils in Canada
BRANCHES THROUGHOUT CANADA

CORRECT AUTOMOBILE LUBRICATION

In the chart below the letter opposite the car indicates the grade of Gargoyle Mobiloils that should be used: For example, A means Gargoyle Mobiloil "A," Arc means Gargoyle Mobiloil Arctic, etc. The recommendations cover all models of both pleasure and commercial vehicles unless otherwise noted.

Table with columns for Automobiles and Lubrication Grades (A, Arc, B, E, etc.) for various car models like Allen, Auburn, Buick, etc.



The Old-time Painter Says:—

"You can't judge paint by the can, but—"

"When I see MAPLE LEAF on the outside I know there's something pretty fine in the paint line inside.

You can tell a good carpenter by the shavings he makes.

—and you can tell a good painter and a good painter by the length of time between jobs.

The longer they have to stay away from repainting an old job the better they are.

It's a long time between jobs with

Maple Leaf Paint

MADE IN CANADA

because it wears well and keeps on looking good all the time.

That's the kind of paint to save money on, and it's the kind your dealer likes to sell.

If you don't know the MAPLE LEAF dealer in your town write and find out about him from the

IMPERIAL VARNISH & COLOR CO. WINNIPEG TORONTO VANCOUVER

Advertisement for SUPER SPARK spark plugs, including an image of the plug and text describing its benefits.

Eastern Distributor: VLIET MFG. CO., 223 McGill St., Montreal
Western Distributor: SHELL SUPPLY CO., 509 McGreevy Building Winnipeg

How To Run A TRACTOR

Our complete practical course by mail on the construction, operation, care, and repair of all kinds of Gas and Gasoline Tractors. A simple home course, also ask about our course on automobile construction, running, etc. Write for free literature.

Canadian Correspondence College, Limited, Dept. E, Toronto, Canada.

SHARP-POINT STEEL POSTS

Don't break your back digging post holes. Don't waste your time replacing rotten posts every few years.

NO HOLES TO DIG
NO POSTS TO REPLACE
NO FREIGHT TO PAY

SHARP-POINT POSTS save money, time and work. They give you an all-steel fence stronger, better and cheaper than any combination of wood and steel. They are 1 1/2 ins. x 1 1/2 ins. x 1/2 in. thick x 7 ft. 4 ins. long, and weigh 9 lbs. each.

PRICE, 48c. each. Freight paid on orders of 50 posts or over.
Farm and Lawn Fence.—Get my prices.
Order your posts at the same time you mail your order for fence. Save in time, freight and hauling to the farm. Mail your order with Cash, Money or Express Order, or Bank Draft to

A. R. LUNDY, 257 King St. West, Toronto, Ont.

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 particulars as to terms, regulations and settlers' rates, write to: H. A. MACDONELL, Director of Colonization, Parliament Buildings, Toronto, Ont. G. H. FERGUSON, Minister of Lands, Forests and Mines

GRAND TRUNK RAILWAY SYSTEM

The Double Track Route

Between Montreal, Toronto, Detroit and Chicago

Unexcelled dining car service
Sleeping Cars on Night Trains and Parlor Cars on principal Day Trains.

Full information from any Grand Trunk Ticket Agents or C. E. Horning, District Passenger Agent, Toronto.

STAMMERING

or stuttering overcome positively. Our natural methods permanently restore natural speech. Graduate pupils everywhere. Free advice and literature.

THE ARNOTT INSTITUTE KITCHENER, CANADA

PATENTS Trade Marks and Designs Procured in all Countries. Special attention given to patent litigation. Pamphlet sent free on application. RIDOUT & MAYBEE 156 Yonge St. Toronto, Ontario

# Dependability



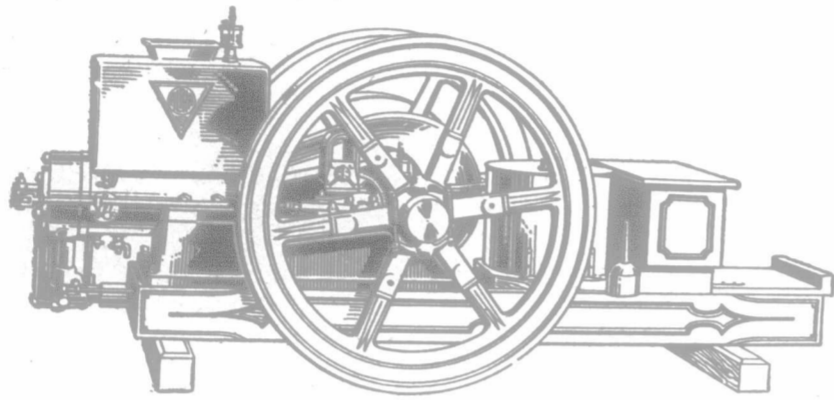
Trade Mark

THE KEYNOTE of the ALPHA Engine is dependability. It runs when you want it to, day after day, and you never need to worry about it. Its simple, sturdy construction makes it dependable.

The ALPHA power rating is *dependable*; if it is a 1½ Horse Power it will deliver at least one-and-a-half horse power; if it is a 28 Horse Power you can bank on getting more than 28—never less.

The De Laval Company is *dependable* — the largest manufacturers of dairy supplies in Canada.

If you don't know who handles the ALPHA in your vicinity, write nearest sales headquarters for his name.



## THE DE LAVAL COMPANY, Ltd.

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

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

# Is Your Thresherman A Grain Saver?

This is the most notable advance made in modern threshing. A device in the hopper returns to the separator the grain that would otherwise go to the stack. Users write us that this improvement saves one to three per cent more grain. Figure what that means to you.

Get the facts from any of the makers of North America's standard threshing machines listed below. Among these are the builders of the leading tractors and farm implements. All of them are prepared to supply threshing machines equipped with the Grain-Saving Stacker. Write to any of these for information.



View looking into hopper showing grain trap near stacker fan; also auger running from beneath trap for returning the saved grain to separator.

# Grain Saving Stacker

### LIST OF MANUFACTURERS

- |   |  |
|---|--|
| <b>Canada</b>   | Sawyer-Massey Company, Ltd., Hamilton, Ontario.                    |
| Robt. Bell Engine & Thresher Co., Ltd., Seaford, Ontario.   | Stewart Sheaf Loader Co., Ltd., Winnipeg, Manitoba.                |
| Dominion Thresher Co., Ltd., New Hamburg, Ontario.          | Sussex Mfg. Co., Ltd., Sussex, New Brunswick.                      |
| Ernst Bros. Co., Ltd., Mt. Forest, Ontario.                 | Waterloo Mfg. Co., Ltd., Waterloo, Ontario.                        |
| John Goodison Thresher Co., Ltd., Sarnia, Ontario.          | R. Watt Machine Works, Ltd., Ridgeway, Ontario.                    |
| Hergott Bros., Ltd., Midway, Ontario.                       | George White & Sons Co., Ltd., London, Ontario.                    |
| Macdonald Thresher Co., Ltd., Stratford, Ont.               |  |
| <b>United States</b>  | A. B. Farquhar Co., York, Pennsylvania.                            |
| Aultman & Taylor Machinery Co., Mansfield, Ohio.            | Frick Company, Waynesboro, Pennsylvania.                           |
| Avery Company, Peoria, Illinois.                            | Harrison Machine Works, Belleville, Illinois.                      |
| A. D. Baker Company, Swanton, Ohio.                         | Huber Mfg. Co., Marion, Ohio.                                      |
| Banting Manufacturing Company, Toledo, Ohio.                | Keck-Gonnerman Company, Mt. Vernon, Indiana.                       |
| Batavia Machine Company, Batavia, New York.                 | Minneapolis Threshing Machine Co., Hopkins, Minnesota.             |
| Buffalo Pitts Company, Buffalo, New York.                   | Port Huron Engine & Thresher Co., Port Huron, Michigan.            |
| Cape Mfg. Co., Cape Girardeau, Missouri.                    | The Russell & Company, Massillon, Ohio.                            |
| J. I. Case Threshing Machine Co., Racine, Wis.              | Russell Wind Stackers Company, Indianapolis, Ind.                  |
| Clark Machine Company, St. Johnsville, New York.            | Sawyer-Massey Co., Ltd., (United States Agency), Moline, Illinois. |
| Ellis-Keystone Agricultural Works, Pottstown, Pennsylvania. | Swayne, Robinson & Co., Richmond, Indiana.                         |
| Emerson-Brantingham Co., Rockford, Illinois.                | The Westinghouse Co., Schenectady, New York.                       |
| Farmers Independent Thresher Co., Springfield, Illinois.    |  |

The Grain-Saving Device Originated with The Indiana Manufacturing Co., Indianapolis, Ind., Who Also Originated the Wind Stacker

When writing advertisers kindly mention Advocate.

## A Barrel of Apples from Each Six-Year-Old Tree

—a good crop—yes, but you can do it, by planting your trees with

### C. X. L. Stumping Powder

Spade-planted trees have cramped and soil-bound roots and their growth is slow and uncertain. Trees planted with C. X. L. reach out with their roots and obtain all the rich fertility and moisture in the sub-soil. C. X. L. not only digs the holes for planting but it breaks up the hard pan.

Fruit trees planted with C. X. L. are healthier, stronger, grow faster and bear quicker than spade-planted trees.

Use C. X. L. for digging tree holes and ditches, for blasting boulders and stumps. Our booklet "Farming with Dynamite" tells how you can use C. X. L. profitably on the farm.

Send for your free copy today.

Canadian Explosives Limited  
816 Transportation Building, Montreal.

There is money in Agricultural Blasting. Write for proposition.



SPADE PLANTED

SIX YEAR OLD APPLE TREES

PLANTED WITH



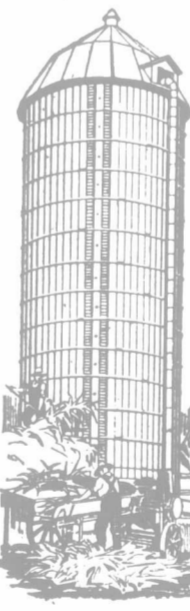
# Ensilage is Profit

Ensilage is clear profit. It gives your stock health and weight they could get in no other way.

Have proper ensilage and lots of it. A good silo is a paying investment on the farm. The construction of the Toronto Silo assures you of ensilage properly protected against air and cold. The Hip Roof allows you to put in several more tons than other silos. In the Toronto Silo you can tramp the ensilage, right to the top.

The Toronto Ensilage Cutter has set a new standard of service. You will find it trouble-free and amply powerful for your needs. And you'll have it when you need it.

Let us tell you all about these two important Toronto Products. Our booklets are complete and illustrated. They will be sent free if you write for them.



Ontario Wind Engine & Pump Co. Limited  
Atlantic Ave., Toronto

Montreal Winnipeg Regina Calgary

**TORONTO**

## PEERLESS LAWN FENCE

is built of strong, stiff wire, heavily galvanized and coated with zinc enamel to prevent rust. In style, durability, service and every feature combined to insure absolute satisfaction, the Peerless fencing is true to its name. It will not sag and cannot break down with ordinary use. Best for farm and city homes. Send for Catalog. Shows many beautiful designs of fencing for lawns, parks, schools, churches, cemeteries, etc. IN USE THROUGHOUT CANADA.

THE BANWELL-HOXIE WIRE FENCE CO., Ltd.  
Winnipeg, Man. Hamilton, Ont.

LIV.

The bu

Hot we

tion is kept

Watch

of water is

Canada

and it is to

A wet

heat makes

It is said

tops there

during the

true.

Agricult

good accou

spring the

factory.

Farmers

this season,

We learned

was revealed

A Holste

recently ga

thus becam

production.

breed name

"Gift" beats

Labor w

this year, an

44-hour we

Thousands

grass, and

is not avail

ment situat

own making

Cattle b

past, to pay

and the qua

The Argenti

tance from

meet our o

by the quali

ment of the

position we

cheapen pro

is no other v

Beginner

not put too

family name

they are val

either at the

live stock s

awards and

cattle world.

reveal shoul

dairy cattle

basis and ju

ethical stand

# The Farmer's Advocate and Home Magazine

PERSEVERE  
AND  
SUCCEED

ESTABLISHED  
1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

LIV.

LONDON, ONTARIO, JUNE 12, 1919.

1394

## EDITORIAL.

The budget speech has come at last.

Hot weather is good corn weather when the cultivation is kept going.

Watch the water supply in the pasture. A scarcity of water is a bad feature.

Canada's orchards gave a good promise this spring, and it is to be hoped that it will be fulfilled.

A wet spring followed by severe dry weather and heat makes the cultivation of all hoed crops imperative.

It is said that in the far north and on certain mountain tops there are fields of ice and snow, but such news, during the past few weeks, appeared too good to be true.

Agricultural Ontario has not yet failed to give a good account of itself, and with all the drawbacks this spring the aggregate harvest may be tolerably satisfactory.

Farmers should be able to cut clover meadows early this season, and endeavor to produce a crop of seed. We learned a lesson last spring when the seed shortage was revealed.

A Holstein cow, known as Little Gift of Spring Valley, recently gave 155.44 pounds of milk in one day, and thus became the world's champion for one day's milk production. This proves that long, unpronounceable breed names are no indication of greatness for "Little Gift" beats them all.

Labor was never scarcer in the country than it is this year, and with it all we hear so much talk about a 44-hour week to relieve the unemployment situation. Thousands and thousands of acres are going back into grass, and often into weeds, simply because the labor is not available to cultivate the land. The unemployment situation if such, in any form, exists is of labor's own making.

Cattle breeders will be obliged, more than in the past, to pay attention to the economy of production and the quality of product in order to meet competition. The Argentine has large stocks of cattle, and their distance from Europe is the only drawback. We have to meet our outside competition, which is strengthened by the quality of sires that have been used in the development of their live-stock industry. To meet this opposition we must get rid of our scrub bulls so as to cheapen production and improve our product. There is no other way out; the scrub bull must go.

Beginners in pure-bred live-stock breeding should not put too much emphasis on families. So far as family names indicate good lineage and its ownership they are valuable. In the last analyses, it is production either at the block or at the pail that counts, and all live stock should be bred to that end. Show-ring awards and carcass tests are the real guides in the beef-cattle world. What the milk scales and the Babcock test reveal should not be overlooked in connection with dairy cattle breeding. We must get down to a material basis and judge cattle according to commercial, not ethical standards.

## Fruit and Vegetable Prospects.

So far as the blossom is any indication of a fruit crop, Canada will have an abundant harvest this coming fall. However, there is always the possibility of a light set and the June drop to consider. Nova Scotia reports that the bloom was never better, and the Peninsular Province has possibilities for almost 2,000,000 barrels when conditions are favorable. There has been some neglect of orchards during the embargo on fruit to Britain, but the high prices which immediately followed the removal of the embargo spurred growers on to better care of their orchards during the present season. Eastern Ontario and Quebec were hard hit by the severe winter of 1917-18. Baldwins, Ontarios and McIntoshes were killed in great numbers, and many trees still living were so weakened that production even on them has been very much reduced. However, there is a general good showing throughout Eastern Ontario, so far as bloom is concerned. Winter varieties do not promise so well in Western Ontario, where throughout the war orchards have suffered very materially from neglect. Young orchards are coming along in British Columbia, and, so far as the blossom indicates, there will be increased production.

This is apparently to be a small-fruits season. The Niagara Peninsula was never more gorgeous with bloom than it was about the middle of May last, and reports state that even with a heavy June drop, there should still be a large crop. Cherries and plums, not to be outdone by peaches, blossomed out very extravagantly. Growers of tender fruits keep one eye constantly on the sugar market because a shortage of sugar lessens the demand for canning purposes. Reliable information indicates that while sugar may be had in sufficient quantities this coming autumn, there is not much possibility of it being any cheaper. One bright spot in the outlook, however, is that the canning factories have depleted their stores of canned goods, and will likely buy very liberally of this season's crop. Canners have been very active in making contracts for strawberries, and the same activity, it is expected, will continue throughout the small-fruits season.

Never in recent years have vegetable growers been held back so badly from getting on the land and planting seed; the cost of fertilizers is high, and the labor situation is no better than it was any time during the war. The potato acreage will likely drop both in Canada and United States, and the outlook for onions is not much better. It is still too early to predict what the ultimate results will be, but the production of vegetables will certainly be curtailed by the unfavorable conditions at planting time.

## The Mythical Coal Shortage.

The spirit of unrest is common throughout the civilized world to-day, but it is more common in Canada than economic conditions justify. On the other hand, however, perhaps the people of no country have been mulcted to a greater degree than have the consumers and workers of this Dominion. War conditions have been capitalized by those sufficiently organized to control the distribution and sale of certain necessary commodities. This in many cases has amounted to nothing less than exploitation and we are now witnessing the aftermath of greed and extortion. Owing to the fact that we have no well developed anthracite coal mines in Canada, fuel has become one of the most essential of the commodities which the people of this country must purchase. Farmers have become large users of coal, and the matter of purchasable fuel touches the pocket-book of almost every citizen. Throughout the war we have been surfeited with statements concerning the shortage of coal and the shortage of cars, upon which the enormous high prices for coal have been

based. These statements have lately been refuted by J. L. Payne, a responsible officer of the Department of Railways and Canals. In an article, which appeared in the Toronto "Globe" on May 31, he wrote: "The average price difference at port of entry as between 1913 and 1919 was 70 cents per ton. When the coal reached the consumer there was a much greater difference. In Ottawa, coal was retailed in December, 1913, at \$8; in December 1918, as well as in January 1919, the price was \$12. The import price between 1913 and 1919 advanced by 14.6 per cent., while the retail price advanced by 50 per cent."

Car and coal shortages were proclaimed both in the United States and Canada during 1917 and 1918, but Mr. Payne's figures show that more anthracite coal was imported in 1916-17 and 18 than in the three preceding years. There has been a nigger in the wood-pile somewhere and the Fuel Controller with his high-priced assistant apparently made no effort to dig him out.

## The Dust Nuisance.

Roads were never more dusty than during the last days in May and early June. Not only were the roads dusty, but if they happened to be automobile speed-ways whole neighborhoods in the vicinity of these highways were enveloped in a gritty fog. Concrete, or roads with hard metal surfaces, are not so bad of course, but the majority of our roads are of such material as characterizes the farm land of the districts through which they run, with perhaps a little gravel added. Good roads are soon found out by the autoists and quickly become a thoroughfare for fast-running motor vehicles. The dust nuisance reaches its maximum on highways which connect urban centres and lead to parks or popular summer resorts, and here dust is more than a nuisance; it is a menace to crops as well as the life and safety of the travelling public.

The dust nuisance must be viewed from at least three angles. First it destroys the value of pasture or crops adjacent to roads. This has been practically ignored, but it should be considered in the future in taxation, if not otherwise. Then there is the matter of road maintenance. On some of our much-used highways the surface material is being lifted and blown away in greater volume than horse and cart can supply it. It was formerly claimed that automobiles did not injure the road as much as narrow-tired, horse-drawn vehicles, but it has been demonstrated of late years that the suction or lifting power of the fast-revolving rubber tire must be reckoned with. Some roads are being de-surfaced at an alarming rate, and the worst is not yet. Motor traffic is growing rapidly and we may as well set ourselves to work in an endeavor to meet the ever increasing demand on country highways. In the third place, dust has become a danger of no small proportions to the safety of those using the roads, whether they travel by horse or motor power. In some instances of late we have seen the dust so thick that it was almost impossible to discern rigs or cars more than two or three rods ahead. This occurs only on much-used roads, but taking it the country over there is considerable danger which should be lessened in some way or other. There are only certain much-used thoroughfares where the expense of oiling would be justifiable, according to our present-day standards, but the time is surely and speedily coming when the dust nuisance will have to be met and overcome. We are living in a dust age.

Do not urge the horses too much during intense heat, and water them frequently. Sun-stroke and exhaustion from heat is likely to occur if the driver is not cautious.





## THE HORSE.

### Protect Horses From Sun-Stroke.

Already there have been several instances where horses have suffered from sun-stroke or heat exhaustion. The sudden rise in temperature before man or beast became seasoned to the heat, and the urgent need of getting seed into the ground, have been the cause of many unpleasant circumstances even at this early date. Many do not know the symptoms of this trouble, and still more neglect to exercise caution or apply preventive measures. The following discussion of sun-stroke, heat stroke or heat exhaustion is taken from a special report of the U. S. Department of Agriculture on horse diseases. The symptoms, treatment and prevention of sun-stroke ought to be known by every horseman.

**Symptoms.**—Sun-stroke is manifested suddenly. The animal stops, drops his head, begins to stagger, and soon falls to the ground unconscious. The breathing is marked with great stertor, the pulse is very slow and irregular, cold sweats break out in patches on the surface of the body, and the animal often dies without recovering consciousness. The temperature becomes very high, reaching 105 degrees to 109 degrees F.

In heat exhaustion the animal usually requires urging for some time previous to the appearance of any other symptoms, generally perspiration is checked, and then he becomes weak in his gait, the breathing hurried or panting, eyes watery or bloodshot, nostrils dilated and highly reddened, assuming a dark, purple color; the pulse is rapid and weak, the heart bounding, followed by unconsciousness and death. If recovery takes place, convalescence extends over a long period of time, during which inco-ordination of movement may persist.

**Treatment.**—Under no circumstances is bloodletting permissible in sun-stroke. Ice or very cold water should be applied to the head and along the spine, and half an ounce of carbonate of ammonia or 6 ounces of whisky should be given in 1 pint of water. Cold water should be showered upon the body of the horse from the hose or otherwise. This should be continued until the temperature is down to 103 degrees F. Brisk friction of the limbs and the application of spirits of camphor often yield good results. The administration of the stimulants should be repeated in one hour if the pulse has not become stronger and slower. In either case, when reaction has occurred, preparations of iron and general tonics may be given during convalescence: Sulphate of iron, 1 dram; gentian, 3 drams; red cinchona bark, 2 drams; mix and give in the feed morning and evening.

**Prevention.**—In very hot weather horses should have wet sponges or light sunshades on the head when at work, or the head may be sponged with cold water as many times a day as possible. Proper attention should be given to feeding and watering, never in excess. During the warm months all stables should be cool and well ventilated, and if an animal is debilitated from exhaustive work or disease he should receive such treatment as will tend to build up the system. Horses should be permitted to drink as much water as they want while they are at work during hot weather.

An animal which has been affected with sun-stroke is very liable to have subsequent attacks when exposed to the necessary exciting causes.

### An Unique Sale of Draft Horses in England.

EDITOR "THE FARMER'S ADVOCATE":

From more than one standpoint the sale, (conducted by Mr. A. W. Hewett, the Hon. Secretary of the British Society,) of pure Percheron horses which took place at Knepp Castle in Sussex on Saturday last, was unique in this country. The horses were brought to England by arrangement with the French Government, which has forbidden further export. They were purchased on behalf of those members of the British Percheron Horse Society who had become guarantors and who alone could bid. The thirty-one horses, all three and four-year-olds, realized nearly £22,000—£21,561 15s. to be exact.—As the result of the keenness of the guarantors to become their owners the purchasers will secure a substantial rebate on the sums expended. The plan adopted was that each subscriber to the guarantee fund should be responsible in proportion to his purchase money for any deficit between the amount realized at the sale and the cost price in France, plus incidental expenses. If a larger sum than this cost were obtained it was arranged to distribute it pro-rata amongst the purchasers who, therefore, will receive back over 50 per cent. of their purchase money.

Mr. Henry Overman and Captain Wickham-Boynnton,

who went to the Perche district of France for the purpose, were responsible for the selection of the horses, and the sale result is sufficient testimony to the skill with which their task was performed. The 28 mares averaged £674 8s. 0d., and the 3 stallions £892 10s. 0d., or a grand average of £695 10s. 0d.

The highest-priced mare, "Pigeonette," was bought by Lord Stalbridge. She is a handsome four-year-old grey, thoroughly typical of the breed; her almost perfect proportions gave an unmerited impression of smallness, but that is what most knowledgeable horsemen desire. Colonel Thynne purchased "Quille," another grand mare, for 1,350 guineas, whilst Sir Merrik Burrell gave 1,150 guineas for "Poteuce," and Major Ackers 1,050 guineas for "Persique."

The top-priced stallion went for 1,600 guineas to Colonel Thynne, bought on behalf of himself, Sir John Ramsden and Mr. Trevor Williams.

Before the sale began Mr. Henry Overman made a clear statement which should dismiss once and for all the idea that the British Percheron Society has any desire to compete with our home breeds. There is room in this country for an active, clean-legged draft horse without interfering with breeds already in existence here.

## LIVE STOCK.

The herd of to-morrow is never better than the bull of to-day.

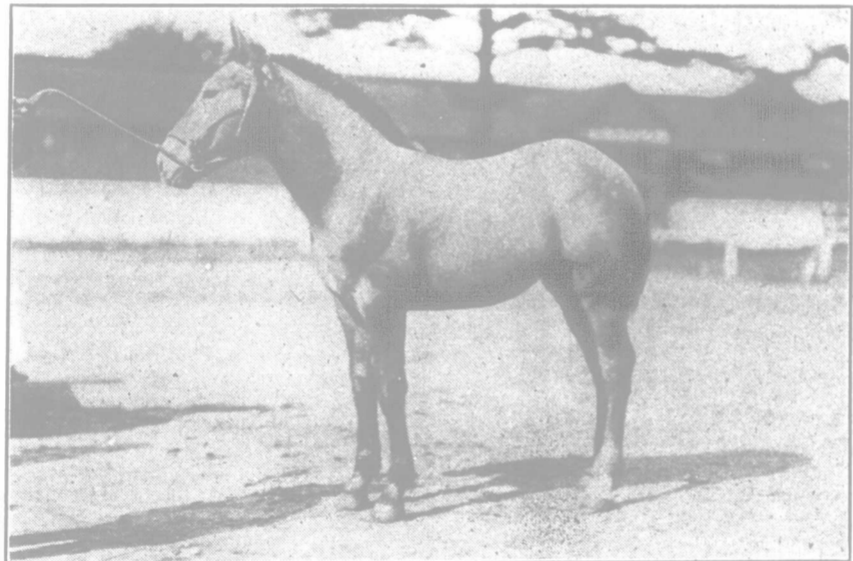
Give the pigs a chance and they will make hogs of themselves.

In the interest of the live-stock industry the scrub bull pedigreed as well as unpedigreed must go.

If building a pig pen this summer be sure and put in enough windows to supply abundance of light and sunshine in the pens.

Young pigs gain strength from the sunshine. Let them out as soon as possible but provide protection from the direct rays of the sun so as to avoid their backs burning.

Some sows are such good milkers that the young pigs become over fat and may die from thumps. Ex-



Start Early to Train for the Fall Fair.

cise will offset the trouble. Give them the run of a yard or paddock.

The hot sultry weather is hard on the stock on pasture where there is no shade. The young stuff at least should be kept in during a portion of the day when the heat is intense.

If perfection is to be attained with any breed or class of stock there must needs be severe culling done every year. Culling is essential in the pure-bred herd as well as in the grade herd.

Yes, it is in the interest of the live-stock industry that the ban be put on the use of inferior grade or pure-bred sires. A great industry cannot be built up on an inferior foundation.

Castrate the lambs which are to be fattened. They make better gains on the same feed than ram lambs and besides if the market is dull in the fall they can be carried over until on in the winter.

If the sheep are not shorn by this date they should be. Not only are the sheep made uncomfortable by the heavy fleece but there is always more or less loss of wool when unshorn sheep are on pasture.

Why is it that some farmers persist in using a grade bull oftentimes of inferior quality? The calves from a good pure-bred usually do better, and are more in demand on the market than the progeny of grade sires.

### Some Common Disease of Sheep.

#### Choks.

Choking or obstruction of the gullet, while not so common in sheep as in cattle, is occasionally met with from the lodgment of an imperfectly masticated substance, as a piece of root, or even too greedily swallowed food of other natures.

**Symptoms.**—Labored breathing, sudden cessation of eating and ruminating, repeated ineffectual attempts to complete the imperfect swallow, salivation and usually bloating.

**Treatment.**—If the obstruction can be located in the neck, efforts by external manipulation should be made to move it upwards or downwards. If this can be done it is probable that the patient will either complete the swallow or cough the obstacle up into the mouth and expel it. When this cannot be done the mouth must be held open by the use of a small clevice or other device, and a horse catheter or a few feet of small rubber hose (which can be strengthened by the use of a whip or a piece of green wood as a stilet). If bloating be excessive, it should be relieved by the use of a trocar and canula. (The particulars of which are discussed below) as sheep readily succumb to intense bloating, and the heaviness of the fleece is often so great that the condition might be overlooked unless careful watch is kept. In some cases the obstruction proves so stubborn that it cannot be moved, in which case it is usually advisable to slaughter the animal.

#### Bloating, Tympanitis or Hoven.

This is quite a common ailment of sheep. Any kind of green forage may cause the trouble, especially if frosted or even wet with rain or dew. Wet or frosted alfalfa or rape is very liable to cause it. It is also caused by sheep eating too large quantities of grain when turned into a stubble field after the crop has been harvested. In other instances, well-marked cases occur without apparent cause.

**Symptoms.**—One or more of the sheep stand with an anxious and distressed appearance, respiration is labored, and the abdomen more or less disturbed, the difficulty in breathing will be in proportion to the degree of bloating, which, of course, is more apparent on the left side between the point of the hip and the last rib. If tympanitis be extreme and relief be not promptly given, the patient commences to stagger, endeavors to retain her feet, but soon drops to the ground and succumbs in a convulsion, the immediate cause of death usually being suffocation, but may be rupture of the stomach or diaphragm, or absorption of gas into the circulation.

**Treatment.**—When the tympanitis is not severe the administration of one to two tablespoonfuls of oil of turpentine in  $\frac{1}{2}$  pint of raw linseed oil will usually be successful in dissipating the gases and preventing the formation of more. If necessary the dose may be repeated in 2 hours, when it would be well to mix the turpentine with whole milk, as there would be danger of superpurgation if repeated doses of oil were given.

Where bloating is so excessive that there is danger of death from causes already stated, it is unsafe to await the action of medicines, the tympany must be promptly relieved by mechanical means. The rumen must be punctured at the most prominent part between the point of the left hip and the last rib. For this purpose a special instrument called a trocar and canula is the proper instrument to use. Where such an instrument is not available the large blade of an ordinary pocket knife may be used. The wool should be clipped off the seat of puncture, the skin and instrument, also the hands of the operator, disinfected with a 5-per-cent. solution of one of the coal-tar antiseptics or carbolic acid. Where a knife is used the lips of the wound should be held apart, or a tube or quill inserted to allow escape of gas. No after treatment is required, except to keep the wound dressed for a few days with an antiseptic as one of those already mentioned.

#### Impaction of the Rumen.

This is distension of the rumen, practically without the presence of gas. It is caused by overfeeding on food that does not readily ferment. The animal continues to eat but the food is not remasticated; it remains in the rumen, the bulk increases and distends the organ, at the same time to a greater or lesser degree causing paralysis of the muscular coats of the organ.

**Symptoms.**—Dullness, loss of appetite, cessation of rumination, a fullness of the abdomen, especially noticeable on the left side. When pressure by the fingers is applied in front of the point of the hip it gives a doughy feel and the impacts of the fingers do not quickly disappear, while pressure in cases of tympanitis gives a springy feel and the parts immediately regain their normal condition when pressure is relieved. Tapping the part with the fingers causes a dull sound instead of a tympanic or drum-like sound as in tympanitis. The patient, in severe cases, apparently suffers considerably, while in others the suffering is evidently not acute.

**Treatment.**—Give a purgative of 6 to 8 oz. Epsom salts in about a quart of warm water, and follow up with 10 to 15 grains of nux vomica 3 times daily. In some cases the patient has periods of comparative ease, during which she will eat if food be available. She should not be allowed to eat anything except a little sloppy food until free action of the bowels is established. If the bowels be not acting freely in 12 to 16 hours after the administration of the medicine, she should be given 5 to 6 oz. of raw linseed oil, and the dose of Epsom salts, and that of oil administered alternately every 12 to 14 hours until free action is established. In the meantime keep up the administration of nux vomica and allow all the water the patient will drink.

WHIP.

# Aberdeen-Angus Families.

What and why is a "family?" How can I tell what family my bull belongs to? Why isn't my bull a "Blackbird" if he has a Blackbird "top" on his pedigree, his dam's sire is a Blackbird and he is in fact fifteen-sixteenths Blackbird? Why must he take his family name from only that many-times great-great-great dam that makes him a Fanny, a Nosegay, or something else not so highly rated in the sale ring? What is a "Scotch" pedigree? An "extended" pedigree? Why not do away with "family names" altogether? Why is one "branch" of a family more highly rated than another? Why do the Old Country breeders prefer the Trojan-Ericas to all other families, while the Americans prefer the Blackbirds? Why does an ordinary-looking Trojan-Erica or Blackbird outsell an outstanding Queen Mother, Westertown Rose or Heatherbloom, for instance?

These and dozens of other similar questions come up before the breeder of Aberdeen-Angus when he starts in the business or considers going in for something a little more fancy than just mere "pedigreed Daddies." Perhaps if I take these questions up one at a time and dispose of them in this limited article, I will have at least cleared away the cobwebs for the beginner or the man contemplating starting. With the pedigrees running back as far as they do now, it is hardly necessary for the beginner to pay so much attention to the fact that Blackbirds are most popular in the United States and Ericas in the Old Country as it is to know who has been handling the cattle you are buying. Cattle that have been in good hands for several generations are bound to be better than cattle that have had no care, regardless of pedigrees.

Again, remember that no herd gets anywhere without a better bull than the average of its cows. Therefore, pay more attention to the bulls that go into your herd to bring it up the ladder with every generation, and watch the pedigrees for strong bulls on every "bracket," especially the first three.

Now for a definition of "Family," something that some people claim does not exist. Here is what Pulling, the British authority, in his book, says of families:

"It will be noticed by anyone attending sales of this breed that certain animals which come into the ring cause much more spirited bidding than other equally good-looking animals, and it will be found that such animals usually belong to certain families. For want of a better word the families to which such bid-inspiring animals belong are called the 'fashionable families' there being of course, degrees of fashion. It may be of interest to consider why certain families have become thus fashionable. The answer to this would in most cases appear to be that the females, from which families derive their names, were meritorious in themselves and were bred or acquired by leading breeders in early days, and as the result of judicious mating produced meritorious offspring, often successful in the showing, which were either retained for breeding in such leading herds or passed into other carefully managed herds. It is easy to understand that their descendants thus bred would be sought after and purchased at high prices, and that the families to which they belonged would come to be enrolled amongst the leading, or fashionable, families."

In other words, families started from the best herds in which the cattle were handled in the early days, and as the descendants of those cattle were handed down from leading men in the Old Country to the leaders in this country, the families gained in value compared to the average run of cattle until we have the concentration more and more on these families and on certain of their branches. It is the same with all breeds of pure-bred cattle, horses, sheep, hogs or poultry yes, even of wheat, corn and oats. Premiums are put on winners, and when the winners are selected at the shows for their superiority in serving Agriculture, why shouldn't it be the proper thing?

Now to identify a family: this is easy with the "Scotch" pedigree, but in the "extended pedigree" it is necessary to have a set of herd books and trace back the "left flank" of the pedigree to the source to get the "family name." By left flank I mean taking the pedigree on the dam's side and following it back to the 2nd dam third dam, fourth dam, etc., to the first animal from which

BY F. H. HIGGINS, ASSISTANT SECRETARY AMERICAN ABERDEEN-ANGUS BREEDERS' ASSOCIATION.



A Chuck from An International Grand Champion Carcass.

the family name is taken. The Scottish pedigree goes back in this way to the first dam recorded. In the case of Prides of Aberdeen it is not uncommon to see eighteen dams listed. Compare the Scotch and extended pedigrees of the famous stock bull at Harviestoun Castle, Scotland—Jason of Ballindalloch, and you see immediately why breeders of this side insist on the extended pedigree, which shows "both sides of the house," though not running back so far on the lower line of the brackets. Instead, the family name is usually put on the pedigree for sale catalogues, so that the breeder may know this family name without having to resort to a set of herd books to look it up.

But even the family name is now coming in for scoring by the small breeders who have "plain bred cattle" that do not command the high prices at sales, and undoubtedly we may soon see what one or two progressive British breeders are doing: putting a family name on each of the eight great-great-grandams, and sires in the third bracket. Refer to the pedigree of the International grand champion bull, Leroy 3rd of Meadowbrook, to illustrate. While he was a Miss Dunn, according to the old standards, this extended pedigree would show he was just as much a Barbara, a Zara, a Drumin Queen, a Fyvie Flower, a Drumin Lucy, an Auchlin Susie and a Heather Bloom. The only reason one can see for calling this bull a Miss Dunn instead of a Zara or Barbara is that it has always been done the other way since the beginning.

"Why not do away with family names?" someone asks. Well, why not go a step farther and do away with pedigrees? If there are "plain-bred ones" that are better than "well-bred ones" individually, it is equally true that there are grades better than pure-breds, isn't it? Well, where does our argument lead to but to Bolshevism then? That's what they have done in Russia with the human race; knocked down all family ties and told the men to help themselves.

But well-bred cattle don't mean confining your choice to one or two families. Too many men capitalize the success of one or two constructive breeders, and as a result, the tendency is always to save every animal of the family commanding the fancy prices and the crooks in the business naturally cheat a little. That is one reason it is of far more importance to buy the product of men than the product of families.

To illustrate this point, the McHenry herd in Iowa dispersed some years ago, was built up from imported seed from the famous Ballindalloch herd in Scotland. That Scotch herd from which the best was imported that could be got was maintained in the Grant family's hands for more than a century. Now both the Grants of Scotland and McHenry of Iowa were careful, constructive breeders with means to satisfy their ideas in breeding. They took the best seed and bred for what they had in mind, and they didn't have the wolf knocking at their doors to compel them to sacrifice ideals to needs. Go to any sale now where McHenry-bred stuff is listed and note the premium put on the name Mc-

Henry. That is largely McHenry and Ballindalloch reputations, but partly it is because breeders have found that those cattle produce wonderful results when mated to well-bred bulls.

You have the same true of some pure-bred herds in Canada, according to men who know the breeders and the cattle on the circuit. Few people know that the first International carcass grand championship won by an Aberdeen-Angus was bred in Canada. This was Elm Park Lad 1194. Now this is easily the most practical beef class at the world's greatest live-stock show, the steers being first judged on the hoof and then on the block after slaughter. Aberdeen-Angus steers have won this honor over all breeds, grades and crosses for the last sixteen years without a break in their victory string, twelve of the "Doddies" being pure-breds and four grades.

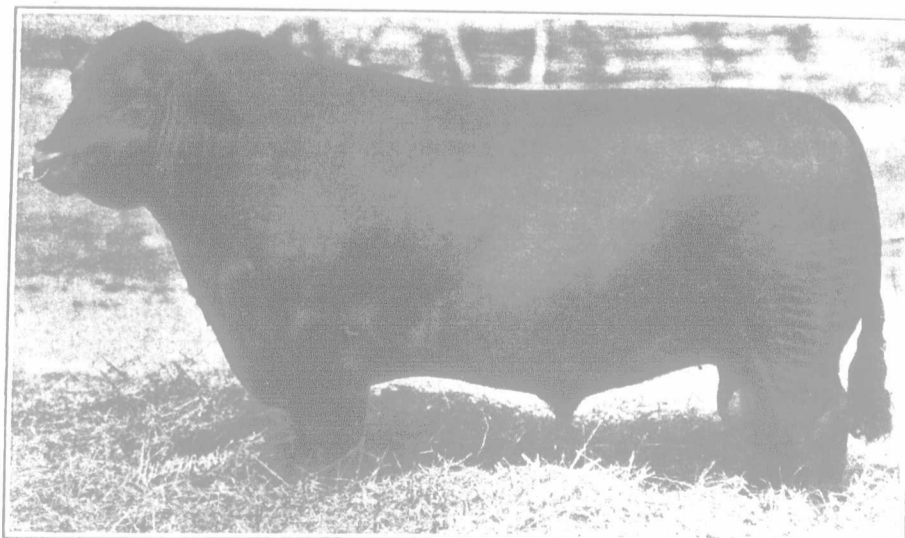
You don't have to go very far with the pedigrees of those twelve pure-bred steers that won this highest beef honor to see that the family name, taken from only the left flank, has little value. The bulls stand out as far more value. The 1901 carcass would be called a Kyma, or perhaps a Tilleyhetly Mary, something not even mentioned among the families in the Old Country histories. The 1903 carcass was a Daisy, practically unknown as a family. The 1905 winner of this practical class was a Miss Sturges, and you can hunt till you get the blind staggers to find such a family in the McDonald & Sinclair history. Yet on the top of the pedigree was Gay Laddie, a great Blackbird bull, and Jim Jams and Blackbird Hero; both great bulls found above in the third and fourth brackets. The 1906 carcass was the famous Exilio, which dressed 70.7 per cent and was undoubtedly the greatest carcass of all the American shows, the marbling being simply perfection. This bull was a Vine, or Daisy, and shows up the "left flank family name" to better advantage, as the Vines descend from Queen Mother and come from a cow that was a full sister to Pride of Aberdeen. Yet above on the extended pedigree we find Black Abbott, Jim Jams, Polar Star, Edgewood Hero and Golden Abbott, all bulls of renown.

Ben H. 1908 grand champion carcass, was a Janet, a name as hard to find as Kyma or another one or two already mentioned as conspicuous for their absence. For the best carcass at the 1909 International, pedigree fanciers will get a little more joy, for La Preto 1515 was a Drumin Lucy, the Scottish pedigree showing thirteen dams. The Lucys are considered the best of the Drumin families by McDonald. Yet the sire of this carcass grand champion was an International grand champion bull, Prince Ito 2d, a famous Pride of Aberdeen. The sire of the steer's dam was Eliminator of Ballindalloch.

Crown, the 1910 International carcass grand champion was also very "plainly bred." Model, 1911 winner of this royal purple ribbon, was an Annie. Can you get them plainer than that? Yet there was a lot of Woodlawn breeding in the pedigree on both sides, and where has there ever been a record for careful constructive breeding on this side of the water to surpass Stanley Pierce's Woodlawn herd with his grand champion steer Advance and his Black Woodlawn, the greatest bull of the breed on this side of the water when the "get" of all the bulls is listed to find the "Greatest." Pierce's bred them well regardless of family names.

Coming down to 1917, we find the best carcass was an Isabella. But what a top to the pedigree! Sired by Pandean, the Iowa State College herd bull, and Pandean, a son of the famous Earl Eric of Ballindalloch; and a McHenry Pride for a grandam on his sire's side! Then there is a Woodlawn Blackbird for the other grandsire with a Jilt bull for the sire of the second dam. The 1918 carcass was a grade, but what a sire! Black Engraver, by Edinburg, and he a grandson of Earl Eric of Ballindalloch! And the grandam was an International grand champion, Blackbird 26th, by Black Monarch of Emerson, a great "getter."

In these International grand champion carcasses, I have shown you enough to convince you that the man who is breeding steers need pay little attention to family. Get good bulls from sound, honest breeders. The longer they have been in the business of breeding their



Idolmere.

A "Lady Ida," and considered by many as one of the best three bulls on this side of the water.



The "Get" of Bar Marshall.

A "get of his" mare that was undefeated last year. Bar Marshall is a "Barbara."

own cattl  
the better

For  
auction  
an impo  
cap Blac  
can be la  
one Inter  
seventeen  
Ericas m  
United St  
cap strain  
the Black  
naturally  
enormous  
has natur  
one was sa

The P  
easily sta  
The last  
and the p  
all Prides  
champion  
2nd, Inte  
Kloman,  
both Pri  
Mother  
1912 and  
pions we  
Quiet La  
honors in  
by many  
side of th  
their head

The be  
there are  
by the beg  
birds and  
these latte  
much abou  
leading Ar  
the \$1,000  
and admit  
spite of th  
Blackcaps  
at \$1,500 t

"I belie  
favor," sa  
hope the  
ignore. ("  
Battles' gr  
and feeder  
ten years a  
my best ca  
body has  
they? F  
if they had

The fa  
this in the  
the best  
mated and  
men they s  
for that aft  
best suited  
has kept it  
the butche  
sweepstake  
continent  
years, vict  
feed, critic  
at a mere  
breeder do  
the Aberd  
results.

In the  
sented in  
Ballindallo  
Prides of  
Idas, Miss  
Wester Fo  
Roses of  
and a few  
fashionable  
behind on  
Iowa sales  
you find ou  
four famili  
and Queen  
Drumin Lu  
outstanding  
set the pac  
offering is  
balanced a  
few Prides  
for good m

The big  
farmer bre  
the annual  
Aberdeen-A  
family nam  
some it is  
beef, and t  
that is wh  
allowing th  
pedigree ra  
steers for  
Canada an  
for show to  
that there  
breed stick  
ring in the  
men.

own cattle, as long as they have used outstanding bulls, the better.

For the man who wants to hold annual sales at auction, pedigrees as well as individuality must play an important part. For the Canadian trade, the Blackcap Blackbird and Enchantress Trojan-Erica strains can be largely ignored. The Blackcaps can show but one International grand champion cow and no bulls in seventeen shows, though the Enchantress Trojan-Ericas muster three: two bulls and one cow. The United States breeders have a monopoly on the Blackcap strain, the cow Blackcap being imported, so that all the Blackcaps fell on this side of the water. The owners naturally pushed this branch, so that they have become enormously over-capitalized and their individual merit has naturally suffered as a consequence because every one has saved regardless of merit.

The Prides of Aberdeen and the Queen Mothers easily stand first in merit on this side of the water. The last three International female grand champions and the produce of cow at the last International were all Prides of Aberdeen. The 1909 International grand champion is also a Prince of Aberdeen. Prince Ito 2nd, International grand champion—1905, and Kloman, the 1911 winner of similar honors, were both Prides, the latter being a K-Pride. Queen Mother Johnson 8th and Glenfoil Queen 2d, the 1912 and 1907 female International grand champions were both Queen Mothers', and Oakville Quiet Ltd., a great herd bull that won the male honors in 1910, is another. This bull is considered by many good judges the greatest living sire on this side of the water, many leading herds having his sons at their head.

The beauty of the Queen Mother and Prides is that there are enough to go round, so that they may be bought by the beginner at low prices compared with the Blackbirds and the Ericas. A scramble for a limited supply of these latter fancy strains is what makes them sell so much above the average. Yet, in top annual sales of leading Angus breeders, where the averages run above the \$1,000 mark, they always put in a few Queen Mothers and admit freely that these are their best cattle in spite of their selling around \$400 to \$600, while the Blackcaps and Eisa and Enchantress Ericas are going at \$1,500 to \$4,000.

"I believe the Queen Mothers are coming back in favor," said one of the breeders the other day. "I hope the breeders will see their merit is too high to ignore. "Where are there any cattle equal to Otto Battles' great Queen Mothers?" said another breeder and feeder who has been in the game since leaving college ten years ago, "My Queen Mothers have always been my best cattle, and I will never quit them." Everybody has a good word for this tribe. And why shouldn't they? From them came the Prides of Aberdeen, even if they hadn't enough merit to stand without the Prides.

The family question, therefore, settles down to this in the end: Cattle that have been carried along in the best hands for generation after generation are mated and fed more carefully. These men being showmen they study closely the type wanted at the markets, for that after all is what shows are for; to develop breeds best suited to the killer. And who can find a breed that has kept its cattle anchored so closely to the needs of the butcher and packer as the Aberdeen-Angus? With sweepstakes victories at 37 points on the North American continent going to Aberdeen-Angus in the past two years, victories won under all conditions of climate and feed, critics of Aberdeen-Angus family fads are picking at a mere side-issue that the average Aberdeen-Angus breeder doesn't even know exists. Results count, and the Aberdeen-Angus steer has been delivering the results.

In the Old Country, here are the families represented in the herds of Harviestoun, Maisemore Park, Ballindaloch, Doonholm, Dalmenu and Bleaton; Ericas, Prides of Aberdeen, Queen Mothers, Jemimas, Lady Idas, Miss Burgesses, Jilts, Blackbirds, Matildas of Wester Fowils, Lucys of Portlethen, Roses of Drumlin, Roses of the Adne, Princesses of Kinochtry, Ruths and a few others. The Ericas are by far the most fashionable of all in the Old Country, and are little behind on this side of the water, the tops at the leading Iowa sales being frequently Trojan-Ericas. But here you find our leading sales in the U. S. offering but about four families—Blackbirds, Ericas, Prides of Aberdeen and Queen Mothers, with an occasional Heather Bloom, Drumlin Lucy, Barbara, Jilt or something else that is outstanding individually, but with the breeders who set the pace on this side of the water, the bulk of the offering is Blackbird and Trojan-Ericas, as evenly balanced as they can get them as to numbers, with a few Prides and a couple of Queen Mothers thrown in for good measure.

The big fellows, however, don't influence the little farmer breeders as much as would be expected, and the annual Spring Bull Sales and Shows of the American-Aberdeen-Angus Breeders' Association always brings family names of about every kind ever heard of, and some it is pretty hard to name. They all make prime beef, and utilize the grass and grain to advantage, and that is what most of the cattle feeders are thinking of, allowing the big fellows at the top to do all the fancy pedigree raising they wish while they buy bulls to sire steers for market. The big fellows, however, in both Canada and the United States, have always fed steers for show to demonstrate to a world that must be shown that there is something to a pedigree. In fact, no other breed sticks so religiously close to feed lot and showing in their pedigree fancies as do the Aberdeen-Angus men.

Henry and Ballindaloch because breeders have found wonderful results when mated

f some pure-bred herds in who know the breeders Few people know that ass grand champion was bred in Canada. This low this is easily the most world's greatest live-stock

ged on the hoof and then Aberdeen-Angus steers

breeds, grades and crosses but a break in their victory 's' being pure-breds and

ery far with the pedigrees ers that won this highest ily name, taken from only

The bulls stand out as carcass would be called a ily Mary, something not

ilies in the Old Country was a Daisy, practically

5 winner of this practical you can hunt till you get

ch a family in the Mc- Blackbird bull, and Jim

n great bulls found above the 1906 carcass

ressed 70.7 per cent and carcass of all the American

ly perfection. This bull now up the "left flank

age, as the Vines descend from a cow that was

een. Yet above on the back Abbott, Jim Jams, and Golden Abbott, all

on carcass, was a Janet, a or another one or two

uous for their absence. International pedigree

y, for La Preto 1515 was pedigree showing thirteen

d the best of the Drumlin the sire of this carcass

ational grand champion ride of Aberdeen. The

ator of Ballindaloch. national carcass grand

red." Model, 1911 and an Annie. Can

et there was a lot pedigree on both sides,

record for careful con- of the water to surpass

with his grand champion Woodlawn, the greatest

o the water when the o find the "Greatest."

is of family names. and the best carcass was

the pedigree! Sired by herd bull, and Pandean,

of Ballindaloch; and a on his sire's side! Then

for the other grand sire the second dam. The

what a sire! Black e a grandson of Earl

grandam was an Inter- kbird 26th, by Black

ter. champion carcasses, I

nce you that the man the attention to family-

onest breeders. The ness of breeding their

is a "Barbara."

### Experiment With Standard Hog Feed.

To meet the need for increased production of live stock in general and hogs in particular early last year, arrangements were made by the Ontario Government for a supply of concentrate feed suitable for Swine. Indications at that time did not point to an early cessation of the war and in view of the abnormal demand upon ordinary cereals for human consumption it was thought advisable to make provision for a supply of suitable stock feeds in order to release our ordinary farm grains for other purposes. During the summer and early fall of 1918 a considerable quantity of the swine feed was available and assisted very materially in supplying feed for the finishing of the large number of hogs that the Ontario farmers then had on their farms. This product was known as Standard Hog Feed. The following, taken from a pamphlet issued by the Ontario Department of Agriculture, gives a fairly good idea of the composition of this feed.

The Standard Hog Feed must conform to the following:

"The swine feed shall consist of at least 6 per cent. of tankage, 10 per cent. oil meal, 20 per cent. of wheat or rye shorts, half of which may be made up of finely ground wheat bran, 33 per cent. of corn or hominy; the balance of the feed shall be made up of one or more of the following: Corn feed, barley feed, wheat bran, or any other feed that may be from time to time approved by the Feed Committee. Provided also that the completed feed shall contain not less than 16 per cent. of crude protein, 4.5 per cent. of fat, and not more than 6 per cent. of crude fibre."

The Animal Husbandry Department of the Ontario Agricultural College has recently completed an experiment commenced early this year to ascertain, if possible, the actual feeding value of Standard Hog Feed.

Fifteen hogs were divided into three groups—five in each lot. Lot 1 was fed Standard Hog Feed. Lot 2 was fed a ration of a mixture of three parts barley to one part oats. Lot 3 was fed a ration consisting of equal parts of the ration fed to Lot 1 and Lot 2. Each lot was given a preliminary feeding period of fifteen days previous to the commencement of the test. The test period was started Jan. 27 and finished April 24 (87 days). Each lot was weighed once a month and the amounts of the various rations fed were carefully checked.

Lot	Initial wgt. Jan. 27	Final wgt. Apr. 24	Total gain	Daily gain	Feed consumed	Lbs. grain for 1 lb. pork
1	Lbs. 593	Lbs. 1,055	Lbs. 462	Lbs. .106	Lbs. 1,236	2.69
2	607	993	386	.886	1,260	3.26
3	585	1,061	476	1.09	1,284	2.67

The Standard Hog Feed cost \$57.00 per ton and at this rate it cost 7.609 cents per pound for 1 pound of gain in Lot 1.

Lot 2 made a gain of 386 pounds on 1260 pounds of the Barley and Oat mixture. This would figure \$1.11.8 cents per bushel for barley and 79.22 cents per bushel or 2.33 cents per pound. In other words when oats and barley are selling for more than the figures quoted above Standard Hog Feed will give more economical gains; or if selling for less than the figures mentioned oats and barley would be a more economical mixture than the Standard Hog Feed. Putting it still another way with oats at 75 cents per bushel and barley at \$1 per bushel the gain in Lot 2 would be made at the rate of 6.98 cents per lb. as compared with 7.609 cents in case of Lot 1 when Standard Hog Feed was used.

Valuing Standard Hog Feed at \$57 per ton, Barley at \$1.11.8 per bushel and oats at 79.22 cents per bushel then Lot 3 made a pound of gain at a cost of 6.96 cents. When Barley and Oats were used as half the meal ration combined with Standard Hog Feed in Lot 3, one hundred pounds of pork was produced 65 cents cheaper than in Lot 1 on Standard Hog Feed alone. Valuing barley at \$1 per bus. and oats at 75 cents per bus. then 100 pounds of pork was produced in Lot 3, 93 cents cheaper than in Lot 1.

This experiment would go to show that Standard Hog Feed has given very good results fed either alone or in conjunction with ordinary farm grown feeds. Cheaper gains were obtained, however, when fed with other grain such as barley and oats. Compared with a ration of barley and oats at prevailing prices during the feeding period Standard Hog Feed did not give as economical gains.

The figure given in connection with this experiment do not represent the actual cost of producing pork. In addition to the meal ration a considerable quantity of by-products such as skim-milk and whey were consumed for which no credit has been given. Further, no charge has been made for other various items that should be considered such as labor, interest and use of buildings.

Animal Husbandry Department,  
O. A. C. College, Guelph.

Trees are an asset to the farm on which live stock is kept. If a few rods around the trees will not grow grain a comfortable place is afforded the cattle during the hot summer days which is ample recompense for the loss of a few bushels of grain. Luxuriant pasture, a running stream and a few trees make the herds paradise.

### The Scrub Bull Court-Martialed.

Plans are under way for the carrying on of an educational campaign to show wherein the scrub sire, either pure-bred or grade, is detrimental to the live-stock industry of the country. It is believed that if stock men would stop and think they would realize how, that, by using an inferior sire they are losing hundreds of dollars each year in place of saving the twenty-five or fifty in the purchase price of the bull. On June 4, the Executive of the Ontario Cattle Breeders' Association and representatives of the Department of Agriculture met in conference in Toronto, to discuss ways and means of placing before the public the exact facts regarding the scrub bull. Hon. G. S. Henry, Minister of Agriculture, was present and gave a few timely remarks, pointing out that there was very little opposition to the elimination of the grade stallion when the time set by the Stallion Enrolment Board for his removal from service, came around. It has taken several years to work up to the point where it was deemed advisable to prohibit the use of grade stallions, and, while it would take a considerable time to reach the same results in regard to cattle, the Minister was optimistic regarding the matter, knowing full well how the cattle industry of Ontario could be increased if only pure-bred, high-quality sires were used. C. F. Bailey, Agricultural Commissioner, who has had the matter under consideration for some time, intimated that from information received from the different counties upwards of forty per cent. of the bulls used in the Province were grades, and then not all the pure-breds were of the quality to warrant their being at the head of herds. An endeavor should be made to make the public acquainted with the facts. This may be done through the press, bulletins, pamphlets, motion pictures, circular letters and meetings. It was suggested that the purchasing and distributing of the pure-bred bulls be in the hands of the Provincial Live Stock Branch, and that the different breed associations lend their assistance in the replacing of the grade bull by the pure-bred. So far as possible, the demand in each county will be met in that county, so as to save freight in shipping. Instances were cited, at the meeting, where the use of a pure-bred sire had increased the profits threefold over those from the use of a grade sire. Professor Toole, of the O. A. C., is on the Committee and his acquaintance with the live-stock industry of the Province should make him a valuable member. Prof. Toole spoke about the campaign for the banishing of the scrub

which has been carried on in various States across the line. The survey of Oxford and Dundas Counties, two of the best dairy counties in the Province, show the number of pure-breds in service to be little over fifty per cent. All breeders of live stock should bear in mind that the herd will never be any better than the sire which is used. Like tends to produce like, and if a farmer is satisfied with using a \$50 scrub, rather than pay four times that amount for a right good sire, he must be contented with marketing inferior steers which do not command anything like the price of well-bred animals. In the final analysis of the cattle industry, it is the commercial animal which counts, and there is ample proof that the better bred an animal is the more economical gains he will make in the feed-lot and the better the carcass will dress out. In the case of dairy-men, there are instances on record where the average milk production per animal in the herd has been doubled in from five to ten years by the use of the best sire available. Because one has a grade herd is no excuse for the use of a grade sire. The most economical way of improving the quality of the herd is through the sire. The only reason we can see for inferior sires being used on the herds and flocks of Ontario is the failure to see past the dollar in the hand to the returns in the future. We have to look ahead and consider what our herd will be in five, ten or fifteen years' time. If we are not improving that herd, it is going back; there is no standing still in the breeding of live stock. The quality is either improving or depreciating, according to the quality and conformation of the sire in use. Which County in Ontario will be the first to proclaim "There is not a scrub sire, pure-bred or grade, in use in this County!" If we are to work up an export trade we must have steers of export quality, and these are not the product of inferior sires.

The elevated sleeping pen for pigs is all right. It keeps them dry and clean and prevents crippling. The bed may be raised three feet off the floor to facilitate cleaning out the pen. Young pigs, shoats and old pigs all take kindly to walking up a gangway to sleep.

Close to one-half million dollars in six hours was the record set at McCray's sale of Herefords. It was the Eleventh Annual Orchard Lake Farm Sale, and 20 bulls averaged \$7,955, while 100 females averaged \$2,772. Twenty-two daughters of Perfection Fairfax averaged \$3,436. The top bull went for \$24,000, and the second for \$23,000. The top female with calf at foot brought \$10,000.

## THE FARM.

### Clover and Grass Seed Prospects.

EDITOR "THE FARMER'S ADVOCATE":

Of course, it is too early to predict just what the prospects for clover and grass seed production may be this year, but with the knowledge we now have, that the markets are sold bare of these seeds, it is safe to say that anyone who has a prospect for saving seed should do it. The heavy rains of this spring have given the meadows a splendid start. A good crop of hay is practically assured. The saying that "a cold, wet May is good for grain and hay" is being realized with regard to the hay crop, and also the grain crop where farmers were fortunate to get it in on the higher, drier soils. Unfortunately for a great many farmers, their land has been too low and too wet to seed, and thousands of acres had to be plowed before seeding could be done.

So far, it looks as though there might be good prospects for timothy and red clover seed production. Last year the red clover crop wasn't very promising and, between the dry weather and frosts, the yield, in most cases, was rather light and of an inferior quality. On the other hand, last year was an excellent year for alsike seed production for all that didn't winter kill. It never yielded better, in fact. There were some phenomenal yields of even 14 to 16 bushels per acre reported, and of excellent quality. As "one extreme follows another" this may be reversed this year and present conditions would point that way, as the growth is likely to be entirely too rank for alsike seed production. The principal remedy for this is pasturing off the excessive growth or clipping it back. As alsike grows best on clay soils, they may keep too wet for pasturing, or even clipping at the proper time. If the season proves favorable for red clover seed production

the first or second growth red clover for seed. This could be done through the Agricultural Representatives in the different counties, and many farmers have signified they would grow clover seed, but not enough will go in for it to purchase a huller in their respective localities.

At the present time not much seed is produced east of Frontenac County, in Eastern Ontario, and very little on the north shore of Lake Huron. It has been demonstrated that excellent seed may be produced in Dundas, Leeds, Glengarry, Lanark and Renfrew Counties, in Eastern Ontario, and on Manitoulin Island, about Gordon Lake, and a few other points on the North Shore. Very few clover hullers have been introduced in these localities, and with an educational propaganda this month a good deal might be done to increase the production of red clover seed.

Seed Branch, Ottawa.

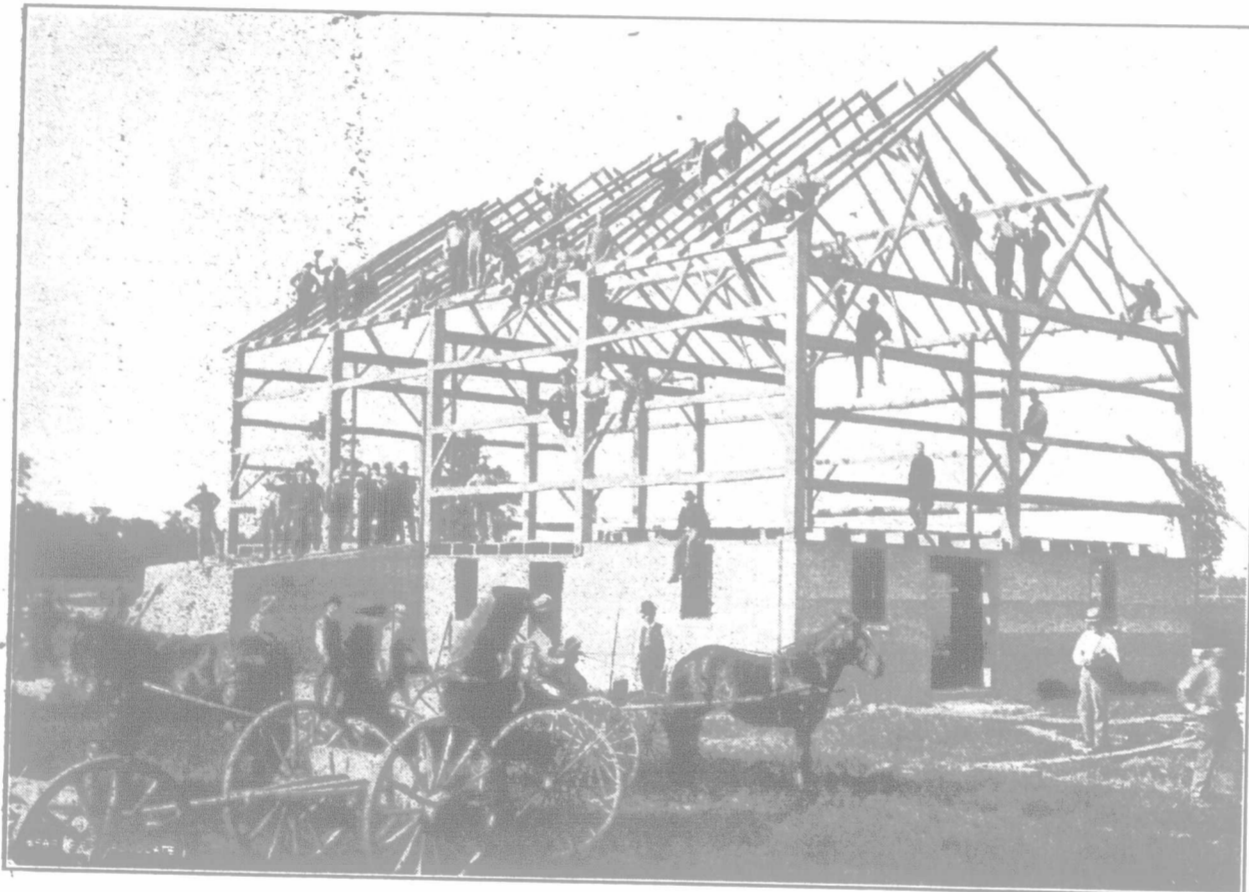
T. G. RAYNOR.

### Late Seeding General Throughout the Province.

The past winter and spring have been rather unusual in the Province of Ontario, and possibly in other provinces as well. The mild winter, followed by an exceedingly wet spring, and then a dry spell, has minimized the chances for a bumper crop of the spring grains. However, the wheat came through the winter remarkably well, and it is doubtful if on the average as good a stand has ever been seen previously in the Province. The meadows are also looking good, and unless a prolonged drouth sets in farmers are assured of a good crop of hay. Last summer was not favorable to new seedings, and on certain types of soil there was not a stand worth leaving this spring. However, comparatively few fields had to be plowed up. While seeding commenced around April 20, it was well on towards the last of May before it was finished on man-

and wheat were looking especially good, but the grain did not show any too healthy a color. There was a considerable amount of it turning yellow, presumably from the excessive wet. Down around Norwich some of the farmers were through seeding, and one or two had part of their corn in. However, there were quite a number who had just started seeding, while others were not more than half through. Lack of underdrainage would have been had the land been drained. South of Norwich, all the men and horse-power available were busy getting the grain in the ground. Between Norwich and Vanessa there is considerable light land, and quite a large acreage of rye was seen. This crop was a good length and was heading out. Around Vanessa, in Norfolk County, some corn was in and the spring crops were looking very good. Throughout the district travelled the stock was mostly out on pasture, and, with the exception of a few herds, appeared to be in excellent condition. Comparatively few sheep were seen, and the hogs out on pasture were not numerous. In the vicinity of Waterford, which is also in Norfolk County, the majority of farmers found it impossible to get on the land before the last week in May, and on the 28th and 29th of the month saw the first grain go in the ground on many farms. A heavy rain on the 24th, which did not occur in many parts of Western Ontario, delayed operations on the land in that district for several days. Throughout a large part of Haldimand County there was practically no spring seeding done until the 28th of May, and even then much of the land was really too wet to be on. The weather setting in extremely hot was baking the soil, rendering it almost impossible to make a suitable seed-bed. Then, too, practically all the fields had a crop of grass five or six inches high, thus adding to the difficulties in preparing the seed-bed. There will be thousands of acres which were intended for spring crops that will either be summer-fallowed for wheat, or sown to such crops as millet and buckwheat. In talking with a number of farmers they expressed the opinion that, while the season was late and the difficulties of getting the grain in enormous, they were going to sow what they could up as late as the end of the first week in June. Land left unsown at that date would be put in buckwheat or millet. Some of the fields intended for grain are being left for corn, instead of plowing sod for corn. The impression gathered while motoring through the district was that the yields of hay and wheat would be above normal, but that the acreage of spring-sown crops would be considerably below normal, and that unless the season was exceptionally favorable the yield and quality of grain would not be on a par with other years.

Communications from farmers in different counties speak of late seeding and of a decrease in the acreage of spring-sown crops. The wet weather seems to be general the Province over. On May 29 there was considerable seeding to be done up through Simcoe County. While some were through in the vicinity of Allison, John Ball of that district writes that there are hundreds of acres of crops to be sown yet. Mr. McPherson, of Dundalk, writing about May 20, intimated that there was practically no seeding done. Were this a strictly grain-growing Province, the situation would be serious indeed. However, where mixed farming is carried on conditions detrimental to one crop are usually favorable to another, and so we find this year that hay and wheat are, if anything, above the average, and if corn can be gotten in by June 15 there will be roughage for wintering the stock, even if the yield of grain is not up to past years. The wheat can be disposed of to purchase concentrates, and silage and clover hay make an ideal roughage ration. Thus, while conditions are not what we would like in many districts, they might be considerably worse. A good shower twice a week is needed to bring on this late-sown grain. With favorable weather and an open fall, the crops may yet turn out better than is now expected.



A Barn Raising in Lambton County, Ont.

from the second crop, it is likely to be all right for alfalfa and sweet clover seed obtained from the second growth. If, however, these seeds come from the first growth it is likely to share the fate of alsike and mammoth red clover, as the growth is likely to be too vigorous to develop much seed. There is likely to be the temptation to pasture off the second growth of clover with stock when meat and milk are so valuable. This would be a great mistake, as clover seed is likely to be very high priced, and the seed will be badly needed for future seeding. It is needed as a fertilizer as well as for feed. Therefore, in the light of present conditions it looks as though it would be good business to arrange for supplementary feeds for stock, as pasture and fodder, and save the second-growth clover for seed.

To those who haven't had much experience in clover seed production, it might be well to emphasize the fact that the best crops of seed are obtained by pasturing the clover and turning off the stock about the 20th of June. If the growth isn't eaten off very well, the mower run over it will be a great advantage. If the clover be cut for hay, get it cut as soon as possible, as taking one year with another the best seed comes from the early second growth. Now is a good time to plan for the clover seed crop, and every farmer should be interested.

#### Encouragement to Ontario Farmers.

It is possible that the Ontario Department of Agriculture may do as the Quebec Department and the New Brunswick Department have done to encourage the production of clover seed this year, and that is to place clover hullers at the disposal of farmers in parts of Eastern and Northern Ontario, who will save some of

farms, and the first week in June saw farmers busy getting in their oats and barley in some counties. Two or three fine days were invariably followed by four or five wet days. Where a farmer had sufficient help and horse-power he was not at such a disadvantage as those who were short-handed. He could cultivate, harrow and sow a field in a day, whereas with but one man on a place the field would no sooner be cultivated than down would come the rain, necessitating the cultivating of the field again before sowing. Not only has it been difficult to get work of any kind cleaned up. On the low, heavy, clay land that is not thoroughly underdrained, seeding has dragged along and the last of May found many of the fields green with grass, rendering it almost impossible to make a satisfactory seed-bed. On well-drained land, or on lighter soil, the work progressed more rapidly, and the early-sown grain is now looking well, but at time of writing a shower would be of inestimable value.

A representative of "The Farmer's Advocate" motored through several of the counties in Western Ontario the last two days of May, and a few remarks relative to the crop situation will give the readers an idea of conditions as seen in the district traversed. Throughout the County of Middlesex the seeding was pretty well advanced, and men were busy on the land preparing for corn and roots. The weather was so extremely hot, however, that there was considerable complaint about not being able to get in a very big day's work with the team. On some of the fields that were a little low, patches were turning yellow, and in other places the grass was getting ahead of the grain. As we proceeded through Oxford County, the meadows

### AUTOMOBILES, FARM MACHINERY AND FARM MOTORS.

#### The Importance of Keeping Machinery Properly Oiled.

EDITOR "THE FARMER'S ADVOCATE":

The importance of keeping machinery properly oiled may be better realized when we try to compute, in dollars and cents, the annual sacrifice in machine efficiency through friction. Carelessness in lubrication may easily reduce the efficiency of a machine fully fifty per cent. At the same time, the machine itself is wearing out faster, on account of the needless friction, than owing to the real work done.

The microscope reveals the fact that the surface of the most highly polished shaft ever made is as rough and untrue as a rough casting appears to the unaided eye. In practice it is not possible to make a metal surface that is absolutely smooth, incompressible, or even a true circle, hence inequalities of pressure at the bearings, grinding and tearing of the metal fibres, causing friction, producing factors of inefficiency and wear and tear. Though these faults of construction cannot be avoided, we can, in a great measure, overcome the effect in machinery by judicious application of a lubricating agent.

The lubricant consists of minute balls or globules. These readily insinuate themselves between the faces in mutual contact, forming a cushion, keeping the metals

apart. I to carry liquids be as efficient between gether p of the me globules n must sticl to the met

The u cohesion the "body in a grea determine good lubri to sustain of the oil p comprises struggle b oil will not requires a load with contact: a easier mov

While value as a to any p requiring c in position ture is ne remain flu and fluidit ordinary to

The oil: The miner sperm oils thick. No light spind for heavy also expen

But the machinery a compound use pure l adulterated acids have compositio ever, pertz objectiona be neutral kind. For oils, that is or clogging and if all cotton wa ternal hea Mineral o But miner point; that some at 21 fatty acids metal whic

It is obv which will of wearing and since g of work c practice is fats in such shall be r of compou machinery, lubricant, brand.

Ontario Ag

Few pec can real hundreds of Wet weathe the westerri handicapped discouraging as those wh Eastern Ont and the vo each year is one has a r dairy indu size up the r A represent paid a visit dairy count conclusion t enviable po

The rem favorable, a weather is v grow very the fact tha to be a ver for miles in see a field, c This condit

cially good, but the grain by a color. There was a brown around Norwich some seeding, and one or two had never, there were quite a seeding, while others were. Lack of underdrainage with seeding than they had been drained. South of horse-power available were round. Between Norwich able light land, and quite. This crop was a good. Around Vanessa, in Nor- in and the spring crops. Throughout the district tly out on pasture, and, herds, appeared to be in ratively few sheep were sture were not numerous, which is also in Norfolk mers found it impossible the last week in May, and month saw the first grain ms. A heavy rain on the n many parts of Western n the land in that district ut a large part of Hal- ically no spring seeding and even then much of the on. The weather setting e soil, rendering it almost e seed-bed. Then, too, a crop of grass five or six e difficulties in preparing thousands of acres which that will either be summer- o such crops as millet and a number of farmers they while the season was late g the grain in enormous, t they could up as late as June. Land left unsown n buckwheat or millet. r grain are being left for for corn. The impression ough the district was that ould be above normal, ing-sown crops would be nd that unless the season e yield and quality of ith other years. mers in different counties ecrease in the acreage of t weather seems to be. On May 29 there was one up through Simcoe ough in the vicinity of tect writes that there are e sown yet. Mr. Mc- about May 20, intimated seeding done. Were this ince, the situation would here mixed farming is al to one crop are usually e find this year that hav e above the average, and if 15 there will be roughage e yield of grain is not t can be disposed of to age and clover hay make us, while conditions are any districts, they might d shower twice a week is n grain. With favorable crops may yet turn out

apart. Its use is not only to reduce friction, but also to carry away whatever excess of heat generated. All liquids have not sufficient sustaining powers to be used as efficient lubricants. Some cannot be retained between the metals; others do not cling together persistently enough. To resist the tendency of the metal to tear the lubricating film apart, these globules must have a good deal of internal strength and must stick together well. They must also cling well to the metal, or they will be squeezed out of the bearing.

The union of the two properties of adhesion and cohesion makes up what is known as viscosity, that is, the "body" of the lubricant. It is these properties, in a greater degree than any other one thing, what determines the lubricating value of any fluid. A good lubricant has just enough of this clinging tendency to sustain the load brought upon it, and the tendency of the oil particles to separate and to readjust themselves comprises the fluidity of the oil. It is because of this struggle between viscosity and fluidity that the same oil will not do for heavy and for light machinery. Each requires an oil with just sufficient body to carry the load without letting the surfaces of the metal come in contact: after that is accomplished the more fluid and easier moving the oil is, the better.

While the viscosity of an oil may determine its value as a lubricant, and fluidity that of its adaptability to any particular machine, there are other factors requiring consideration. Machines and bearings located in positions where, in cold weather, the working temperature is near the zero mark, require an oil that will remain fluid at low temperature, even if its viscosity and fluidity do not balance up the best for its load at ordinary temperature.

The oils and the fats are the principal lubricants. The mineral oils are thin, and so are lard, olive and sperm oils. Castor oil, neats-foot, tallow and rape are thick. Nothing is better for high speed bearings and light spindles or shafts than sperm oil, but it is costly; for heavy bearings castor oil is superior to this, but it is also expensive.

But there is relatively little pure lubricant used in machinery, for it is usually more economical to employ a compound oil, compounded for special uses, than to use pure lubricants which, after all, are often heavily adulterated—gum, soap lime, alumina soda, and free acids have their own distinct purpose to serve in the composition of cheap oils. The chief advantage, however, pertaining to the use of compound oils is, that the objectionable qualities, of one kind of lubricant, can be neutralized by mixing it with a lubricant of another kind. For instance; vegetable and fish oils are drying oils, that is, they oxidize rapidly, and cause gumming or clogging of the bearings to which they are applied, and if allowed to drop and accumulate upon dust, cotton waste, and timber are liable to develop an internal heat that will cause spontaneous combustion. Mineral oil does not oxidize, neither does animal. But mineral oils have what is termed a low flashing point; that is, they fire or ignite at a low temperature, some at 212 degrees Fah., or under. Animal oils develop fatty acids and these corrode and pit the surface of the metal which they are used to lubricate.

It is obviously undesirable, therefore, to use lubricants which will fire at a low temperature, or pit the surfaces of wearing parts. Since pure lubricants are costly, and since good lubricants suitable for all special classes of work can be compounded much more cheaply, the practice is to combine the various kinds of oils and fats in such proportions that their objectionable features shall be neutralized. In this way various qualities of compound oils are prepared to suit all classes of machinery, and no layman knows the composition of the lubricant, but only its commercial name, number or brand.

JNO. EVANS,

Ontario Agricultural College, Guelph.

## THE DAIRY.

### Dundas County Dairymen Face Unfavorable Conditions.

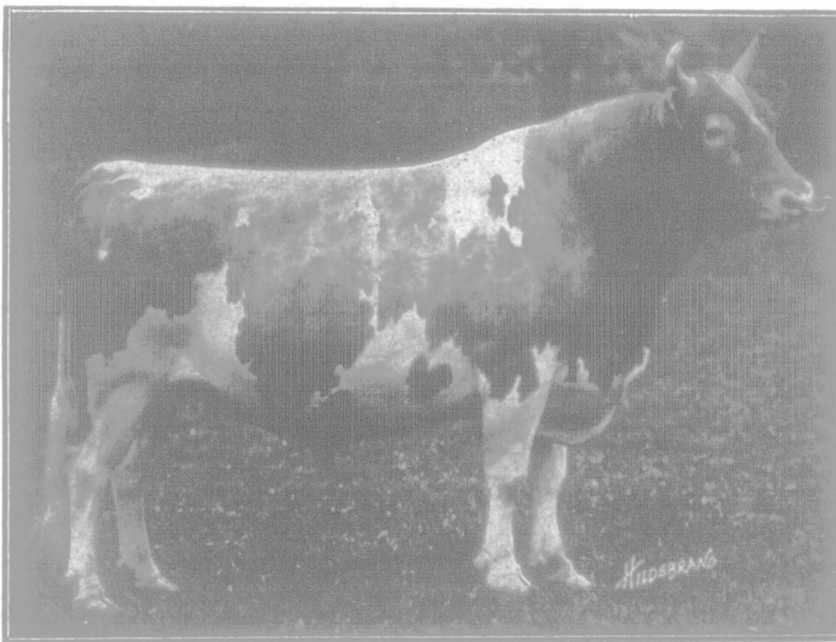
Few people who have not been forced to face them can really appreciate the conditions under which hundreds of farmers in Ontario are working this year. Wet weather has been very prevalent, and farmers in the western part of the province have been greatly handicapped in seeding. These conditions are certainly discouraging, but not nearly so much so, we believe, as those which face the dairymen of the eastern counties. Eastern Ontario contains some splendid dairy districts, and the volume of milk produced in Eastern Ontario each year is such as to be difficult to appreciate unless one has a more or less intimate acquaintance with the dairy industry in Canada, so as to be in a position to size up the relative importance of various dairy sections. A representative of "The Farmer's Advocate" recently paid a visit to Dundas County, one of the recognized dairy counties in the East, and we were forced to the conclusion that the dairymen of this county occupy no enviable position in their outlook for the year 1919.

The remainder of the season may, of course, be very favorable, and as this is being written at Ottawa, the weather is very warm and of a character to make things grow very rapidly. The difficulty lies, however, in the fact that nearly everywhere we went there seemed to be a very unusual quantity of land in grass, while for miles in certain parts of the county it was rare to see a field, even a small one, of spring grain coming up. This condition of affairs as late in the season as the

last week in May does not augur well for a successful year. We talked with some dairymen who had not put a seed in the ground as yet, while many others could be seen working one, two or three teams of three and four horses, in a hasty endeavor to get some seeding done before another rain. Up to the time of our visit since the last heavy rain, and a good deal of work was needed to recover lost ground. Perhaps some idea of the condition of the soil may be gleaned from the fact that in several places we saw herds of cattle finding excellent pasture from grass a foot high in last year's corn fields. In other places equally good pasture was to be had in fields plowed last fall and grown up so with grass that could not be worked under by cultivation, as to look almost like drilled grain.

The fall of 1918 was a very hard one for Eastern Ontario dairymen who, in hundreds of instances, could not harvest their corn crops, and the bare stalks are still standing this spring. We saw dozens of such fields where the crop of last year is still standing yellow and much broken, the land being so wet that in only a few cases were attempts being made to disc in the standing stalks. Last year, too, the quality of seed corn was poor, with the result that the stalks were coarse and heavy, while there were few ears, if any, to harvest when the wet weather prohibited the gathering in of the whole crop. One man told us that while he had finally managed to use a corn binder and harvest his crop with a liberal use of horse flesh, the binder sank in from six inches to a foot at every length, and his field would never be in good shape again for ten years. Questioned as to the net value of his corn crop last year, he said that it would probably have paid him not to cut it at all.

A considerable portion of the Eastern part of the Province is very level land and badly in need of drainage. This can only be secured by the digging of large open ditches by the Government or municipality so that farmers can get an outlet for underdrainage, which a great many would be glad to install. At present, however, they are subject to the vagaries of the weather,



Florham Laddie.

Sold at recent National Gurnsey sale for \$5,500.

and thousands of acres of splendid land are limited in productivity to the extent, possibly, of 25 per cent. or more, because drainage is not available. One needs only to pass from the flat, level land to other sections where the ground is more rolling to see the very great advantage which comes from land that is easily drained. We drove through two such districts, where the contrast was particularly noticeable. In the one case so little seeding had been done that almost no fields could be seen while in the other district, up higher, on a rather gravelly ridge, seeding was nearly all done.

We talked briefly with Ingram Crass, a successful Dundas County dairy farmer, who engages largely in summer dairying. Last summer he produced about 800 pounds of milk daily. His farm is 200 acres in extent, but he is only working a little over 100 acres because of difficulty in obtaining sufficient labor. To say that labor conditions are oppressive is putting it rather mildly. Mr. Crass said that it was impossible to obtain first-class farm labor at any price, and the kind of labor that is available is not worth the wages that are asked. He is not different from a very large number of other farmers, and would rather go without help, doing what he can, than to pay out the proceeds of the farm to unsatisfactory help. The theory that farmers are making lots of money does not meet with much favor from Mr. Crass, who says he made less money last year than any year he has been on his farm. In fact, labor conditions and bad weather were so discouraging that he had a notion to follow the example of many other farmers during the last few years and sell out. These conditions can be duplicated all over the country, and it is certainly poor proof that agriculture is a get-rich-quick scheme, even during war time, when a man who has been farming all his life and for himself during the four years that have been generally considered most profitable for the farmer, begins to think seriously of selling out.

We found out that Mr. Crass was in the district where a farm survey was conducted in 1918 by the Ontario Department of Agriculture. On enquiring what he thought of farm management surveys and their value to the farmer, we found Mr. Crass not very decided in his opinion either way, although he thought that they could be very valuable if the results were closely studied. He admitted that the report on his own farm had given him and his family cause for some study, and rather implied, if he did not actually say it, that he found some things there that rather surprised him. At present the herd on his farm numbers 20, most of the old cows having been sold off. We were rather surprised to find the same condition rather prevalent in the district, nearly every man with whom we talked saying that his herd was smaller than usual. S. Kittle, who operates a 100-acre farm, said that he has purchased a tractor to help out with the farm work. He himself is none too well at times, and his son is the only other assistance he can get. Mr. Kittle hopes to get the greatest service from the tractor from belt work. When we visited Mr. Crass he was busy working up a last year's corn field, and was trying to disc down the stubble. The ground was baked and it seemed impossible to get a fine degree of tilth or work down the lumps to a fine condition. If, as some think, the excessive wet weather that had been experienced up to this time is followed later on by a period of very dry weather, ground in this condition will dry out very quickly.

We found that most of the dairymen in this district raise their own young stock, contrary to the practice of a great many commercial dairymen who keep cows for the milk that can be sold, and look on a cow more or less as a machine to be replaced in the most convenient manner when it is worn out. Others, and apparently most of the men in this section of Dundas County, are among them, prefer to grade up their herds by using pure-bred sires on grade cows, keeping a few pure-breds at least to hasten the process. We were informed that nearly every dairymen with a herd of good size keeps a pure-bred bull, a practice which could well be more largely followed in other districts to good advantage. Apparently the one way to appreciate the value of a pure-bred sire is to engage in commercial milk production in a specialized dairy district. Under these conditions the most successful men will usually be found to use and generally own a pure-bred herd header.

Before the war, we were told, it was a general practice to feed grain to the cows on pasture. Mr. Crass was very high in his praise of this practice, believing that at no time can grain be fed to so great advantage. A little goes a long way, he said, but notwithstanding the fact the practice has fallen off very much during the last few years, the price of feed being so high and labor so scarce that more land has been used for pasture, and less grain fed in summer.

In the Chesterville District all the milk goes to the condensery, and the daily supply amounts to about 200,000 pounds. The manager informed us that he had entered into an agreement with the farmers, who had organized to secure a more adequate price, to pay them \$2.50 per hundred pounds until October, this being 50 cents more than cheese factories were paying. It was figured, however, that the whey was worth twenty cents, the extra care needed for milk going to the condensery another fifteen cents, and the extra charge for hauling long distances, which we understand is pooled among all the patrons, was placed at fifteen cents also. Considerable trouble has been experienced with cows giving acid milk, over 18,000 pounds of such milk having been received on the Monday previous to our visit. The acid found is not lactic acid, and the milk comes mostly from heifers at their first milking. No one seems to be able to name the acid nor locate the cause, according to the manager of the condensery, who said he sent samples to various chemists and dairy experts, but without result. The problem, however, is very serious, and is a matter that should be the subject of immediate investigation and research.

Sunday milk is also a problem for the dairymen of the Chesterville District. It appears that milk for the condensery must be fresh, and that it is impossible to use Sunday's milk for condensing on Monday. Quite a number of the farmers were in favor of delivering milk to the condensery on Sunday because this is their market, and they neither keep hogs nor have separators so that they can utilize it economically. Others decided to abstain from Sunday delivery on principle and decided to separate the milk. At the time we were there, there was a notice up that no old milk would be accepted on Monday, and both parties were resolved to go ahead with Sunday delivery. What the Dominion Alliance would do about it was another matter.

M MACHINERY  
MOTORS.of Keeping  
erly Oiled.

TE":  
g machinery properly  
n we try to compute, in  
sacrifice in machine effi-  
ness in lubrication may  
machine fully fifty per  
achine itself is wearing  
needless friction, than

fact that the surface  
ever made is as rough  
appears to be the unaided  
ible to make a metal  
ooth, incompressible,  
qualities of pressure at  
g of the metal fibres,  
rs of inefficiency and  
faults of construction  
great measure, over-  
judicious application

ute balls or globules.  
es between the faces  
n, keeping the metals

## FARM BULLETIN.

### Budget Calls for \$17,000,000 Reduction in Tariff Revenue.

AS announced some days previous, Sir Thomas White, Minister of Finance, delivered the Budget speech on Thursday, June 5. After long weeks of waiting, farmers all over Canada are now in a position to know how the Government proposes to meet the enormous expenditure which faces them for the present fiscal year. Low tariff advocates, among whom the Western prairie farmers are the leading element, are also able now to gauge the sympathy of the Government for them and their views of international trade policy. Those who subscribe to "The Farmer's Platform" will view with greatest satisfaction the heavy increase in income taxation that is proposed, but will scarcely feel the same degree of jubilation over the tariff reductions, notwithstanding the fact that a thorough tariff revision, long overdue, is promised as soon as international conditions are thought to permit it.

Tariff reductions announced by the Finance Minister involve the entire repeal of the British Preferential tariff rate of 5 per cent., imposed by the 1915 Customs Tariff War Revenue Act. The intermediate and general tariff rate of 7½ per cent., imposed by the same act, is partially repealed, and will no longer be applicable to the following classes of goods: foodstuffs, linen and cotton clothing, woolen clothing, boots and shoes, fur caps and fur clothing, hats, caps, hoods and bonnets, gloves and mitts, collars and cuffs, hides, skins, leather, harness and saddlery, agricultural implements, petroleum oils, mining machinery, and bituminous coal.

Provision is made for the free importation into Canada of wheat, wheat flour and potatoes from countries which do not impose a customs duty on such articles grown or produced in Canada. Some Empire Preference is given by a reduction of 3 cents per pound on British-grown teas, while a reduction of five cents per pound is made on roasted or ground coffee. Specific instead of ad valorem duties are to be imposed upon pig iron, zinc spelter and copper ingots, while on soda ash the rates are changed from 5 and 7½ per cent. under the British Preferential and General Tariffs, respectively, to 1-5 and 3-10 cent per pound.

Evidently the Minister of Finance believes a substantial reduction has been made in the tariff on agricultural implements. He made much of the difficulty in effecting any reduction whatever because Canadian manufacturing firms have been handicapped by higher freight rates to the West than those paid by their Western competitors. This has been due to the fact that "the American manufacturer of agricultural implements is not only closer to the American consumer and American distributing points, but he is also nearer to the Western distributing points of Canada." Freight assistance was, therefore, sought by the Government, and under a plea of national development and encouragement to agriculture, and a promise of a removal of the 7½ per cent. tariff on bituminous coal, of which our railway companies are the largest users, new freight tariffs which will give the Chicago rate on agricultural implements from producing centres in Eastern Canada west of Montreal and east of the Great Lakes to Prairie points for load movements loaded to a minimum of -24,000 pounds have been secured from the railways. In other words, the Government felt the necessity of recompensing the implement firms for loss of tariff protection with lower freight rates, notwithstanding that there will still remain a very considerable duty on agricultural implements. The principle of free trade has, therefore, not been conceded in any regard, but by a system of bargaining some concession has been made to the farming community. The proposals for reduction of the tariff on agricultural implements are as follows, as stated by Sir Thomas:

"Including the 7½ per cent. war duty reduction to which I have already referred, our proposals, if adopted by the House, will provide for a total reduction under the general tariff from 27½ per cent. to 15 per cent. on cultivators, harrows, horse-rakes, seed-drills, manure spreaders, and weedeaters and complete parts thereof, and from 27½ per cent. to 17½ per cent. on ploughs and complete parts thereof, windmills and complete parts thereof, portable engines and traction engines for farm purposes, horse-powers and threshing machine separators and appliances thereof.

"On hay-loaders, potato diggers, fodder and feed cutters, grain crushers, fanning mills, hay tedders, farm, road or field rollers, post-hole diggers, snaths and other agricultural implements the resolutions will provide for a total reduction in the rate from 32½ per cent. to 20 per cent., and a similar reduction on farm wagons. In the case of cement, the war customs duty will be repealed and the general tariff rate will be reduced to 8 cents per hundred pounds. This is a reduction of 2 cents from the present general tariff rate."

#### Tariff Revision.

As a part of the tariff proposals announced by the Minister, a statement was made by him regarding tariff revision. "The sound policy in this regard," said Sir Thomas, "and the one which has been followed by all administrations in Canada, is that at certain periods, separated by intervals of eight or ten years, there should be a deliberate reconsideration and revision of the entire tariff schedules. Such general revision becomes necessary in the national interests from time to time in order to adjust the tariff to the changed conditions which have arisen. In the intervals between general revisions the policy has been to make as few

changes as possible, in order that the business of the country, which has adapted itself to existing tariff conditions, may not be disturbed by a sudden and unexpected change, which always makes for uncertainty and lack of confidence." In 1904 there was a revision of duties relating to a limited list of commodities, and in 1907 there was a general revision such as Sir Thomas mentioned. In 1914 there was a partial revision and, the House was informed, "had the war not occurred there would have been a general revision in 1916 or, at the latest, in 1917." The revenue received from the special war tariffs of 5 and 7½ per cent. was as follows: \$25,256,787.89 in 1915-16; \$37,830,427.39 in 1916-17; \$45,018,562.27 in 1917-18; and \$44,726,019.67 in 1918-19.

Continuing, the Finance Minister said that when it is considered that this year we are budgeting to raise barely the amount of current expenditure, and will have to borrow for capital and demobilization expenses, it appears very necessary to maintain at least the most of our customs revenue. Further, he said that at this time it would not be practicable to make a sound, general revision of the tariff. International trade is most unsettled, prices are unstable, and labor conditions internationally still uncertain. "It is my hope," said Sir Thomas, "that within a year conditions will have become so established as to permit of a general revision of the tariff. Preceding such revision there should be a thorough enquiry, conducted by the Minister of Finance and two or more of his colleagues, representing the different geographical sections of Canada. My own view is that such inquiry might well be commenced about autumn of this year."

#### Heavier Income Taxes Announced.

The tariff reductions above enumerated are estimated to mean a reduction in customs revenue of \$17,000,000 and, due to a reduction in the total volume of imports that is anticipated in view of diminished purchasing power and because of a probable decline in prices, the total loss in customs revenue is expected to reach \$25,000,000. As will be shown later, the estimated revenue for the present year, based upon last year, is \$280,000,000, while the expenditure on ordinary account is estimated at \$270,000,000. This leaves a balance of \$10,000,000, which is turned into a deficit of \$15,000,000 when the anticipated loss in customs revenue of \$25,000,000 is taken into account. To offset this deficit an increase in income taxation is proposed, and was outlined as follows in the budget speech: "We propose that all corporations shall pay ten per cent. on their net income in excess of two thousand dollars. Shareholders shall be given credit for the normal tax to which they are liable upon dividends received from companies subject to this taxation.

"In the case of individuals we propose that the normal rate of four per cent. shall be levied upon all income exceeding one thousand dollars, but not exceeding six thousand dollars in the case of unmarried persons and widows or widowers without dependent children, and upon all income exceeding two thousand dollars but not exceeding six thousand dollars in the case of all other persons. We propose a normal tax of eight per cent. upon all income exceeding six thousand dollars. We propose that the surtax shall commence— from five thousand dollars instead of from six thousand dollars as at present and shall increase by graduation, applying firstly to income between five thousand dollars and six thousand dollars, and to every two thousand dollars between six thousand dollars and one hundred thousand dollars. Upon incomes in excess of one hundred thousand dollars materially increased rates are levied."

In the case of the surtax the rate varies from one per cent. of the amount by which the net income exceeds \$5,000 and does not exceed \$6,000 to 65 per cent. of the amount by which the net income exceeds \$1,000,000. As a result of the increase in taxes upon incomes, taxes on incomes of \$3,000 will be increased from \$20 to \$40, on incomes of \$5,000 the increase will be from \$100 to \$120, on \$100,000 the increase will be from \$17,607 to \$31,190, and on incomes of \$1,000,000 the increase will be from \$499,157 to \$663,190.

In addition to income taxes, the business profits war tax will be renewed for the current calendar year. Companies with a capital of \$25,000 to \$50,000 will be taxed 25 per cent. of all profits in excess of 10 per cent., while companies capitalized at more than \$50,000 will be taxed 75 per cent. of all profits over 20 per cent., 50 per cent. of all profits between 15 and 20 per cent., and 25 per cent. of all profits over 7 per cent. in the case of incorporated companies, and 10 per cent. in the case of unincorporated companies.

#### What the War Cost.

The total cost of Canada's part in the war to March 31, 1919, is \$1,327,273,848. This amount was distributed over the five war years to date as follows:

\$ 60,750,475	for 1914-15
\$166,197,755	for 1915-16
\$306,488,814	for 1916-17
\$343,836,801	for 1917-18
\$450,000,000	for 1918-19

The aggregate of Canadian war loans exceeds war expenditures, but Canada provided substantial credits for Great Britain, and these so far exceeded credits extended to us that Great Britain now owes us about \$230,000,000. In addition, our financial resources on March 31, 1919, as represented by deposits in Canadian banks, were represented by a total of \$204,414,047. Interest on the national debt will amount to about \$115,000,000 annually as compared with \$12,893,504 before the war. In addition there will be further war burdens annually on account of pensions which will be

\$30,000,000 or \$40,000,000 per year, and the cost of maintaining hospitals and convalescent homes for returned soldiers.

#### Canada's Resources.

Commenting upon the resources with which our heavy future expenditures must be met, Sir Thomas White said: "We have a country of almost unlimited natural assets, vast stretches of cultivable lands, magnificent forests, regions abounding in mineral wealth, and fisheries the most valuable in the world. We have a highly intelligent, energetic, enterprising people of great stability of character and ardent aspirations for national and individual success. To develop our natural resources there is required the application of enterprise, capital and labor. To sell our products we require markets, domestic and foreign.

"As a great food-producing country Canada is bound always to enjoy agricultural prosperity. The war has caused the death of millions of the rural workers of Europe, devastated vast tracts of cultivated lands, consumed the horses, cattle and other domestic animals, and destroyed the implements of tillage. It must be many years before Europe is able to recover agriculturally from the effects of the war. In the meantime the hungry millions must be fed, and it would seem certain that Canada's agriculture will not lack for profitable markets for all it can produce.

Immigration has not altogether ceased during the war, as the figures given herewith show, and the Minister emphasized the need of population in order to increase our production and fill up our cultivable lands.

Immigration for 1914-15	144,789
" " 1915-16	48,537
" " 1916-17	75,374
" " 1917-18	79,074
" " 1918-19	57,702

#### Canada's Trade Position.

In 1913 we had a balance of trade against us of \$300,000,000. In 1914 this adverse balance was \$180,000,000, but in 1918 from a total trade of \$2,550,000,000 our exports were \$1,586,000,000. Total trade for 1919 amounted to \$2,169,000,000, and of this \$1,253,000,000 was exports, leaving a balance of trade in our favor of \$340,000,000; more than a reversal of our condition in 1913. Our total trade doubled in five years, and for 1918 it was 2½ times the trade of 1914. Of course, high prices and trade on war material greatly enhanced these figures, the latter amounting to \$418,000,000 in 1918 and \$260,000,000 in 1919. One thing which stands out very prominently in the figures placed on record by Sir Thomas White is the very large trade we do with the United States, a very considerable balance always being against us, as, for instance, in 1918-19, when we exported goods to the value of \$454,923,170 and imported goods to the value of \$746,940,654. In other words, out of a total trade amounting to \$2,169,523,502, our trade with the United States amounted to \$1,201,863,824. On all our imports from the United States Canadian consumers pay heavy duties. For those who favor Imperial trade relations it may not be very consoling to note imports from the United Kingdom of \$73,029,215 in 1918-19, as compared with 746,940,654 from the United States. Our exports to the United Kingdom amounted to \$531,920,977, however, as compared with 454,923,170 to the United States.

Our exports during 1918-19 by classes were as follows: Mines, \$77,429,963; fisheries, \$37,137,072; forests \$70,024,644; animals and their produce, \$197,805,478; agricultural products, \$269,819,833; and manufactures, \$549,284,268. From the latter figure, however, must be deducted \$260,000,000, the amount of munitions and war material exported. With this deduction made, agriculture provided 50 per cent. of all exports, and in 1917-18, on the same basis, agriculture provided 66 per cent. of all exports.

(Continued on page 1153.)

### The Minister of Agriculture Resigns.

As a corollary to the budget speech the long anticipated resignation of Hon. T. A. Crerar Minister of Agriculture since the formation of Union Government, has materialized. Mr. Crerar was expected to differ from his colleagues on the budget and with so half-hearted a measure of lower tariffs he could not be expected to agree as participator in the forming of "The Farmers Platform." Whether he will retire from the ranks of Union Government is problematical but doubtful, unless a considerable body of other Western members should decide that this is their best policy. His successor in office is at time of writing a matter of conjecture. If Sir Robert Borden wishes to select a member of the present House who is qualified to head the Department of Agriculture, his choice is certain to fall upon the shoulders of Dr. S. F. Tolmie, Victoria City, B. C., but past experience has shown that such is not always the motive that leads to the selection of cabinet ministers. Canada at this time needs a Minister who has a broad general knowledge of Agriculture, especially of live stock and with sufficient confidence, courage and influence to cope with a Cabinet Council composed, for the most part, of ministers indifferent to the Agricultural industry. Dr. Tolmie knows farming in this broad sense to a degree not equalled by any other member of the House. He also possesses the confidence of the live-stock men with whom he has been particularly affiliated as an officer of the Health of Animal Branch for many years and latterly as President of the Holstein-Friesian Association of Canada, The Western Canada Live-Stock Union and the Canadian National Live-Stock Council.

Notwit  
of cattle  
\$1.00 per  
of cattle  
of the pr  
50 cents  
a similar  
regardless  
tillery ca  
the present  
lost groun  
appears r  
tion of fre  
and the fo  
and a nu  
had boug  
selves in  
cost them  
could be  
market,  
rather ne  
some case  
of the r  
purchases  
opportuni  
market.  
was gener  
quality, t  
several m  
top price  
day was  
on cattle  
quality o  
hundred;  
from \$13  
Steers of  
pounds so  
other sal  
head aver  
five poun  
averaging  
at \$13.60  
ten hundr  
while nur  
\$12.75 to  
under te  
\$13.50 in  
loads sol  
later mar  
\$12.75 pe  
the majo  
bulls we  
and onl  
quality so  
Few stoc  
for count  
unwilling  
The few  
most cas  
compared  
prices. C  
calves to  
price of  
advance i  
per hund  
choice ve  
\$18.00 pe  
\$13.00 to  
Lamb a  
to be ea  
were ma  
down abo  
Hogs  
during t  
sold at \$2  
but for t  
was the r  
Of the  
for the w  
packing l

# Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending June 5. Receipts and Market Tops.

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

Receipts							CALVES					
Top Price Good Steers (1,000-1,200)							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	Week Ending	
June 5	1918	May 29	June 5	1918	May 29	June 5	1918	June 5	1918	May 29	May 29	
Toronto (Union Stock Yards)	3,481	3,257	5,051	\$14.25	\$16.00	\$15.25	1,383	1,482	2,151	\$17.50	\$16.00	\$18.00
Montreal (Pt. St. Charles)	552	483	320	15.00	15.75	15.00	2,115	2,398	1,720	14.00	13.50	13.50
Winnipeg	349	2,344	1,661	14.00	16.50	14.00	2,073	1,382	1,432	14.00	13.50	13.50
Edmonton	—	1,121	1,559	—	15.50	14.00	31	154	41	15.00	16.50	14.00
	—	535	286	—	14.25	14.50						

HOGS							SHEEP					
Top Price Selects							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	Week Ending	
June 5	1918	May 29	June 5	1918	May 29	June 5	1918	June 5	1918	May 29	May 29	
Toronto (Union Stock Yards)	4,568	5,044	8,652	\$22.25	\$20.00	\$23.25	286	1,538	494	\$16.00	\$22.00	\$17.50
Montreal (Pt. St. Charles)	1,470	728	1,423	22.35	20.75	22.25	298	363	176	—	*14.00	*10.00
Winnipeg	1,102	514	593	22.25	20.75	22.25	276	374	228	—	*14.00	*10.00
Edmonton	2,392	6,558	1,118	20.50	19.00	20.50	42	252	51	—	—	—
	—	2,198	1,407	—	18.60	20.25	—	—	—	—	—	—
	—	614	343	—	17.60	20.25	—	—	—	—	—	—

\*Each. NOTE: Winnipeg sales for June 2nd, not included.

## Market Comments.

### Toronto.

Notwithstanding a very light offering of cattle a depreciation of approximately \$1.00 per hundred was noted on all grades of cattle compared with the closing prices of the previous market, values declining 50 cents per hundred on Monday, and a similar degree on Wednesday. Regardless of the fact that very few distillery cattle will be available during the present month immediate recovery of lost ground in the case of choice cattle appears rather improbable as consumption of fresh meats is at low ebb at present and the foreign outlet is limited. Drovers and a number of local speculators who had bought cattle ahead found themselves in a position where their offerings cost them more at country points than could be realized on them in the local market, and in order to clear, some rather heavy losses were sustained in some cases. In view of the uncertainty of the market speculators made no purchases and packer buyers had an opportunity to direct the course of the market. Last week's offering of cattle was generally speaking, of extra good quality, the stock showing evidence of several months of careful feeding. The top price paid for heavy cattle on Monday was \$14.25, while the highest sale on cattle of almost equal weight and quality on Thursday was \$13.25 per hundred; most of that weight moved from \$13.50 to \$14.25 per hundred. Steers of ten hundred to twelve hundred pounds sold in small lots at \$14.00, while other sales were those of twenty-one head averaging ten hundred and seventy-five pounds at \$13.65, twenty-two head averaging ten hundred and ten pounds at \$13.60, twenty-two head averaging ten hundred and forty pounds at \$13.50, while numerous sales were made from \$12.75 to \$13.25. Steers and heifers under ten hundred pounds reached \$13.50 in a few instances but no straight loads sold above \$13.25, and in the later markets of the week from \$12.00 to \$12.75 per hundred was the range for the majority of the sales. Cows and bulls weakened equally with other grades, and only animals of exceptionally good quality sold above \$11.50 per hundred. Few stockers and feeders were bought for country shipments, farmers being unwilling to buy on a declining market. The few transactions recorded were in most cases \$1.00 per hundred lower compared with the previous week's prices. Cessation of the heavy runs of calves together with an advance in the price of skins, was responsible for an advance in calf prices of \$1.00 to \$2.00 per hundred during the past two weeks, choice veal realizing from \$16.00 to \$18.00 per hundred and medium from \$13.00 to \$15.00.

Lamb and sheep prices were inclined to be easier. Very few spring lambs were marketed. Sheep were marked down about 50 cents per hundred. Hogs declined \$1.00 per hundred during the week. Hogs on Monday sold at \$22.25 per hundred fed and watered but for the balance of the week, \$21.25 was the ruling quotation. Of the disposition from the Yards for the week ending May 29, Canadian packing houses purchased 1,086 calves,

TORONTO (Union Stock Yards)					MONTREAL (Pt. St. Charles)			
CLASSIFICATION	No.	Avg. Price	Price Range Bulk Sales	Top Price	No.	Avg. Price	Price Range Bulk Sales	Top Price
STEERS								
heavy finished	275	\$13.69	\$12.75-14.25	\$14.50				
STEERS								
good	616	13.41	12.50-13.75	14.25	36	14.50	14.00-15.00	15.00
1,000-1,200 common	105	12.22	11.25-12.75	12.75				
STEERS								
good	856	13.12	12.25-13.50	13.75	120	14.00	13.00-14.50	14.50
700-1,000 common	161	11.26	10.00-12.00	12.00	26	12.25	11.00-13.00	13.00
HEIFERS								
good	556	13.28	12.25-13.75	14.00	8	13.00	12.00-14.00	14.00
fair	101	11.25	10.50-11.75	11.75	9	11.00	10.00-12.00	12.00
common	5	9.50	9.00-10.00	10.00	21	8.25	7.00-9.00	9.50
COWS								
good	172	11.15	10.50-11.50	12.00	29	11.50	11.00-12.50	12.50
common	346	9.47	8.50-10.00	10.00	79	9.25	8.00-10.50	10.75
BULLS								
good	37	11.13	10.00-11.50	12.00	7	11.50	11.00-12.00	12.00
common	55	9.38	8.50-10.25	10.75	107	9.00	8.00-10.00	10.75
CANNERS & CUTTERS	40	6.88	6.00-7.50	7.50	28	6.25	5.00-7.00	7.00
OXEN								
					8	10.75	10.00-11.00	11.50
CALVES								
veal	1,383	14.49	13.00-16.00	17.50	2,106	12.75	12.00-13.50	14.00
grass					9			
STOCKERS								
good	64	11.97	11.00-12.50	12.50				
450-800 fair	27	10.50	10.00-11.00	12.00				
FEEDERS								
good	53	13.32	12.50-13.75	13.75				
800-1,100 fair	12	12.75	12.00-13.00	13.00				
HOES								
selects	4,254	21.86	21.25-22.25	22.25	1,216	22.00	21.25-22.25	22.25
heavy	3	22.95	22.25-	22.25	57	20.75	19.25-21.25	21.25
lights	154	19.25	19.25-	19.25	53	20.00	19.25-20.25	20.25
(fed and watered) sows	148	18.70	18.25-19.25	19.25	132	18.00	17.25-18.25	18.25
stags	9	16.80	16.25-17.25	17.25	12	15.00	14.25-15.25	15.25
LAMBS								
good	14	14.00	10.00-16.00	16.00*	39	—	10.00-12.00	*12.00
common					8			
heavy	44	10.00	9.00-11.00	11.00				
light	111	12.00	11.00-13.00	13.00	69	12.00	12.00-	12.00
SHEEP					182	10.50	10.00-11.00	11.00
common	117	7.00	5.00-8.00	8.00				

\*Each.

3,343 butcher cattle, 11,096 hogs and 136 lambs. Local butchers purchased 1,033 calves, 320 butcher cattle, 279 hogs, and 352 lambs. Canadian shipments were made up of 16 calves, 135 stockers 254 feeders and 68 hogs. Shipments to United States points consisted of 71 calves, and 66 butcher cattle.

The total receipts from January 1 to May 29 inclusive were 127,537 cattle, 27,463 calves, 151,743 hogs and 28,300 sheep; compared with 107,215 cattle, 28,449 calves, 165,956 hogs and 11,578 sheep, received during the corresponding period of 1918.

### Montreal

With the exception of one load of steers from Hastings, Ontario, and one load from Richmond, Quebec, practically all the steers offered were from the Toronto market. The best load averaged eleven hundred and sixty pounds per steer and sold for \$15.00 per hundred. The owner of one load reshipped to the country, while the other loads were sold at prices about equal to those of the previous week. A few top cows sold at \$12.50, most of the good cows around \$11.50, cows in fair flesh from \$10.00 to \$10.50, and common cows from \$8.00 to \$9.00. The best bull offered weighed sixteen hundred and ninety pounds, and was sold for \$12.00 per hundred; this bull was bought on the market less than

one year ago and weighed at that time eight hundred and sixty pounds and cost \$8.00 per hundred. Poorly fed bulls that have been well wintered are still arriving in car lots, and sell from \$9.00 to \$10.00 per hundred. There is still a very good demand for veal calves and although there were forty-two hundred head for sale on the two markets, prices were firmer than during the previous week. Calves weighing one hundred pounds or over were sold at \$13.25 to \$13.50, and in some cases up to \$14.00 per hundred.

Sheep sold from \$1.00 to \$1.50 per hundred less than on the previous market, despite the fact that the quality of the offering was better. Spring lambs changed hands in most cases at \$10.00 to \$12.00 each, while some very common lambs sold as low as \$8.00.

On Monday hogs sold at \$22.50, for selects; weighed off cars, and most of the offerings were disposed of at that price. By Wednesday, prices had declined to \$22, off cars, and by Thursday, to \$21.50. The percentage of heavy sows offered was much larger than during any previous week this year. Sows sell \$4 per hundred less than selects and stags \$7 per hundred less.

PT. ST. CHARLES.—Of the disposition from the Yards for the week ending May 29, Canadian packing houses and local butchers purchased 1,729 calves, 13

canners and cutters, 68 bulls, 196 butcher cattle, 1,423 hogs and 176 lambs. Canadian shipments were made up of 40 milch cows. There were no shipments to United States points during the week.

The total receipts from January 1 to May 29, inclusive, were: 13,243 cattle, 31,353 calves, 27,946 hogs and 6,296 sheep; compared with 13,733 cattle, 29,744 calves, 26,941 hogs and 5,467 sheep, received during the corresponding period of 1918.

EAST END.—Of the disposition from the Yards for the week ending May 29, Canadian packing houses and local butchers purchased 1,432 calves, 342 butcher cattle, 515 hogs and 228 lambs. Canadian shipments were made up of 78 hogs. There were no shipments to United States points during the week.

The total receipts from January 1 to May 29, inclusive, were: 15,380 cattle, 22,580 calves, 15,146 hogs and 6,679 sheep; compared with 12,018 cattle, 25,726 calves, 16,070 hogs and 5,390 sheep, received during the corresponding period of 1918.

### Winnipeg.

As a result of the strike conditions, cattle receipts were still much below normal. Approximately two-thirds of the cattle offered for sale consisted of butcher stock for which prices continued steady with those of the previous

resources with which our must be met, Sir Thomas ntry of almost unlimited of cultivable lands, magnifi- ing in mineral wealth, and n the world. We have a nterprising people of great nt aspirations for national evelop our natural re- application of enterprise, our products we require ing country Canada is cultural prosperity. The illions of the rural workers racts of cultivated lands, and other domestic ani- mplements of tillage. It Europe is able to recover ts of the war. In the must be fed, and it would riculture will not lack for an produce. gether ceased during the ith show, and the Minister ation in order to increase cultivable lands.

144,789  
48,537  
75,374  
79,074  
57,702

Position.

of trade against us of iverse balance was \$160,- al trade of \$2,550,000,000 00. Total trade for 1919 nd of this \$1,253,000,000 of trade in our favor of reversal of our condition ublished in five years, and ade of 1914. Of course, aterial greatly enhanced nting to \$418,000,000 in e One thing which stands ures placed on record by arge trade we do with a derable balance always ce, in 1918-19, when we of \$454,923,170 and im- \$746,940,654. In other nting to \$2,169,523,502, es amounted to \$1,201,- om the United States duties. For those who it may not be very con- the United Kingdom of 746,940,654 exports to the United 920,977, however, as the United States. 19 by classes were as : fisheries, \$37,137,072; d their produce, \$197,- ts, \$269,819,833; and From the latter figure, \$60,000,000, the amount al exported. With this provided 50 per cent, of the same basis, agricul- l exports. (page 1153.)

## Agriculture

speech the long anti-A. C. Crerar Minister of Union Government, was expected to differ dget and with so half-iffs he could not be ex- in the forming of "The he will retire from the problematical but doubt- other Western members est policy. His successor a matter of conjecture. select a member of the o head the Department rtain to fall upon the ictoria City, B. C., but such is not always the on of cabinet ministers. nister who has a broad ure, especially of live ence, courage and in- Council composed, for different to the Agricul- nows farming in this equalled by any other also possesses the con- uth whom he has been icer of the Health of ad latterly as President ation of Canada, The ion and the Canadian

week. Two steers weighing slightly over twelve hundred pounds each, sold at \$16 per hundred, while steers within these weights but not as good in quality as the former sold from \$14 to \$15. Butcher steers within the weights of ten hundred to twelve hundred pounds were weighed up from \$13 to \$14. Handy weight butchers changed hands from \$11.50 to \$13. Good butcher cows sold generally around \$11.50, but in a few instances \$12.50 was paid. Bulls and oxen were very scarce, and no market for these was established. An advance was made in the market for calves, and those offered were readily disposed of at an average price of \$16, and a top price of \$18. Stocker and feeder trade was dull and the market weak, the highest price that could be realized for good feeders was \$10.50, and for stockers of similar quality, \$9 was the best sale.

### Buffalo.

Cattle.—Prices on steers averaging from ten hundred up showed another heavy decline at Buffalo last week—selling fully a dollar and more under the previous week, placing best weighty native steers at \$15 to \$15.75, with the best Canadians \$15. It was one of the worst weeks Buffalo has had in many months, the demand, by reason of Jewish holidays, being limited and with weather very hot, killers discriminated against very heavy cattle, as the light cuts are more popular during the summer. At the present time, prices on shipping steers, running from eleven hundred pounds up, are all the way from \$3 to \$4 per hundred lower than for the high time in March last. Some authorities are inclined to expect a still further decline, by reason of the fact that the country is well supplied with well-finished steers, and this fact, together with the grassers running now, they think will have a tendency to still lower values. Butchering cattle, on the best order, including nice, tidy steers and desirable butchering heifers, sold fully a half to seventy-five cents per hundred lower, medium and common cows and light, trashy butchering stuff selling at about steady prices. Bulls were a quarter to a half lower. Stocker and feeder demand was slow and a half lower. Good milk cows and springers sold full steady, medium and common grades going at beef prices. Quite a few loads of a medium to goodish kind of shipping steers were held over from day to day. There were around sixty to seventy cars of Canadians the past week, largely steers and good butchering stuff. Offerings for the week totaled 4,275 head, as against 6,075 head for the previous week, and as compared with 4,575 head for the corresponding week a year ago. Quotations:

Shipping Steers, Natives.—Very choice heavy, \$15.75 to \$16; best heavy, \$15.25 to \$15.50; 1,250 to 1,350 lbs., \$14.75 to \$15.25; 1,200 to 1,300 lbs., \$14 to \$14.50; 1,100 to 1,200 lbs., \$13 to \$14; plain, \$11 to \$12.

Shipping Steers, Canadians.—Best heavy, \$14 to \$15; fair to good, \$12.50 to \$13.50; medium weight, \$12.50 to \$14; common and plain, \$11 to \$12.

Butchering Steers.—Yearlings, choice to prime, \$14.75 to \$15.50; choice heavy, \$13 to \$14; best handy, \$14 to \$14.50; fair to good, \$12 to \$13; light and common, \$11 to \$11.50.

Cows and Heifers.—Best heavy heifers, \$12.50 to \$13.50; good butchering heifers, \$12.50 to \$13; fair butchering heifers, \$11 to \$11.75; light common, \$9.50 to \$10; very fancy fat cows, \$11.25 to \$11.75; best heavy fat cows, \$10.50 to \$11; good butchering cows, \$9 to \$10; medium to fair, \$7.75 to \$8.50; cutters, \$7 to \$7.50; canners, \$5.50 to \$6.50.

Bulls.—Best heavy, \$10.50 to \$11; good butchering, \$10 to \$10.50; sausage, \$9 to \$10; light bulls, \$8 to \$8.50.

Stockers and Feeders.—Best feeders, \$11 to \$11.50; common to fair, \$10 to \$10.50; best stockers, \$10.50 to \$11; fair to good, \$9.25 to \$9.75; common, \$8.75 to \$9.

Milchers and Springers.—Good to best, small lots, \$100 to \$135; in carloads, \$90 to \$100; medium to fair, small lots, \$80 to \$85; in carloads, \$70 to \$75; common, \$50 to \$55.

Hogs.—Prices at Buffalo the first half of last week showed a big margin over other points, but after Wednesday the receipts were more liberal and prices were on the decline. Monday, Tuesday and Wednesday it was generally a one-price deal of \$21.75 for the best grades, and pigs landed mostly at \$20.50. Thursday

the good hogs sold largely at \$21.50, with pigs going at \$20.25, and Friday the good hogs landed mostly at \$21, while lights and pigs ranged from \$19.50 to \$20. Roughts the fore part of the week sold around \$19, and Friday the bulk went at \$18.50. On stags the range was from \$16 down. Receipts for the past week were 20,100 head, as compared with 22,441 head for the week before, and 13,200 head for the same week a year ago.

Sheep and Lambs.—Buffalo had a good lamb trade last week. Monday the best desirable lots sold at \$16.75; Tuesday and Wednesday the trade was steady; Thursday's top was \$16.65, and Friday the range was from \$16.50 down. Inferior to good cull lambs sold from \$8 to \$14, and heavy lambs, which were discriminated against by most buyers, sold from \$13 to \$14. Sheep were scarce and they sold steady all week. Top for wethers was \$11.50, and best ewes brought from \$10 to \$10.50. For the past week receipts were 13,100 head, being against 12,572 head for the week before, and 7,400 head for the same week a year ago.

Calves.—Last week started with top veals selling at \$16.50 and \$16.75; Tuesday the general range on the best was from \$16 to \$16.25; Wednesday a few reached up to \$17; Tuesday none sold above \$16.50, and Friday the bulk moved at \$17.50. Good cull calves undersold the tops around \$2.50 per cwt., and common light calves ranged as low as \$10. Receipts the past week totaled 6,600 head, for the week previous there were 6,148 head, and for the same week a year ago the run numbered 4,500 head.

### Toronto Produce.

Receipts at the Union Stock Yards, West Toronto, on Monday, June 9, numbered 196 cars, 3,330 cattle, 653 calves, 1,729 hogs, 416 sheep and lambs. Slow, draggy market; all classes butcher cattle 50 to 75 cents lower; top, \$14 per hundred for a few baby heaves. Heavy steers sold at \$12.50 to \$13. Cows and bulls also 50 to 75 cents lower. Calves and light sheep steady; fat sheep lower. Hogs, \$22 per hundred, fed and watered.

### Breadstuffs and Feeds.

Wheat—Ontario (f.o.b. shipping points, according to freights)—No. 1 winter, per car lot, \$2.14 to \$2.20; No. 2 winter, per car lot, \$2.11 to \$2.19; No. 3 winter, per car lot, \$2.07 to \$2.15; No. 1 spring, per car lot, \$2.09 to \$2.17; No. 2 spring, per car lot, \$2.06 to \$2.14; No. 3 spring, per car lot, \$2.02 to \$2.10. Manitoba (in store, Fort William), No. 1 northern, \$2.24½; No. 2 northern, \$2.21½; No. 3 northern, \$2.17½; No. 4 wheat, \$2.11.

Oats—Ontario (according to freights outside)—No. 3 white, 78c. to 79c.

Barley (according to freights outside)—Malting, \$1.28 to \$1.32.

Buckwheat (according to freights outside)—No. 2, nominal.

(Rye according to freights outside)—No. 2, nominal.

Corn—American, (track, Toronto, prompt shipment), No. 2, 3 and 4 yellow, nominal.

Peas (according to freights outside)—No. 2, nominal.

Flour—Manitoba (Toronto)—Government standard, \$11; Ontario (prompt shipment, in jute bags), Government standard, \$11 in bags, Montreal and Toronto.

Milfeed.—Car lots delivered, Montreal freights, bags included)—Bran, per ton, \$42; shorts, per ton, \$44; good feed flour, \$2.80.

Hav.—(Track, Toronto)—No. 1, per ton, \$32 to \$35; mixed, per ton, \$20 to \$24.

Straw.—(Track, Toronto)—Car lots per ton, \$10 to \$11.

Hides and Wool.

Priced delivered in Toronto:

City Hides.—City butcher hides, green; flat, 18c.; calf skins, green, flats, 30c.; veal kip, 20c.; horse hides, city take-off, \$6 to \$7; sheep, \$3 to \$4.

Country Markets.—Beef hides, flat, cured, 18c. to 20c.; green, 16c. to 17c.; deacon and bob calf, \$2 to \$2.75; horse hides, country take-off, No. 1, \$6 to \$7; No. 2, \$5 to \$6; No. 1 sheep skins, \$2.50 to \$3; horse hair, farmer's stock, \$28.

Tallow.—City rendered, solids, in barrels, 8c. to 9c.; country solids, in barrels, 6c. to 8c.; cakes, No. 1, 7c. to 9c.

Wool.—Unwashed fleece wool as to quality, fine, 40c. to 55c. Washed wool, fine, 70c. to 75c.

### Farm Produce.

Butter.—Prices kept stationary on the wholesales during the past week selling as follows: Creamery, fresh-made lb. squares at 56c. to 57c. per lb.; creamery solids at 54c. per lb.; dairy, 50c. per lb.; other grades, down to 40c. per lb.

Oleomargarine.—34c. to 37c. per lb.

Eggs.—New-laid eggs declined, wholesale, selling at 51c. to 52c. per doz. for case lots, and 54c. to 55c. per doz. for selects in cartons.

Cheese.—The market is very firm at advanced prices, old selling at 37c. per lb. and new at 33c. to 34c. per lb.

Poultry also kept firm at stationary prices. The following prices being quoted for live weight to the producers. Spring chickens, 60c. per lb.; chickens, 30c. per lb.; hens, under 4½ lbs., 32c. per lb.; hens, over 4½ lbs., 34c. per lb.; roosters, 25c. per lb.; turkeys, 30c. per lb.

Wholesale Fruits and Vegetables.

Lemons.—The daily advance in lemons was the feature of the wholesale market during the past week, reaching \$7 to \$7.50 per case, with still higher prices to be expected.

Pineapples.—The supply continued to be very light and prices firm at \$6 to \$8 per case.

Rhubarb.—Rhubarb came in freely, selling at 30c. per dozen.

Strawberries.—Strawberries kept about stationary with an active demand at 35c. to 40c. per box.

Tomatoes sold especially well; No. 1 hot-house selling at 40c. per lb.; No. 2's at 30c. to 35c. per lb., with Floridas ranging from \$6 to \$8 per six-basket crate.

Watermelons.—Two cars of watermelons came in during the week, and sold well at \$1.25 to \$1.75 each.

Asparagus was practically a glut on the market, as it became very low grade; some good selling at 75c. to \$1.50 per 11-qt. basket.

Beans.—New beans declined to \$4 to \$5 per hamper.

Beets.—New beets varied in quality and price at \$2.50 to \$3 per hamper.

Cabbage was slightly easier at \$5 to \$6 per crate.

Carrots kept about stationary at \$3 to \$3.25 per hamper.

Cucumbers sold well; hot-house bringing \$3 per 11-qt. basket for No. 1's, and \$2.25 for No. 2's; Floridas at \$4 to \$5 per hamper.

Lettuce is still scarce; Leaf selling at 25c. to 50c. per doz.; large Leaf at \$1.50 to \$2 per doz., with Canadian Boston Head at \$4 to \$4.50 per case.

Onions were a slow sale at \$5 to \$5.50 per 50-lb. crate.

Potatoes declined—Ontarios selling at \$2.25 to \$2.40 per bag; New Brunswick Delawares at \$2.40 per bag.

### Montreal.

Horses.—During last week there was some enquiry for horses for cartage purposes, the various carting concerns being evidently fully employed, and it is understood that some business was done. Prices continued steady, being as follows: heavy draft horses, weighing from 1,500 to 1,700 lbs. each, \$250 to \$300 each; light draft, 1,400 to 1,500 lbs., \$200 to \$250 each; light horses \$125 to \$170 each; culls, \$50 to \$75; fine saddle and carriage horses \$175 to \$250 each.

Dressed Hogs and Provisions.—The market for dressed hogs was affected by the unusually hot spell and demand fell off. Prices were fractionally below those of the previous week being 30½c. to 31c. per lb. for abattoir fresh-killed stock. Smoked and cured meats were in fair demand, being easily preferred in hot weather. Prices continued steady with light hams selling at 41c. to 42c. per lb.; mediums, weighing 12 to 15 lbs., 39c. to 40c.; heavies 37c. to 38c. per lb. Breakfast bacon held steady at 44c. to 45c. per lb.; Windsor selected bacon, 47c. to 48c. and Windsor boneless 49c. to 50c. Barreled pork was not in active demand and the market was quiet with Canadian short-cuts quoted at \$8 to \$90 per barrel. Lard was steady with Canadian pure leaf selling at 37c. per lb.

Poultry.—Stocks of poultry in cold storage are diminishing constantly and are now light. Prices continued steady at 48c. to 50c. for choice turkeys; 40 to 47c. for chickens, according to quality, 33c. to 38c. for fowl, 45c. to 50c. for ducks and 31c. to 33c. for geese.

Potatoes.—Demand for potatoes con-

tinued active and quality of old stock was excellent for this time of year. Sales of Green Mountains were quoted at \$2.50 per bag of 90 lbs., ex-store, and of Quebec white stock at \$2.25. Some Manitoba potatoes were in the market and were quoted around \$2, ex-store.

Eggs.—Quite a few eggs are evidently being shipped out. The local market continued exceedingly firm and the hot spell is affecting the quality and causing the price of selects to advance; these were quoted at 55c. to 56c. per doz., while straight gathered were steady at 52c. to 53c., and No. 2 eggs 49c. to 50c. per dozen.

Butter.—Quality of butter reaching the city is excellent. The make at the present time should be among the finest of the year. Pasteurized creamery was quoted at 56c.; finest creamery was a little lower than a week ago, being available at 54½c. to 55c. per lb. Fine creamery was 54c. to 54½c., while dairy was steady at 47c. to 49c. per lb.

Cheese.—The Peterborough market was cleared at 13¼c. per lb. Locally the price continued in the vicinity of 31c. to 32c. according to quality and quantity.

Grain—No. 3 Canadian Western barley was quoted at \$1.49½, ex-track. Ontario extra No. 3, \$1.47; No. 4 Canadian Western \$1.45; rejected \$1.40. Oats were firm with No. 1 feed quoted at 90½c.; Ontario No. 2 white 91c.; Manitoba rejected 83c. per bushel, ex-track.

Flour.—The market for flour showed practically no change last week. Car lots of Government standard Manitoba spring-wheat flour were made at \$11 in jute, ex-track, Montreal freights, or to city bakers, with an advance of 10c. for smaller lots delivered and a discount of 10c. all the way round for spot cash. Feed flour was quoted at \$7 to \$7.50 per barrel in jute bags. Ontario winter-wheat flour was steady at \$11.40 to \$11.50 per barrel in new cotton bags. White corn flour was steady at \$10.10; rye flour at \$3.75 to \$3.99 per bbl.

Milfeed.—Car lots of bran were selling at \$42.50 to \$43 per ton, including bags, ex-track and of shorts at \$44.50 to \$45. In smaller lots prices were as much as \$1 more. Feed cornmeal was quoted at \$70; pure barley meal at \$62 to \$64; mixed mouille \$56 to \$58; dairy feed, \$48; oat middlings \$44 per ton.

Baled Hay.—Car lots of baled hay were quoted at \$38 to \$46 per ton for No. 2 Timothy, good, and at \$1 less for ordinary No. 2. No. 3 timothy was quoted at \$34 to \$35, ex-track.

Hides.—The market was unchanged last week, with steer hides selling at 27c. per lb.; cow hides 25c., and bull hides 20c. per lb. Veal skins were 70c. per lb. with kips at 25c. Spring lambs were 75c. each, while wool skins were \$4 each and horse hides \$7.50 to \$8 each.

### Chicago.

Hogs.—Heavy weight, \$19.80 to \$19.90, medium weight, \$19.70 to \$20; light weight \$19.50 to \$19.95; light lights, \$18 to \$19.55; heavy packing sows, smooth, \$19.25 to \$19.65; packing sows, rough, \$19 to \$19.25; pigs, \$17.25 to \$18.

Cattle.—Compared with a week ago, good and choice beef steers, 75c. to \$1 lower; medium grades, 50c. to 75c. lower; fat cows and heifers, 50c. to \$1 lower; canners and cutters, 25c. to 50c. lower; bologna bulls, mostly 25c. lower; butchers' bulls, 50c. to 75c. lower; choice veals, steady to 25c. lower; medium grades, 25c. to 50c. lower; stockers and feeders, 75c. to \$1.25 lower.

Sheep.—Compared with a week ago; best handy dry-ried shorn lambs strong; other lambs weak to unevenly lower; grassy and common kind, 75c. to \$1 down; spring lambs, 25c. to 50c. lower; sheep, 75c. to \$1.50 lower; fat ewes declined most.

### Cheese Markets.

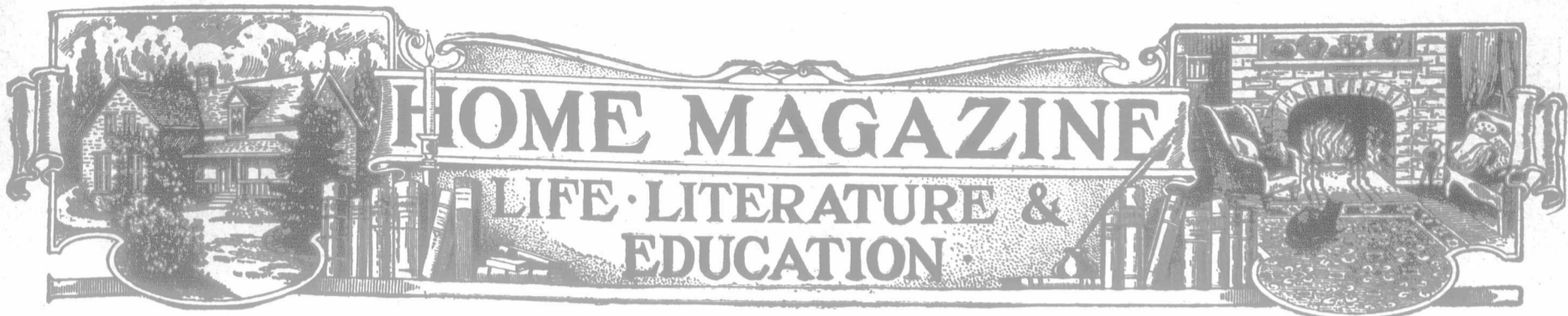
New York, flats, specials, 31¾c. to 32¼ cents; average run, 31c. to 31½c.; twins, specials, 32c.; average run, 31½c. to 31¾c.; St. Hyacinthe, 27½c.; Watertown N. Y., 30c.; Montreal, finest eaters, 28c. to 29c.; Belleville 28½c.

Country Parson to Village Blacksmith.—And now, John, I suppose the time has come to beat our swords into ploughshares?

Prosaic Smith.—Well, I don't know, sir. Speaking as a blacksmith of forty-five years' experience, I may tell you it can't be done.—Punch.

FOUNDED  
 May nothi  
 And ma  
 About thes  
 And ra  
 Strengthen  
 Withstan  
 This heart  
 chill,  
 Will keep  
 Peace shall  
 rooms,  
 Touching  
 Till every o  
 Into a sh  
 Laughter s  
 And, th  
 thin,  
 May they  
 And hol  
 Buildin  
 DURIN  
 D littl  
 Nov  
 over and  
 many of th  
 intending i  
 has becom  
 interest. A  
 resembling  
 in the U  
 many mon  
 Canada.  
 Someone  
 requisites  
 house are:  
 site, and a  
 of these goe  
 is not usua  
 it deserves  
 overlooked  
 With the  
 of an article  
 to do. Up  
 architect h  
 mission to s  
 An ideal  
 (1) Com  
 nearest vil  
 can be fou  
 must be s  
 given the p  
 to town a c  
 and a shor  
 matter. Th  
 days of pr  
 "foot it," a  
 extra mean  
 ly in winter  
 or less drif  
 (2) A d  
 the cellar  
 is a great  
 and econom  
 is inevitab  
 prevalent s  
 while a cel  
 ruination o  
 stored there  
 (3) The  
 beautiful as  
 afford a fin  
 matter. It  
 of artistic  
 comes in sig  
 against its l  
 It is worth  
 beautiful la  
 rooms of th  
 it is, wear  
 another in  
 autumn and  
 sunrise to s  
 the shadow  
 grubbing so  
 these things  
 mean much  
 "beginning"





### The New House.

May nothing evil cross this door,  
Withstand the battering of the storm;  
And may ill-fortune never pry  
About these windows; may the roar  
And rains go by.

Strengthened by faith, these rafters will  
Withstand the battering of the storm;  
This hearth, though all the world grow  
chill,  
Will keep us warm.

Peace shall walk softly through these  
rooms,  
Touching our lips with holy wine,  
Till every casual corner blooms  
Into a shrine.

Laughter shall drown the raucous shout;  
And, though these sheltering walls are  
thin,  
May they be strong to keep hate out  
And hold love in.

### Building the New House.

**D**URING the war comparatively little house-building was done. Now that the long turmoil is over and the soldiers have returned, many of them with wives and many more intending to marry, the "new house" has become, once more, a subject of interest. Already, it is said, something resembling a furor for building has set in in the United States, and before very many months it may be expected in Canada.

Someone has said that the three main requisites for the erection of the new house are: the necessary cash, a good site, and a good architect. The first of these goes without saying; the second is not usually accorded the importance it deserves; and the third is usually overlooked altogether.

With the matter of cash the writer of an article on house-building has nothing to do. Upon the questions of site and architect he may, however, have permission to say a word.

#### The Site.

An ideal site on a farm demands: (1) *Convenience to school and the nearest village or town*, if such a spot can be found on the place. If either must be sacrificed let the school be given the preference. Usually in going to town a car or horse is taken anyway, and a short distance further does not matter. The children, however, in these days of pre-consolidated schools, must "foot it," and the length of a field or two extra means to them a great deal, especially in winter when the road may be more or less drifted.

(2) *A dry, well-drained spot*, where the cellar will give no trouble. This is a great consideration both to health and economy otherwise. A damp house is inevitably an unhealthy house, a prevalent source of colds and rheumatism; while a cellar that admits moisture is ruinous to the vegetables and fruits stored there.

(3) *The site chosen should be as beautiful as can be found*, and should afford a fine view. This is no trifling matter. It is worth while to feel a thrill of artistic satisfaction every time one comes in sight of the "old home," beautiful against its background of trees and sky. It is worth while, also, to look out at a beautiful landscape from all the living rooms of the house; a changing landscape it is, wearing one face in spring, and another in summer, and yet others in autumn and winter,—varying even from sunrise to sunset, as the sky changes and the shadows fall differently. To the grubbing soul that is blind to beauty these things may mean little, but they mean much to every one who even to a "beginning" degree, appreciates beauty.

Even the grubber may find out their value if ever he wants to sell his place, for the house in a beautiful setting, with fine views from its windows, is likely to appeal to more buyers than the one that has no such recommendation. There are more people—thank heaven—who appreciate beauty than not, and their numbers are steadily growing.

As a rule the best site is found on rising ground, and if at all possible, it should be backed, or flanked, by trees already grown, either fruit-trees or woods. If it is impossible to find the right spot with the right trees, the right spot should be chosen and the trees planted at once. Quite large saplings may be transplanted by using modern methods.

#### The Architect.

A good architect is a real necessity, if a wholly satisfactory house is to be expected, and yet it is little short of wild foolishness to turn the whole matter over into the hands of any architect who may be recommended. Many an architect has not the slightest inkling of the artistic in his whole make-up, and the one who recommends him to you may not have, either. The "good" architect is a combination of the artist, the engineer, and the honest man, and it will pay in the long run to find him, even if one has to pay him more for his services. His duty, then, will be not only to draw satisfactory plans and specifications, but also to visit the builders frequently while they are at work to see that they are carrying out the plans perfectly and using good

materials. Otherwise the whole plan may be botched and, unless the contractor happens to be a man of sterling honesty, inferior material and slipshod construction may ruin the whole effect and lasting quality of the little home you have been so long and anxiously planning. It is to be hoped that you have been long and anxiously planning in it, for the new house is worth long study. Once it is up, if there are mistakes you will have to put up with them, and "putting up with" is but sorry comfort. The best way is to decide first of all

just about how much you can afford to put into the new house, then proceed to collect pictures and plans of houses that suit you, and ideas for one detail and another from every available source. Keep the pictures in a drawer, also a book in which you have jotted down or pasted the ideas. Decide whether your house is to be brick, stone, stucco or frame, or a combination of two materials. Decide whether it is to be small and cozy, low and broad (often a very picturesque effect), or tall and stately. Look at the site and imagine you see first one kind of house and then another, upon it. Really it is not so very hard to "see" a house that is not yet up, if you keep at it. Then, when you have squeezed dry every source of ideas for the house that can fit your wishes, and when you are pretty sure just about what you want, consult your architect. Show him your pictures and tell him your ideas. If he is the right sort he will be glad of this. Be sure, too, to listen to his suggestions with an open mind. He may be able to suggest clear improvements on your plan; but he will have some sort of idea what you like, and will be almost sure to concede to it, suggesting improvements only, not a drastic change of the whole thing. Weigh carefully in your own mind what he suggests, and if, quite clearly, you feel your own idea is better, you are perfectly free to insist, giving reasons therefor.

#### The House Itself.

In some respects the outside of the house matters less than the inside, in which one has to live, and yet the out-

side matters greatly. Most certainly outside and inside, the house should be built for strength, durability, convenience and beauty. Not one of these can be left out. Remember, and keep remembering that as a great builder once said—"a cottage costing \$3,000, or less, planned by an artist for the needs and tastes of the members of the family is a better investment than a \$30,000 mansion void of the magic touch of refinement and affection." How great the advisability, then, unless one's own tastes are artistic, to consult the opinions of those

who are artistic, and secure a real artist, if possible, in the architect.

The very first rules, perhaps, in consideration of the outside of the house are:

(1) *Never think that anything merely odd is good design.*

(2) *Avoid useless, meaningless trimming as you would the plague.*

These two negative rules stand first in all the "Don't" lists of good taste in architecture. Unusualness in design may be much to be desired—often the usual building in a neighborhood is bad in the extreme; but mere oddness, freakiness, grotesqueness, is always bad. . . . Useless trimming—bits of fretwork and "jigsaw" work ranged in gables and around verandahs like paper-lace on a wedding-cake, useless cupolas, mock "towers" that look like silos, "fancy" variegated painting, silly little windows of stained glass, etc.—all of these are usually to be kept farther away, if one would follow good taste, than the distance avoided by the proverbial "forty-foot-pole."

Perhaps the first rule among the positives, in regard to architecture is "PROPORTION, PROPORTION, PROPORTION!" A house of fine and exquisite proportions, and unspoiled by vulgar trimming, is always a delight to the eye. In its proportion there is harmony, in its simplicity refinement. Be it ever so small, it proclaims the home of "real folk," gentlemen and ladies in the true sense of the word. With vines for adornment, shrubbery about the foundations, and trees near for background, what need has it of other adornment?

(To be continued.)

### Canadian Wild Flowers.

**Bunchberry** (*Cornus Canadensis*), also known as *Low or Dwarf Cornel*:—Very common in damp woods in many parts of Canada, even in far Northern Ontario, is this pretty little low-growing plant, which belongs to the Dogwood family. The white portion of the "flower" is not part of the flower at all, but merely a protective involucre to take care of the very tiny real flowers, which are greenish in color and closely crowded together in the center. After the blossom of the bunchberry has passed—it flowers in June—the flower-stalk stretches upward and bears a closely clustered bunch of pretty red berries that are edible and used, in some places, for making jam.

### Post for Mrs. Muldrew.

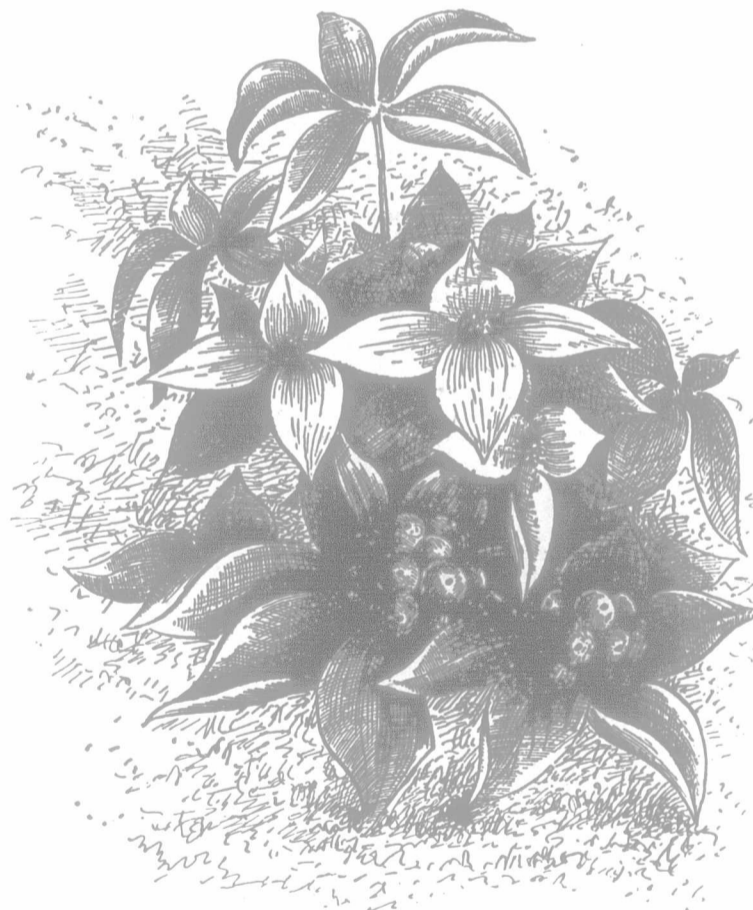
Mrs. Jean Muldrew, well-known to Women's Institute workers, has been appointed Director of the Home Branch of the Soldier Settlement Board, with headquarters at Ottawa.

In connection with her new work, Mrs. Muldrew plans a campaign for the improvement of home conditions on the farm. Her ideas are altogether practical. She is at the service of the women who are going out on the land with their husbands, and is ready to answer correspondents who may need help at this time.

### Smiles.

A Rest Cure.—"Some men," said Uncle Eben, "goes fishin' not so much for the sake of de fish as for de chance to loaf without bein' noticed."—*Washington Star*.

The city visitor to the mountains affected a keen interest in the work of the farm. Inquiring about Jack, one of the sons, she was told that he was out grubbing trees. "How very interesting," she said, "and what does he do with the grubs when he catches them?"



Bunchberry.

### Chicago.

Weight, \$19.80 to \$19.90, \$19.70 to \$20; light weight \$18; light lights, \$18 to \$19; packing sows, smooth, \$17.25 to \$18.

With a week ago, beef steers, 75c. to \$1.00; grades, 50c. to 75c.; and heifers, 50c. to \$1.00; and cutters, 25c. to 50c.; and bulls, mostly 25c. to 50c.; and cows, 50c. to 75c.; and calves, 25c. to 50c.; and stockers and yearlings, 25c. to 50c.

With a week ago, and shorn lambs strong; and unevenly lower; and on kind, 75c. to \$1.00; and on kind, 25c. to 50c.; and on kind, 25c. to 50c.; and on kind, 25c. to 50c.; and on kind, 25c. to 50c.

### Markets.

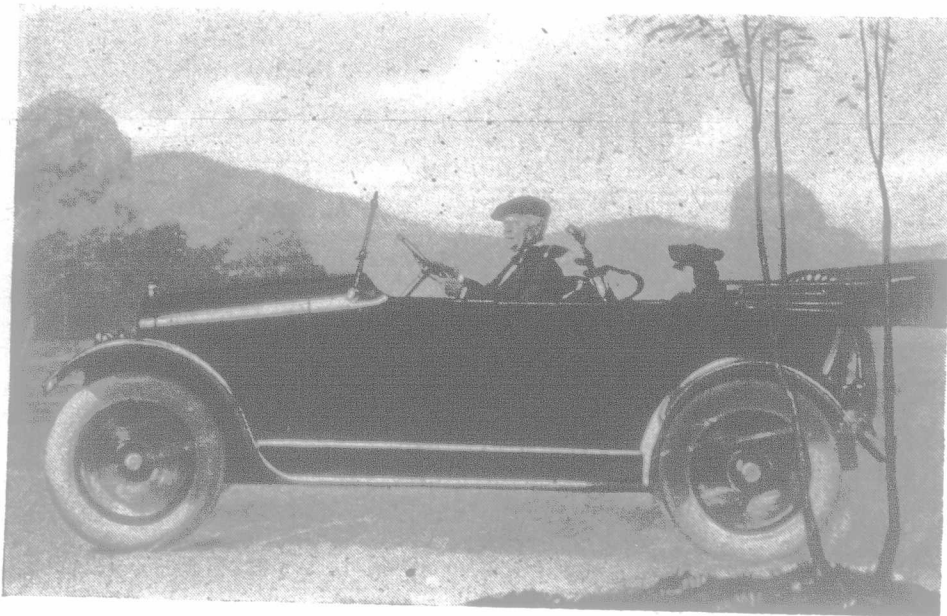
Specials, 31 3/4c. to 32 1/4c.; 31c. to 31 1/2c.; twins, 27 1/2c. to 28 1/2c.; Watertown, 28 1/2c. to 29 1/2c.; finest caterns, 28 1/2c. to 29 1/2c.

Village Blacksmith. Suppose the time has swords into plough-

Well, I don't know, sir. Blacksmith of forty-five may tell you it can't

# Overland

TRADE MARK REG.



## Oh Boy!

The owner of an Overland owns all out of doors. To him even more important than *where* he drives is *how* he rides. In his Model 90 he goes in comfort, and with an enjoyment possible only because of the high quality and fine appearance of his car. He probably was first attracted to it by the praise of owners. Now he makes new friends for Overland by his own enthusiasm over the exceptional economy and the faithful performance of his car. This kind of appreciation among the thousands of Overland owners is a safer buying guide for you than specifications. It explains why so many people are buying Model 90 right now.

WILLYS-OVERLAND LIMITED  
Willys-Knight and Overland Motor Cars and Light Commercial Wagons  
Head Office and Works, West Toronto, Ontario  
Branches: Montreal, Winnipeg, and Regina

Model 90 Touring, \$1360; Model 85-4 Touring, \$1495; Model 88-4 Touring, \$2575; Willys Six, \$2425.  
J. O. B. West Toronto

## Hope's Quiet Hour.

### The Master of My Life.

Then said Jesus unto the twelve, Will ye also go away? Then Simon Peter answered Him, Lord, to whom shall we go? Thou hast the words of eternal life.—S. John 6:67, 68.

The writer of "Christianity and the Social Crisis" ends his Preface with these words: "If this book in some far-off way helps to ease the pressure that bears them (the downtrodden) down and increases the forces that bears them up, I shall meet the Master of my life with better confidence." Those words, "the Master of my life," will go home to many readers of this Quiet Hour. I don't know much about the working of "wireless" telegraphy, but I suppose the common idea is true that no apparatus can receive a message unless it is tuned in harmony with the sending machinery. Only those who have chosen Christ as their lawful Master can understand those words of Professor Rauschenbusch. I send out my weekly Quiet Hour, feeling that if it helps any soul to realise more clearly the Presence of Christ in our midst, I shall meet the Master of my life with better confidence.

Our Lord had been followed from the other side of the lake by eager crowds. The opportunity to become a popular preacher was offered—and He refused it. He Who has proclaimed what a friend of mine calls "the beatitude of the persecuted and the woe of the popular," spoke that day words which caused the crowds of half-hearted followers to melt away like snow in the sunshine. No wonder He turned to the twelve men who had been His daily companions, and asked: "Will ye also go away?"

St. Peter's answer was ready and confident, on behalf of himself and his comrades: "Lord, to whom shall we go? Thou hast the words of eternal life. And we believe and are sure that Thou art that Christ, the Son of the living God."

The words of his Master were mysterious and hard to understand. He had just told them that He was the bread of life, and they must eat His flesh and drink His blood if they would have eternal life. The sacrament of "The Lord's Supper" had not then been instituted, and even the apostles might have echoed the amazed question of outsider: "How can this Man give us his flesh to eat?" Many, who had owned Him as Master, "went back and walked no more with Him," but those who knew Him best could not tear Him out of their hearts so easily. To whom should they go? Could any other leader be named in the same breath with the Holy One of God?

It is an amazing thing that anyone should hesitate about the choice of a leader. We naturally want to follow the best, and Jesus of Nazareth reigns supreme among men. The nineteen centuries since His birth are starred with shining examples of men and women,—His humble followers,—but, as the stars are drowned in light when the sun appears, so the words and deeds of Christians look pale and dim beside the wondrous Life which is slowly transforming the world.

The idea of a League of Nations has lifted its head above the chaos of war-division. But the seed of worldwide brotherhood was planted by the Great Sower, who calmly announced as a truth which admitted of no dispute: "One is your Master, even Christ, and all ye are brethren."—S. Matt. 23:8, 10. Racial hatred ought to be impossible in a worldwide kingdom of brothers under the rule of the Prince of Peace.

The King of the Jews was rejected by the Jews, and His claim to be the rightful Master of the lives of men seemed to be utterly disproved as He hung in dying agony on the shameful Cross. Yet Death was brushed aside like a fleecy cloud which for a moment hid the face of the Sun, and the Risen Jesus again asserted His claim to the allegiance of every creature. With royal authority He sent out the little band of disciples to "teach all nations" and baptize them into His Church. Quite undismayed by the apparent failure of His own personal mission, He promised to be with His people unto the consummation of the age. That promise was intended to fill

the hearts of courage—and the harvest of the labourers. The faithfulness of the harvesters may have the world for a dream. It d

**e's Quiet Hour.**

**ter of My Life.**

Jesus unto the twelve, go away? Then Simon Him, Lord, to whom shall hast the words of eternal 6: 67, 68.


"Christianity and the nds his Preface with these is book in some far-off ease the pressure that (downtrodden) down and orces that bears them meet the Master of better confidence." Those ster of my life," will go readers of this Quiet know much about the ireless" telegraphy, but ommon idea is true that an receive a message d in harmony with the ery. Only those who ist as their lawful Master those words of Professor I send out my weekly ing that if it helps any ore clearly the Presence midst, I shall meet the e with better confidence, been followed from the lake by eager crowds. to become a popular fered—and He refused s proclaimed what a calls "the beatitude of and the woe of the that day words which ds of half-hearted fol- way like snow in the onder He turned to the had been His daily asked: "Will ye also

swer was ready and all of himself and his to whom shall we go? ds of eternal life. And re sure that Thou art on of the living God." s Master were myster- nderstand. He had just e was the bread of eat His flesh and drink y would have eternal ent of "The Lord's then been instituted, les might have echoed on of outsider: "How us his flesh to eat?" yned Him as Master, yned no more with who knew Him best n out of their hearts om should they go? ader be named in the e Holy One of God?

g thing that anyone out the choice of a ally want to follow s of Nazareth reigns men. The nineteen s birth are starred es of men and women, ows,—but, as the in light when the words and deeds of and dim beside the ch is slowly trans-

ague of Nations has e the chaos of war- eed of worldwide anted by the Great y announced as a ted of no dispute: r, even Christ, and —S. Matt. 23: 8, 10. t to be impossible ngdom of brothers Prince of Peace.

ews was rejected by im to be the rightful f men seemed to be He hung in dying meful Cross. Yet aside like a fleecy ment hid the face. Risen Jesus again o the allegiance of h royal authority e band of disciples and baptize them nite undismayed by f His own personal d to be with His summation of the as intended to fill



**COWAN'S MAPLE BUDS**

**A Dainty Solid Chocolate**

**Refuse Imitations of this Delicious Confection**

**Cream of the West Flour**

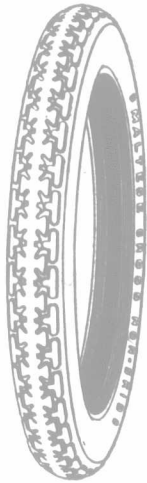
*—the hard wheat flour that is guaranteed for bread*



The high gluten flour prized for splen- did big loaves of delicious, nourishing bread. Ask for it at your dealer's.

The Campbell Flour Mills Company, Limited, West Toronto

**MALTESE CROSS TIRES**

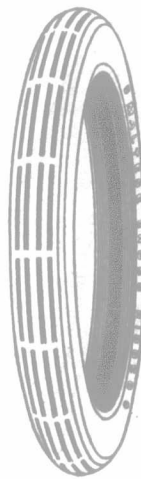


Farmers and other motorists should demand a tire that will give the utmost service. Maltese Cross Tires are giving thousands of motorists perfect service and are particularly suited for driving on country roads.

Maltese Cross Tires give maximum mileage and minimum road troubles. Think what this means to you. Ask your neighbor who is using Maltese Cross Tires what he thinks of them. That's the best way to learn their true worth.

**GUTTA PERCHA & RUBBER LTD.**  
Head Offices and Factory: TORONTO

BRANCHES: Halifax, Montreal, Ottawa, Toronto, Fort William, Winnipeg, Regina, Saskatoon, Edmonton, Calgary, Lethbridge, Vancouver, Victoria.



the hearts of disciples with hope an courage—and it is still a word of power. The harvest-field was immense and the labourers were few. In moments of faithlessness those first Christian mission- aries may have felt that the call to win the world for Christ was an impossible dream. It does not look impossible

to-day; for Christianity stands supreme among the religions of the nations, and it has proved its power to uplift de- graded savages. More than that, the Name of Jesus stands first among names in the hearts of a great multitude which no man can number. I have found, during my work among the sick, that

the Friend Who can give joy in sickness is the ever-present Good Physician. He is on duty day and night in each hospital ward, and many hearts thrill responsive to His touch. Rauschenbusch is stating an every- day fact when he says: "To-day, as Jesus looks out upon humanity, his

spirit must leap to see the souls responsive to His call. They are sown broadcast through humanity, legions of them. The harvest-field is no longer deserted. All about us we hear the clang of the whetstone and the rush of the blades through the grain, and the shout of the reapers. With all our faults and our slothfulness we modern men in many ways are more on a level with the real mind of Jesus than any generation that has gone before. If that first apostolate was able to remove mountains by the power of faith, such an apostolate as Christ would now summon might change the face of the earth."

Only the Master Himself knows how many hearts are reaching up in love to His and only He knows how many acts of willing service are daily laid at His feet.

As I wrote this page the postman brought a letter from a young woman whose brother passed suddenly away a week ago. She says: "We cannot mourn for him for we know our loving Father has just called him to Higher Service."

How many thousands of aching hearts have been strengthened by that hope, during the war, and the epidemic which followed it. Higher "Service!"—obeying the Master of one's life more perfectly! That is what we want most, though we may show very little sign of our heart's desire. The people who think they know us best may call us hypocrites, because we profess to be "disciples of Christ" and yet are conceited and selfish, behaving very much like the professed "men and women of the world." And yet—like the apostle who denied his Master—we can turn from the sins, which we hate even when we are committing them, to the Master we love even though we may deny Him, and say confidently though humbly: "Lord, Thou knowest all things; Thou knowest that I love Thee." When I seem to be a servant of the world I still desire with all my heart to be a faithful servant of the Master of my life.

"I step, I mount where He has led; Men count my haltings o'er; I know them; yet, though self I dread, I love His precept more."

That first miracle in Cana of Galilee was also a parable of life—life spent in the service of Christ. Those who willingly and enthusiastically, obey the command: "Whatsoever He saith unto you, do it!"—as the servants at the wedding feast filled the water pots "up to the brim"—soon discover that a miracle has changed their lives. The days, filled to the brim with common- place work, are transfigured and glorified. The water in those pots was warm and unrefreshing—intended for purifying—but it was changed into the best wine. So the routine work of every day, if done for Christ and in His strength, becomes a fresh joy, instead of weary drudgery, each day that passes. Any life may be glad and beautiful if spent with the Worker of Nazareth, in His workshop and by His side.

Though it is my glad privilege to speak to you,—my fellow-servants,—about our Master; the poor quality of my service is well-known to Him. Though I may seem to you to be preaching from a pulpit, my only rightful place is the penitent's bench. But our Master is still the Friend of sinners—that is my great claim upon Him. So, when failure tries to kill hope in my heart, I go straight to the Master whose cause I have dishonored.

"Straight to Thy Presence get me and reveal it, Nothing ashamed of tears upon Thy feet, Show the sore wound, and beg Thine hand to heal it, Pour Thee the bitter, pray Thee for the sweet."

"Yea, thro' life, death, thro' sorrow and 'thro' sinning Thou shalt suffice me, for Thou hast sufficed— Christ is the end, for Christ was the beginning, Christ the beginning, for the end is Christ."

If we turn from Him, to whom shall we go for a Master who can satisfy the desires of our souls? Do you know any other who can give joy and peace—and cleansing—to sinners who long for soul-

beauty? I look through the universe, and then turn back to the one Master of my life, echoing St. Peter's words: "Lord, to whom shall we go? Thou hast the words of eternal life."

DORA FARNCOMB.

**Gifts for the Needy.**

A Plattsville reader, A. V. R., sent a dollar for the needy, and Mrs. A. M. Parkhill, dropped a five-dollar donation into the Q. H. P., asking that some of it be used for needy little children—(there is little fear of my over-looking such a request.) Many parcels of papers for the "shut-in" have also arrived during the last week. My arms were full yesterday when I visited the hospital.

I find that one of my "Quiet Hour" Mss.—which should have reached the "Advocate" office March 5,—went astray. Looking through the Q. H. account book I see that two donations came in that week. "Another Friend," Dundas, Ont., sent \$2; and C. K. A., Thurso, Que., sent \$4. I acknowledged those gifts the first week in March; but, if my "copy" was lost between here and London, of course the donors never heard that their gifts had been received and passed on.

Very hearty thanks to all my good friends!

DORA FARNCOMB.  
6 West Ave., Toronto.

**The Ingle Nook**

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

**The Art of Keeping Cool.**

WITH the onrush of hot weather, which came so suddenly this year, the question of keeping cool was forced to the top in short order. Of course it's impossible, when the thermometer registers 90 degrees in the shade, really to keep cool, yet it is possible to be much cooler than one might otherwise be, if one sets about the matter aright.

In the first place one simply can't feel comfortable in hot, tight clothes. In this the country woman certainly has the advantage. She can go about home about as loosely and thinly clad as anyone. The pinch comes when it is necessary to go to town for a day's shopping and she feels obliged to put on corsets and tighter shoes with which to face the hot sidewalks. Corsets certainly are an abomination in hot weather, but there are means of escape. May I whisper a secret? Scores and scores of women—"good dressers" at that—are giving them up for the summer. You see the loose straight dress styles make it quite impossible to detect whether a woman has them on or not, unless, of course, she is of the fat variety. So the woman-who-would-be-comfortable wears the following: a lisle thread combination, a thin hooked brassiere to give fit to the waist, a thin underskirt with a loose band, and a straight one-piece gingham or voile one-piece dress. A loose-belted suspender arrangement is worn to hold up the stockings and keep the abdomen down, and may be made at home of stout cotton, with garter elastic for the garter portion. Buttonholes are worked in the elastic and buttons sewn to places on the stocking-top which are strengthened by bits of stout cotton sewn tightly on. . . If one is not slight enough to adopt this outfit, recourse may be had to the net corset, or to an elastic girdle which may be bought in varying widths with suspenders attached. . . Canvas Oxfords, with sensible medium, well-set heels (under the heel, not pushed towards the center of the foot), a light hat and a green silk or linen parasol complete an outfit which is about as cool as can be contrived, suitable for either street wear or garden parties.

Another item in keeping cool is to eat the right foods. All fats are heating, therefore bacon, etc., should be left aside until the cool weather in the fall justifies its being used again. Oatmeal also is heating, and so are suet puddings. Use the lighter cereals such as cream of



**Less Gas—More Mileage**

THE addition of the new and stunning Special Touring model rounds out the Briscoe line.

Whatever model you may select, your Briscoe will more than "hold its own" with cars of much higher price.

Cars of true economy—proven economy—with a record of 29.35 miles per gallon of gasoline on a 10-day non-stop run.

The following prices (f.o.b. Brockville) are subject to war tax:  
 Special Touring.....\$1,350  
 Standard Touring.....\$1,225

**THE CANADIAN BRISCOE MOTOR COMPANY, LIMITED**  
 HEAD OFFICE, TORONTO      FACTORY, BROCKVILLE

Toronto Agents: BAILEY & DRUMMOND MOTOR CO., 497 Yonge St. ■  
 Hamilton Agents: LIVINGSTONE BROS., 97 King Street West  
 London Agents: BINDER & MORRISON, 174 Fullarton Street



**Tires That Save Money and Guarantee Satisfaction**

Satisfied users throughout the Dominion are loud in their praise of the merits of the Tires we offer at such money-saving prices.

Quality and durability are pronounced features in their manufacture—only the best of material being used. In ordering Tires from us you risk nothing. We ship on approval, C.O.D., with the option of returning at our expense. These Tires are the product of one of Canada's four leading Tire manufacturers.

Why not take advantage of this offer to-day?—look the prices over and mail your order.

Remember! We pay all express charges to any address in Ontario, Quebec or the Maritime Provinces, and unless, on examination, you are perfectly satisfied that the Tires are all we claim, you don't have to buy them.

Size	Plain	Non-Skid	Size	Plain	Non-Skid
28 x 3	\$10.50	\$11.50	36 x 4	26.00	29.20
30 x 3	10.50	11.50	33 x 4 1/2	24.00	27.50
30 x 3 1/2	13.45	15.45	34 x 4 1/2	25.00	27.50
32 x 3 1/2	13.00	16.70	35 x 4 1/2	28.00	38.00
31 x 4	18.00	22.00	37 x 4 1/2	29.00	39.00
32 x 4	19.00	22.00	37 x 5	35.00	40.00
33 x 4	22.60	27.10	35 x 5	35.00	42.50
34 x 4	23.40	28.10	37 x 5	35.00	45.00
35 x 4	25.75	28.30			

30 x 3 1/2 Tubes, Fully Guaranteed \$2.25

**Security Tire Sales Co.**  
 516 1/2 Yonge St. TORONTO      211 1/2 Sherbrooke St. W. MONTREAL

wheat; eat plenty of vegetables, green salad plants, bread and butter, and fruit. Omit rich cake and chocolate pies. Drink quantities of cold water, lemonade, etc., to make up for the rapid evaporation of moisture from the body. Some people fall back on lemonade and iced tea for meals, but it is a question whether too much cold drink taken into the stomach at meal-times is not rather a hindrance

to digestion. Even in hot weather a good cup of hot tea is most refreshing, and it is not harmful if the water is poured off the leaves in exactly 3 minutes. An expert in tea-making gives the following rule: Always use a tea-drawer. Have it perfectly clean and dry. Warm the tea in it, then pour on water that has just come to the boil. Let stand, closely covered, on the back of the range or other warm spot, for 3 minutes, then drain off into the teapot, add the required amount of hot water and pop a cozy over the pot to keep it hot until all the tea is used. The best tea is made by using 1 level teaspoonful of tea for each cup (some add an extra one "for the teapot"), and the cream should be thick and sweet.

Ice cream is not as good as water-ice, sherbet, etc., for hot weather. It cools for the moment but the cream contains fat, and, as remarked before, all fat is heating.

To keep the house cool throw all the windows open at night and keep the shades down all day on the sunny side on the hottest days. Also keep the windows closed during the day when it is very hot. This will keep out the hot day breezes, and leave the rooms cooler for sleeping. Live out of doors on a shaded porch or in the shade of trees all you can. The air will stand a chance of being kept moving there and will be good for you. Take your work out there. Peel your potatoes there, sew there, induce the whole family to get into the open-air habit; there is nothing like it for healthfulness, and besides the house will be cleaner than when it is constantly used; that will mean less exertion for you when the temperature is at gasping-point. If it is practicable have everyone sleep out of doors. Every house should have a sleeping porch, but a floored tent on the lawn or in the orchard will do very well. The best canvas for either tent or awning for the sleeping

JUNE 12  
 long  
 pan  
 This  
 know  
 per  
 only  
 not  
 amo  
 rods  
 amo  
 In J  
 rodd  
 Prev  
 I  
 pape  
 equip  
 I  
 rods  
 T  
 on pr  
 N  
 when  
 weigh  
 L  
 they v  
 C  
 able c  
 Y  
 TH  
 porch is da  
 white the l  
 one is likel  
 four—three  
 in these da  
 the morning  
 Two othe  
 cool are a  
 cooker. Equ  
 can be kept  
 when the the  
 If one can  
 is a second  
 in a shed ou  
 be a mere  
 or board "si  
 as the weat  
 be added but  
 It is absolut  
 have the s  
 spark-protec  
 against fire,  
 other buildi  
 ON the 2n  
 had a  
 popula  
 the surround  
 fore Park to  
 on the 60 va  
 ing there. E  
 progressive c  
 it is rumoure  
 for a "Peony  
 of the Japan  
 the very muc  
 in St. Thoma  
 ental reputa

## Do You Own a Building?

We want to tell you something about lightning rods—it won't take long and there may be some money in it for you.

Two-thirds of all rural barn claims settled by forty Insurance Companies in Ontario during a period of twelve years were due to lightning. This is a Government report—it's not dope.

For 1917 the Ontario Fire Marshall reports that of all loss from all known causes to farm property, lightning was responsible for fifty-one per cent.—the amount of damage in dollars being \$660,164. One building only of the whole lot was equipped with lightning rods—the others were not rodded.

For 1913 he reports that the lightning loss to unrodded buildings amounted to \$504,27 and that three buildings equipped with lightning rods were damaged.

For the month of May last year the losses on unrodded building amounted to \$121,012 and there was no damage to rodded buildings. In June 1918 the total loss by lightning was \$73,299 of which \$28 was to rodded buildings. The others were not rodded.

The Fire Marshall's Department, Toronto, have a Booklet: Fire Prevention on the Farm and Elsewhere—well worth sending for.

Last year the Ontario Government issued full page ads. in the Farm papers circulating in Ontario, urging Farmers in the strongest terms to equip their buildings with lightning rods.

Bulletin 220 of the Ontario Department of Agriculture says, "lightning rods properly installed are almost absolute protection."

The Manitoba Agriculture college at Winnipeg have a good bulletin on protection from lightning. Its number is 34.

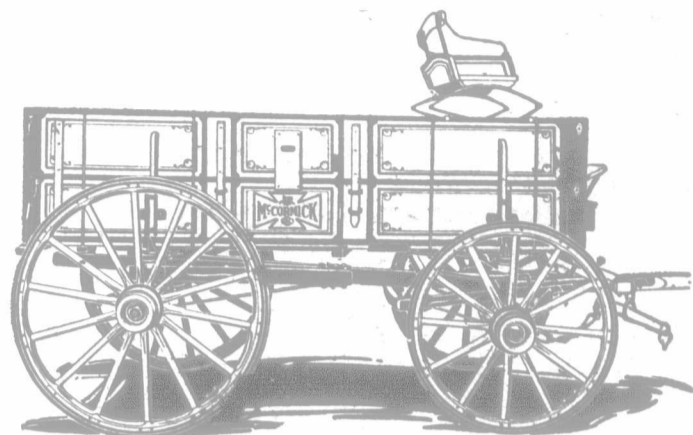
Ninety-two Insurance Companies in Ontario give reductions in rate when buildings are properly equipped with lightning rods of standard weight and design.

Do you know what it would cost you to replace your buildings if they were burned?

Can you afford to take the chance of losing them through a preventable cause?

Your inquiries will receive courteous attention. Write us to-day.

**THE UNIVERSAL LIGHTNING ROD CO'Y.**  
HESPELER, - ONTARIO



## Ask to See This Wagon

THE McCormick is a real wagon. It is worth seeing and better worth having—a wagon you will be proud to drive down the road—one that you will think more and more of the longer you use it and as you come to appreciate the quality of the service it gives you.

Not only is all the material in it of the very best, but the different parts are so proportioned that, without an ounce of unnecessary weight, the wagon is far stronger than the average. Light draft is assured by a skein and skein box construction that prevents undue wear at the collar and that keeps sand and dirt out of the bearings.

Note the number of steel plates used to protect the wood of the wagon. Those plates insure long service. When wood parts rub together they weaken or break, and it is difficult and expensive to replace them. The McCormick steel plates are inexpensive and easy to replace when worn. The wood, the body and strength of this wagon, need never be injured. With proper care in this respect a McCormick wagon will last and do good work for many years.

Ask to see the McCormick wagon. Look it over carefully before you buy. Compare it in every way with every other wagon. Write us for folders telling you all the special McCormick wagon features. This is a wagon you'll like.

**International Harvester Company of Canada, Limited**

**BRANCH HOUSES**  
WEST—Brandon, Man., Calgary, Alta., Edmonton, Alta., Estevan, Sask., Lethbridge, Alta., N. Battleford, Sask., Regina, Sask., Saskatoon, Sask., Winnipeg, Man., Yorkton, Sask.  
EAST—Hamilton, Ont., London, Ont., Montreal, Que., Ottawa, Ont., Quebec, Que., St. John, N. B.

porch is dark green or brown; if it is white the light glares in too much and one is likely to be awakened by it at four—three—(what time is it anyway in these days of clock-confusion?) in the morning.

Two other great helps in keeping cool are an oil-stove and a fireless cooker. Equipped with these the kitchen can be kept comparatively livable even when the thermometer is on the up-scale. If one cannot have them the alternative is a second stove—an old one will do, in a shed out of doors. This shed may be a mere roof of boards with canvas or board "sides" to put on or take off as the weather demands. A floor may be added but is not absolutely necessary. It is absolutely necessary, however, to have the stove-pipe equipped with a spark-protector, and in every way safe against fire, which might spread to the other buildings.

ON the 2nd of June St. Thomas, Ont., had a "Lilac Day," when the population and many people from the surrounding country went to Pinafore Park to see the fine masses of flowers on the 60 varieties of bushes now growing there. Every year, almost, the same progressive city has a "Tulip Day," and it is rumoured that it has been preparing for a "Peony Festival."—Makes one think of the Japanese, doesn't it? with their "Cherry Blossom Festivals."—Of course the very much alive Horticultural Society in St. Thomas, which has won a continental reputation, is at the back of all

these flower celebrations, as well as at the back of the movement that is rapidly making that place one of the prettiest little cities in America.

It's a pretty idea, is it not?—these flower fêtes. One, too, that can be taken up by any village or any country community.—But of course, people have to prepare beforehand for the flowers. That, however, is not only a pleasant task but a profitable one, as the planting of vines, shrubbery and trees always adds to the value of property.

—JUNIA.

### Re Paint.

Would the lady who sent the paint recipe to the Advocate please tell in your valuable paper, what kind of oil she used for the boiled paint. The recipe is 5 lbs. yellow ochre, ½ lb. glue, the whites of 6 eggs beaten stiff, mixed with soft water. Last year in March we painted our kitchen floor, and it was all right, but 2 weeks ago we painted it just the same, and it is all washing off. We don't know what kind of oil they gave us, last year, but it made, it a dark yellow. This year they gave us boiled oil, and it is not washing well at all. The name signed was "Inquirer," Elgin County.

READER.

Will "Inquirer" please answer.

### June Cookery.

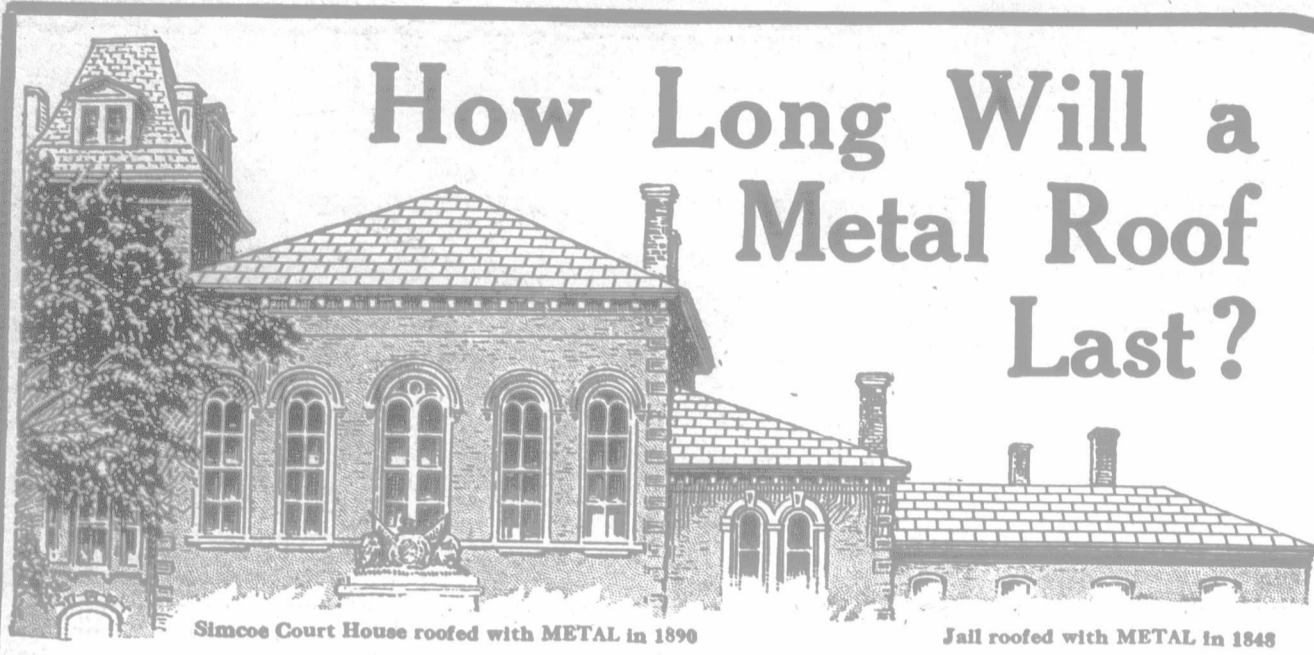
A Tasty Dish.—Take some cold spinach; or any other kind of greens, seasoned

well, and spread it on the bottom of a baking dish. Over it put some hard-boiled eggs cut in halves. Turn over this a sauce made by cooking together a cupful of milk, a tablespoonful of flour and a tablespoonful of butter (mixed together), ¼ cup grated cheese a little salt and pepper. Sprinkle the top with buttered crumbs and brown in the oven.—Both tasty and nutritious.

Buttercup Salad.—Hard-boiled eggs, lettuce, French dressing, mustard. Arrange small crisp lettuce leaves on individual dishes. Boil an egg for each dish, turning the eggs often so the yolks will be in the middle. Put them under water (so that the white will not harden) and peel. With a sharp knife cut the white through to the yellow in fine strips from end to end, leaving a space as large as a cent at each end uncut. Now place the eggs in a tea towel which has been dampened in warm water. When ready to serve take each egg between the thumb and finger, still keeping the warm cloth around it, and press together until the uncut places under the thumb and forefinger come together and the yellow part of the egg oozes between the white strips. Drop a mustard-spoonful of "made" mustard on the round uncut white portion of each egg. Place a flower shaped egg on each dish, curling the smallest leaves upward to represent the small leaves of the flower. Serve with French dressing in a small fancy pitcher.—A pretty dish for a "state occasion."

Cooking Spinach and Lamb's Quarters.—

Spinach is nine-tenths water, and the other tenth is mineral matter of very high medicinal value. The French, indeed, call this plant "the broom of the stomach." Being so beneficial to the blood it is worth all the drugs on the market as a complexion beautifier. Especially it is good for the liver, and for people who have to avoid starchy food. The "lamb's quarters" weed of garden and field is just wild spinach, and is quite as good as the cultivated variety, so everyone can have this healthful food. To cook the greens: Wash well through several waters, then put on in the smallest possible amount of boiling salted water. If the greens are very young only 2 tablespoonfuls to the peck will be needed; as they grow older more will be required. Let heat very gradually until the juices start then cook more rapidly, in an uncovered kettle, watching that it does not burn. There should be very little water to drain off at the last, as the valuable medicinal properties should be retained in the greens, not drained off down the sink. For variety you may add a green onion, or a pinch of nutmeg as the French do; a handful of sorrel will give a tart flavor, or mint can be used in which case add a little lemon juice or vinegar. Always serve greens very hot and as dry as possible; you may heat them in the oven in a colander just before serving. Add butter, pepper and salt, and serve either "as a vegetable" for dinner, or on hot buttered toast for a supper dish. Greens warm over splendidly, so leftovers should not be wasted.



Simcoe Court House roofed with METAL in 1890

Jail roofed with METAL in 1848

# How Long Will a Metal Roof Last?

IT is hard to say how long a Metal Roof will last.

Metal Shingles have been made in Canada for 34 years, and the first roofs covered with them are in good repair.

For example, there is the Court House at Simcoe, which has Metal Shingles that have been on for 29 years, and which look good for many more years.

And right next to the Court House is the jail that was roofed with Metal Shingles in 1848—71 years ago. They had to be imported, as Metal Shingles were not made in Canada at that time.

That seems a long time for a roof to last, but here is the proof:—

Simcoe, April 25th, 1919.

I certify to the fact that the jail in connection with Norfolk County Court House was erected in 1848 and that the roofing used was Metal Shingles which are still in place to-day and doing good service.

E. BOUGHNER,  
County Clerk, Simcoe.

The Galvanized Steel Shingles made in Canada to-day are unequalled in durability. They are made with a full knowledge of the severe Canadian climate, and are built of a quality of Galvanized Sheet Steel that experience has demonstrated is best suited for Canada.

The farmer who roofs with Metal settles his roofing problem for the years to come. He doesn't have to think about re-roofing the barn in a few years, as he will surely have to do if he puts on cheaper material. He doesn't have to worry about sparks setting fire to his roof—it can't be done. He does not fear the lightning—a Metal Roof, properly grounded, is immune from damage by the lightning stroke!

Rain, snow, dust, leaves and chaff slide right off a Metal Roof. Nothing can stick to its smooth, hard surface to cause the roof to rot. Zero days cannot crack it or the summer sun dry it out.

Galvanized Steel Roofs require no maintenance—no repairs. There is no better or more economical barn than one roofed and sided with Metal.

Catalogues and further information from any of the firms mentioned below. Send the size of your roof for free estimate.

The McFarlane-Douglas Company, Limited, Ottawa

The Pedlar People, Limited, Oshawa, Ontario.

The Metallic Roofing Company, Limited, Toronto

The Metal Shingle & Siding Co., Limited, Preston, Ont.

The Galt Art Metal Company, Limited, Galt, Ontario.

**STEEL Not "Tin"**  
There is no "tin" plate such as is used in tin cans, etc., used in Galvanized Steel Shingles or Corrugated Sheets. They are of sheet steel heavily coated with zinc spelter. To call Metal shingles a "tin" roof is like calling a steel armoured battleship a "tin" boat.

## Roof with Metal for safety and permanence

### The Scrap Bag.

#### Silk Stockings.

Wash silk stockings as soon as you take them off after each wearing and they will wear much longer.

#### Patent Shoes.

Rub patent leather shoes at night with vaseline, rubbing it off well with a rag in the morning.

#### To Wash White Silk.

White silk waists, etc., will turn yellow if washed in hot water. Use cold water and a mild white soap.

#### A Cucumber Hint.

A writer in Suburban Life says: "There is no need for throwing lime, ashes, road dust, etc., on cucumber vines, or covering with cheese-cloth to protect them. Simply plant a large onion in the center of each hill. Your vines will not be destroyed by insects if you use this method."

#### An Iceless Refrigerator.

An iceless refrigerator that will keep milk, meat, etc., much better than without it is made of a four-legged stool or similar contrivance (made of a box will do), with a shelf inserted about midway.

One shown by the Housewives' League at a Baby Welfare Exhibition was made in such a way. The whole was enclosed with an old cotton sheet, one end of which was kept soaked in a flat pan of water on top of the stool. This by the force of capillary attraction, kept the cotton moistened, and the evaporation cooled the air inside, so that milk bottles remained quite cold and butter firm. A more permanent cooler can be made with a wooden frame, having a top nailed on, and two shelves fastened to the supports. To make a neat job of it make a covering of white canton flannel, smooth side out, or of heavy white duck, to fit the frame. The front flap can be arranged as a door, but it must overlap enough to exclude the outside air. Place on top a rather shallow pan of enamel ware, which will not rust, and keep this supplied with water. Take two double of the material, half the width of each side, and sew them to the top of each side covering, letting them extend about three inches into the pan of water. They will convey the water along, as a lamp wick does oil. Place the cooler in a large pan to catch the drip, having the cover reach to the bottom of the pan. The more airy the spot in which the cooler is placed the greater the evaporation. If properly managed, a temperature of 50 degrees can be obtained inside the cooler, on a dry hot day. Remember that the water must be conducted, or

"seep," throughout the covering continually.

### Our Serial Story.

#### The Forging of the Pikes. A Romance Based on the Rebellion of 1837.

Serial rights secured by The Farmer's Advocate and Home Magazine.

#### CHAPTER XXIX.

#### An Interlude.

December 20th, 1837.

"Could you sit over a bit, Alan Machree, until I put the dinner on? It's liking the old stone fire-place you are, I believe, as well as the fine grates in the city." "And better, Mother of Mine," as I drew aside for my little mother. This old fireside has—peculiar associations, you see. Why, it calls up pictures of spankings, and—" but she playfully covered my mouth with her hand. "But it's grand," she said, sitting down in her rush rocker, and fanning her pink cheeks, all lighted up with the glow of the blazing logs, "it's grand, laddie, that we're all here together. It's been a happy Christmas for us, after all the worry." Then, with a shadow passing over her face, "It's strange, Alan, that one can

## ROOF WITH METAL

Send us the size of any roof that needs covering and we will mail you a very interesting proposition.

**"EMPIRE" CORRUGATED IRON "EASTLAKE" STEEL SHINGLES**

are admitted Standards of Quality

35 years' reputation for sterling reliability is behind "Metallic" goods. 35 years' experience in filling farmers' needs is at your service.

Write today for Roofing Booklet E

**The METALLIC ROOFING Co. Limited**  
196 MANUFACTURERS  
**TORONTO and Winnipeg**

## USE "METALLIC"

---

### FEEDS

**We Sell** Linseed Oil Cake Meal, Cotton Seed Meal, Gluten Feed (23% protein), Bran, Shorts, Feeding Corn Meal, Feeding Molasses (in barrels), Dairy Feeds, Hog Feeds, Cracked Corn, etc. Car lots or less. Our Poultry Feeds are the best on the market, and the prices are just right. Ask for quotations.

**We Buy** Hay, Straw, Oats, Buckwheat, Mixed Grain etc.

**Crampsey & Kelley**  
Dovercourt Road, Toronto

FOR SALE  
**Pure-bred Yorkshire Pigs**  
Six weeks old.  
GERMAN FINDLAY, Walkerville, Ontario

sufferings flight, an wretched, So we the pota coals, an to sizzle, Present though to "It's a ch back the Throu were a fra sunlit fiel purplish-b Winged V a little and began "He's b "He come For a f then my back. "E be shut winter has sometimes "It's v fear there for as I was think but also sash and t a glowing woods of months pe right for this day I could not times I ha effort had Perhaps fashion, di is how se those we from on mysterious it!—At all began sm way that i "Laddi did not s Father ga to tell yo place we with you." She was up the sou they had Christmas fortune tha been exper had been t have wept ness of the for me to my visions had center me as muc I drew r hoping her keen. "Of cour farm. Ther I think we mother.—A my fault, Barry, I m that until She smile "You're Alan,—reti marvel to and somet times in th traits of be and perhap may enter up with hir "Yes," I one day. she herself I was no me, for she "It's a parent, Al and then y back to he "Barry y unusual gir about her, the Deveril "I am gla to love he remember— picking up the mud?" She smile "our wake-r "Yes, I "Well," wake-robin about a p memory of

sufferings of the refugees in their winter flight, and of those others, still more wretched, in the prisons.

So we sat in silence for a little, while the potatoes bubbled over the ruddy coals, and the bacon in the pan began to sizzle, sending forth tempting odours.

Presently my mother sprang up, as though to drive off unpleasant reverie. "It's a charming day," she said, drawing back the white knitted curtain.

Through the window, as though it were a framed picture, I could see snowy sunlit fields, and, in the distance, the purple-brown background of the Golden Winged Woods. As she stood there, a little "snow-bird" came to the sill and began pecking.

"He's becoming quite tame," said she. "He comes every day for his crumbs."

For a few moments we watched him, then my mother fastened the curtains back. "Pity that such a view should be shut out," she said. "After all, winter has its own beauty, fearsome as it sometimes seems in the bush."

"It's very beautiful," I said, but I fear there was not much life in the words, for as I looked at the trees beyond I was thinking, not only of the refugees but also of Barry—Barry with her red sash and the little green vine in her hair, a glowing spirit of the green sun-washed woods of a happy May-time now long months past. I wondered, too, if it were right for me to think of her now; yet this day looking out upon her old haunts, I could not put her away from me. Sometimes I had been able to do so,—but the effort had left me even physically weary.

Perhaps my mother, in some dim fashion, divined my thought.—Strange it is how so often, and especially with those we love, thought seems to course from one to another, as though some mysterious invisible current were carrying it.—At all events she came to me and began smoothing my hair back in the way that is so sweet to me.

"Laddie Machree," she said, "we did not speak of it yesterday, when Father gave you the deed, but I want to tell you that, when we bought the place we hoped Barry would share it with you."

She was speaking of Big Bill's farm, up the south branch of the river, which they had bought and given me for a Christmas surprise, a little unexpected fortune that had come to my father having been expended in that way. Proud they had been to do that for me, and I could have wept for tenderness over the sweetness of their gift. But it had been hard for me to hide altogether that, since all my visions of having land of my own had centered about Barry, it had brought me as much pain as joy.

I drew my mother very close to me, hoping her mother's eyes were not too keen.

"Of course," I said. "But I love that farm. There's not better land hereabouts. I think we'll have to call it 'Riverdale', mother.—And, you know, it was all my fault,—your not knowing about Barry, I mean. I—I think I was leaving that until I came home."

She smiled, but very tenderly. "You're like your father in some things, Alan,—reticent. It's a never ending marvel to me how characteristics appear and sometimes in the children, sometimes in the grandchildren, and how the traits of both parents or grandparents—and perhaps further back than that—may enter into one little babe and grow up with him."

"Yes," I replied. "Barry spoke of that, one day. She said she was quite sure she herself was two people."

I was not sure at first that she heard me, for she looked lost in meditation.

"It's a great responsibility to be a parent, Alan," she remarked, presently, and then my words, apparently, came back to her.

"Barry was an unusual girl—a most unusual girl," she said. "Often I wonder about her, and how she came to be with the Deverils."

"I am glad?" I said, "that you learned to love her in spite of that. Do you remember the day you told me about picking up the white wake-robin from the mud?"

She smiled assent. "I called Barry 'our wake-robin' did I not?"

"Yes, I loved you for that."

"Well," she continued, "she is our wake-robin still, Alan. There is this about a perfect friendship,—that the memory of it is always white and sweet,

like a lily. One would not have missed it. It lives forever."

Silently I took her hand and pressed it to my cheek.

"I am not sure," she went on again, still smoothing my hair, "that if we had known—about Barry, I mean—we might not have given you the money instead, to go the Upper Canada College. But, dear, you can sell the place, if you like, you know."

"I don't want to sell the place," I said. "There'll be another way for me to go to the College if I take that into my head, Mother. But perhaps I'll not care to go now. I'm finding out that, with the books, and seeing enough of life, and having enough application, a man can get somewhere even by himself. I'm a bit old now to think of starting to the College."

She kissed me on the forehead, and stepped away to set the table. Was it the strange, invisible current of understanding between us that told me she was hoping that perhaps, after a while, someone else would come to fill my heart and help me to make a home on the farm by the river?

I watched her as she went to the cupboard and took down, in my honour some of the treasured, blue-patterned dishes that had been her mother's mother's. How pretty she was, with the little ringlets escaping from beneath her white cap! And how housewifely the way in which she handled the quaint old heirlooms!

"Do you think," she asked presently, "and I could have smiled at the transparency of her,—that Nora will be sure to visit us next summer?"

"I think so," I answered. "She says she 'adores' the bush, and she is an all-round good comrade, ready for anything."

—Indeed the idea must have remained with her all day, for at the dinner-hour she remarked to my father, quite casually, that Mary Lathorp, her dear girlhood friend, had married a cousin and was very happy.

\* \* \* \* \*

A little while ago I stopped writing because of a tap at the door.

When my mother opened it there stood Hannah, who, since Jimmie went away to Montgomery's, has been back with her aunt.

"I heard ye was home, Alan," she said, "but I was comin' over anyways. I wanted to tell yer mother the news—an' yer father too. He'll be good an' glad to hear it, knowin' all that's goin' on."

"Why, what's the news?" we asked, simultaneously.

"I got a letter!" she said, triumphantly, sitting down by the fire and throwing back her shawl. "It came yesterday—Christmas; sure enough.—Jimmie's got to the States all right."

"And what about—" I began, eagerly.

"Oh, Hank an' Dick's with him."

"Thank the Lord!" I exclaimed, and never had I uttered more fervently pious thanksgiving.

"They had a devil of a time gittin' there," continued Hannah placidly. "Jimmie says it's too long to write, but enyhow I'm to go, too, in the spring. They're all workin'! Mebbe ye'll like to see the letter."

Quite proudly she handed it to me. It was a marvel of spelling and composition, but Jimmie's warm heart throbed between the lines. Something in this wise was it:

Dere Hannah  
I now take my pen in hand to rite you hopping this will find you well as it leves me at present we had a divvle of a time gitin hear but were hear all rite you bet ile tell you all about it wen i see you its to long to rite we nere starved and hid in haystaks an slep wonn nite over a pig sty e an got over in a bote in the middel of a storm me an dick rowed an hank stearred the bote we stole the bote but hopped it ud drift back an so the man wudnt loose it hanks a dam fine fellow sos dick were all workin now dick an me pilin frate an hanks in a stoar hes ritin to nite we jst started work hear to days ago we see lots of rebbles from hoam, that is Canada but none from the korners were loansome you bet but i gess weve got to git over that as sune as it gits fit to travell in spring Hannah ile send you monie to come hear i kin hardly wate mebbe youd better sell the cow an pig an oxen but if you cud kepe a few of the hens we cud kepe them hear an it ud be more like hoam. give my

**OF WITH METAL**  
Send us the size of any roof...  
**EMPIRE**  
**UGATED IRON**  
**ASTLAKE**  
**L SHINGLES**  
...admitted  
...of Quality  
...reputation for  
...liability is behind  
...goods. 35 years'  
...in filling farmers'  
...your service.  
...for Roofing Booklet E  
**IC ROOFING Co.**  
Limited  
**TORONTO**  
and  
**Winnipeg**  
**ALLIC**  
**EDS**  
...inseed Oil Cake Meal,  
...otton Seed Meal, Glut-  
...protein), Bran, Shorts,  
...eal, Feeding Molasses  
...ry Feeds, Hog Feeds,  
...Car lots or less.  
...eds are the best on the  
...ices are just right.  
...ay, Straw, Oats, Buck-  
...heat, Mixed Grain etc.  
**y & Kelley**  
...ad, Toronto  
**R SALE**  
**Yorkshire Pigs**  
...weeks old.  
...Y, Walkerville, Ontario  
...others are not; we're  
...our own. But one's  
...too, at times. . . I  
...y all are, this day."  
...er," said I. I knew  
...most of all, of Hank,  
...master, and Red Jock  
...and poor old Dickie  
...he is, younger even  
...em fair, mother," I  
...ould be living on the  
...when they are—where  
...not help them—not  
...were suffering, too,  
...et sometimes I cannot  
...a churl. Sometimes  
...would have been a  
...n caught. Yet I can  
...to be gained, now, for  
...myself up."  
...ust not think of that."  
...ake out the fire better,  
...if in her low rocker  
...ing must come out  
...she went on. "The  
...come out, and then,  
...es will be moderated.  
...—those men who are  
...r gloomily, but said  
...be the end, I knew  
...other, of the present

## DETROIT

The Auto Center is the Logical Place To

# LEARN AUTO AND TRACTOR BUSINESS

Trained men are needed everywhere to test, repair and give expert advice on care and handling of automobiles, trucks and tractors. Big money for M. S. A. S.—Detroit trained men. Good jobs or independent businesses await our graduates. Opportunities unlimited.

### Earn \$100 to \$400 Monthly

Our Course will teach you how in a few short weeks. Most complete, comprehensive and up-to-date Course known. Wholly practical. No job too hard for our graduates. Every phase of work covered. Actual experience given on dozens of different cars. Entire equipment best obtainable. Instruction includes complete Tractor Course. Brazing, Welding and Tire Repairing taught separately.

## Learn in Detroit—Start Any Time—Our Graduates in Demand

Here you get the benefit of finest co-operation of biggest factories. They know the thoroughness of our Course and gladly help our students in every way possible. Almost daily we have calls for graduates to fill responsible positions. School open all year. Enter classes any time. No need to waste or lose a moment.

**A STUDENT WROTE HIS CHUM IN CANADA:**  
Dear Herman— You asked me to let you know how I liked the school. Have been going three weeks and have nothing but praise for it. The school teaches every branch of the business in detail. I am at the motor part now. My mate and I are giving a Dort an overhauling and I must say we are making a good job of it. The instructors have a keen interest in the welfare of every student, and they make it their business to see that you get along in your work. The school has everything they advertise, and I have talked with many other students from all parts of the country, and they say that this is the ONLY school worth going to.

GEORGE H. PURVIS.

**CANADIAN GRADUATES WROTE THESE—**  
Dear Sirs—I am getting along fine since leaving your school, with my pay more than double since this time last year. I certainly feel grateful for the help I received in so short a time, and greatly recommend your school. Am sending you names of three boys who are greatly interested in work of this kind.  
J. D. CRAWFORD, Strathmore, Alta.

Gentlemen—I shall be pleased to have you refer any prospective students to me, as I consider your course much superior to any other. At present there is a very brisk demand for men in Canada, and I shall probably be able to place some of your graduates.  
O. C. STURDY, Toronto.

**Money Back Guarantee.**  
We guarantee to qualify you for a position as chauffeur, repair man, automobile dealer, or tractor mechanic and operator, paying from \$100.00 to \$400.00 monthly, or refund your money.

**BIG FACTORIES ENDORSE OUR SCHOOL.**  
They know what we do—how we teach and the type of graduates we turn out and give our students unusual assistance. Every instructor an experienced man—one who knows and is able to teach others.

**SEND THIS COUPON TODAY**

**MICHIGAN STATE AUTO SCHOOL**  
1046 Auto Building, 807-81 Woodward Avenue, Detroit, Mich., U. S. A.  
Gentlemen: Please send me, absolutely FREE, New 76-page Illustrated Catalogue, "Auto School News," and information as checked below.  
 Auto and Tractor Course     Tire Repairing  
 Brazing and Welding  
(Mark each course you are interested in.)  
Or, better still, you can expect me about

Name.....  
Street.....  
City..... State.....

**Get Free Catalog.**

Tells all about "The Old Reliable School" located in "the Heart of the Auto Industry." Or better still; jump on the train and come to Detroit as hundreds do. Your fare refunded if everything not as represented.

**Michigan State Auto School**  
A. G. Zeller, Pres.  
1046 Auto Bldg., 807-81 Woodward Ave., DETROIT, MICH., U.S.A.



# Sydney Basic Slag

PRODUCED BY  
**THE CROSS FERTILIZER CO., LTD.**  
SYDNEY, NOVA SCOTIA

Hundreds of farmers who wanted Basic Slag to apply with their fall wheat could not get supplies during the war because our men would not work steadily. Labor troubles have now disappeared, and every Ontario farmer who books early can be guaranteed his full requirements.

The Cross Fertilizer Company sell more fertilizers than any other concern operating in Canada.

## WHY?

You must have heard enough about Sydney Basic Slag to cause you to consider the purchase of a carload. The neighbors will help you out and you will be reasonably recompensed for your trouble. Our sales agent is now arranging agencies in unrepresented districts. Send him your name and address, and he will call on you when in your neighborhood shortly.

GENERAL SALES AGENT FOR ONTARIO:  
**A. L. SMITH, 220 Alfred Street, Kingston, Ont.**

### Champion Tractor Plugs Insure Tractor Efficiency

The tractor is one of the most severe of all service tests to which Spark Plugs are subjected. Its low speed and continuous, heavy load, whether on draw-bar or belt, develops a terrific heat with tremendous shock strain and vibration. Its efficiency depends on the ability of its spark plugs to withstand such gruelling punishment.



## Champion

### Dependable Spark Plugs

have a "built in" dependability and have long since proved their ability to render satisfactory service under any condition in every type of tractor or farm engine just as they have in the more than two hundred makes of motors in which they are regular factory equipment. Champion 3450 Insulators with their patented asbestos lined gaskets resist heat expansion, cylinder shock and vibration to an extent far in excess of the efficiency demands of heavy duty tractor service.

Insist that every Spark Plug you buy for any purpose has "Champion" on the insulator—it guarantees "Absolute satisfaction to the user or full repair or replacement will be made." Sold wherever Motor supplies are sold.

**Champion Spark Plug Co. of Canada, Limited, Windsor, Ontario.**

*Champion "Tractor" for Fordson A 14, 1/2 inch. Price \$1.00.*

*"Heavy Stone" for Tractors and heavy Service Motors B13, 1/2 in. B 43, 3/4-18 B 53, 3/4 long. Price \$1.25. Ball terminal furnished when specified otherwise regular knurl nut.*

of the strikers, it is said, would now be glad to return to work but are afraid to. In Toronto most of the sympathetic strikers have returned to work.

On the second of June the entire British Cabinet arrived in Paris, at the request of Premier Lloyd George, to consider the advisability of advocating modifications in the Peace Treaty. Any modifications made by the Conference will, it is said, be in details and will not affect fundamentals, and will be undertaken to make the treaty workable and restore peace as soon as possible. The Austrian Government says the terms to Austria are too heavy to be met. The smaller Eastern European nations object to the provisions of the Austrian treaty to establish religious, racial and linguistic freedom in all countries affected by the treaty, the Roumanians and Czechoslovaks claiming that the provisions are an infringement of their sovereignty, giving outside powers control over the people of the Balkans. The latest decision re the Adriatic coast controversy is to make Dalmatia a buffer state to be governed by a Council of Five, made up of 2 Italians, 1 Jugo-Slav, 1 Hungarian, and a citizen of Fiume chosen by the rest of the Council.

### Gossip

Grover Anderson, of Waterford, whose advertisement of dual-purpose Shorthorns appears in another column of this issue, is working into a very nice herd. As a herd sire he is using Brant Hero, a bull with good milk backing on both sides. Maud, the foundation cow, has a record of 11,861 lbs. of milk and 513 lbs. of butter-fat. A number of the heifers in the herd are now in the R. O. P. and are making a creditable showing. While giving a very good flow of milk they are in excellent flesh. There are a number of very nice young heifers coming on, which should make good foundation stock. Mr. Anderson is offering specially two bull calves out of his best milker; one of these is red and the other a roan. It is worthy of note that cows in the herd have tested as high as 4.7. Those wishing to secure Shorthorns of milking strains might communicate with Mr. Anderson, or, better still, visit his farm and see the stock.

Over forty years ago Edward Knight selected the farm he is now living on in Norfolk County. Many were the hardships contended with in the pioneer days, but he and his family now enjoy as convenient and homelike a place as is to be found in many a day's travel. While the soil is of a lightish nature, it is strong enough to produce large crops, yet at the same time it works easily and the crops this year are not affected by the rain and the drouth to the extent that they are a few miles distant. Among the attractive features about the place is a row of maples, planted along the lane and around the buildings forty years ago by Mr. Knight, and which this year yielded over seven gallons of syrup. Long ago Mr. Knight realized in the Shorthorn breed dual-purpose animals and purchased a few well-bred females as the foundation of a herd. That he made a good choice is in evidence by the milk records which he has obtained and by the quality and conformation of the animals in the herd at the present time. While the herd only numbers about twenty head they are a select lot. The herd is headed by Marquis of Lorne, a son of Dairymaid whose record was 13,535 lbs. of milk. In the herd is Colquette 2nd, a cow with a record of 17,732 lbs. milk and 636 lbs. of butter-fat. She is a Darlington-bred cow and four of her heifers are in the herd, as well as a son sired by Marquis of Lorne. This bull calf is a particularly choice individual. The heifers in milk have done well and the young things give promise of making good records. Daisy is another of the foundation cows. She is a big, strong, Pansy-bred cow with excellent indications of milk. The calves, both male and female are a sappy, growthy lot. They have deep bodies, well-sprung ribs and full quarters.

love to everybodie and be shure to kepe plenty of it fer yerself Hannah you kin rite me to rochester an pleser rite sune im as lonesome as the divile  
yure lovin husband  
JAS. R. SCOTT."

"So they're in Rochester, Hannah," I said, as I handed her back the letter. "Well that's the best news I've heard in a long time. I'll write to them all right away, too."

"They'll be jist bustin' to hear from ye," returned Hannah. "Now finish yer writin' an' I'll help yer mother with the evenin' work. I'm quite to home here now."

So she bustled about, while I finished my "writin'."

To-morrow, weather and roads permitting, I start back for the City. It has been a precious holiday. Yet, somehow, I have felt so old, through it all. Never, I suppose, shall I feel really young again. We have all lived much since we last sat together in the dear old home. Things have changed. Never again can they be what they were in my boyhood days.

And yet, perchance, such change is but one of the growing pains that we must all go through. My mother says this, and no doubt, as usual, she is right. Sometimes I marvel at her patience. Patience, I fear, is one of the lessons I have yet to learn. No doubt good will be the end of all this suffering, for so many, yet that end seems still too far off to be seen. I would hurry the months if I could.

In the meantime, Mackenzie is at Navy Island, in the Niagara River, about three miles above the Falls,—but of that later.  
To be continued.

Art on the Farm.—Modern Plow lady (ecstatically)—"My furrows are so much more artistic than the straight ones Farmer Jones used to plow!"—Life.

"In unsettled times the thoughts of men turn instinctively to the sound security of Life Insurance. The first step to securing suitable and adequate Life Insurance is to obtain dependable information. Permit the Great-West Life to give you that information—by mail, if you wish, for leisurely consideration. You will readily see the merits of the Great-West Plans. Inexpensive, profitable, liberal—these Policies have appealed to over sixty-five thousand persons as the best anywhere available."

### THE GREAT-WEST ASSURANCE COMPANY

DEPT. "Z"  
HEAD OFFICE WINNIPEG

### Ontario Hereford Breeders' Association



"Hello, Harry, don't you think Herefords are selling away below their value in Ontario?"

"I certainly do, compared with how they are selling in the States. Look at McCray's sale at Kentland. Ind., 120 head averaging \$3,655 each. The farmer that is buying Herefords in Ontario is wise."



J. E. HARRIS, Pres., Kingsville, Ont.

JAMES PAGE, Sec., Wallacetown, Ont.

### The Dollar Chain Current Events.

Exclusively to help blind and maimed Canadian soldiers, unless otherwise requested.

Contributions from May 23 to June 6th: "Toronto", \$2.00; "Scotia", London, Ont., \$1.00.

Previously acknowledged, \$6,033.50

Total to June 6th, \$6,036.50

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

Major John P. Cowles has been appointed Provincial School Attendance officer for Ontario.

Many horses and a number of people in Canada succumbed to the extreme heat of early June.

Winnipeg at time of going to press, is patrolled by over a thousand returned soldiers sworn in as constables to preserve order and prevent parades. Many

The  
is alu  
teous  
man  
is to  
m  
st

BULL  
THE HALL

Swe  
WHIT  
\$1.00 p-r  
65 cents

Seed Mer

Advertisement  
heading, such  
Situations Wa  
TERMS  
Each initial  
two words.  
Cash must  
advertisement

MAN TO O  
team to coll  
expected and  
vocate. Londo

POV  
E

Condensed  
under this lie  
insertion. Ea  
figures for tw  
counted. Cas  
order for any  
Parties having  
for sale will fir  
advertising co  
for less than 66

BABY CH  
Price reduce  
Order at once.

BABY CHIC  
Loghorns, 3  
five catalogue  
Cooksville, Ont

BARRED RO  
reduced price  
John Pringle

BABY CHIC  
grand lot of  
for immediate  
last year. Las  
heat of this, in  
ported phenom  
also supply chi  
in Wyandotte  
\$28 per hundre  
All previous per  
ping 5,000 per  
Hind, Baby Ch  
Toronto, Ont.

CANADIAN  
Pedigreed tra  
winter layers.  
chicks. Matin  
Coldham, Box 1

PURE-BRED  
set eleven.

E  
HI  
PO  
We require a lar  
It w  
C.

78 King St.

Please m



it is said, would now be to work but are afraid to. most of the sympathetic returned to work.

... ..

... of June the entire arrived in Paris, at the Premier Lloyd George, to divisibility of advocating in the Peace Treaty. Any made by the Conference be in details and will not nals, and will be under- the treaty workable and s soon as possible. The nment says the terms to o heavy to be met. aster European to the provisions of the y to establish religious, istic freedom in all coun- the treaty, the Rouman- o-Slovaks claiming that are an infringement of y, giving outside powers e people of the Balkans. ion re the Adriatic coast to make Dalmatia a o be governed by a made up of 2 Italians, ngarian, and a citizen y by the rest of the Council.

Every farmer who desires to do business with

## The Molsons Bank

is always assured of a courteous reception by local managers. And their object is to assist the farmer in a legitimate way, to make his land and stock more productive.

**ARE YOU BUILDING OR REPAIRING?**

OUR CATALOGUE OF BUILDING MATERIALS AND TOOLS WILL SAVE YOU MONEY. WRITE FOR FREE COPY.

THE HALLIDAY COMPANY, LIMITED, HAMILTON FACTORY DISTRIBUTORS CANADA

## Sweet Clover

WHITE BLOSSOM (2nd Grade)

\$17.00 per bushel f.o.b. Stouffville. Bags extra, 65 cents each. Terms, cash with order.

TODD & COOK  
Seed Merchants Stouffville, Ont.

**WANTED**

Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted and Pet Stock.

TERMS—Four cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 60 cents.

MAN TO OPERATE TRUCK OR FURNISH team to collect cream and produce. State rate expected and references. Box 27, Farmer's Advocate, London, Ont.

## POULTRY AND EGGS

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

BABY CHICKS—WHITE LEGHORNS—Price reduced to \$15.00 and \$20.00 per 100. Order at once. B. Linscott, Brantford, Ont.

BABY CHICKS—BRED-TO-LAY S.-C. WHITE Leghorns. Safe arrival guaranteed. Descriptive catalogue free. Cooksville Poultry Farm, Cooksville, Ont.

BARRED ROCK COCKERELS FOR SALE AT reduced prices. Satisfaction guaranteed. Write John Pringle, London, Ont.

BABY CHICKS FOR SALE—I HAVE A grand lot of S.-C. White Leghorn chicks ready for immediate delivery. The same stock as I had last year. Last year's customers will be glad to hear of this, in order to procure more. They reported phenomenal laying from this strain. Can also supply chicks from the best of laying stock in Wyandottes, Rocks, Reds. Wyandottes are \$28 per hundred, other varieties \$25 per hundred. All previous price lists cancelled. Will be shipping 5,000 per week during June. Order to-day. Hurd, Baby Chick Specialist, 1378 Queen St. E., Toronto, Ont.

CANADIAN RINGLET BARRED ROCKS—Pedigreed trap-nested Bred-to-Lay stock, Heavy winter layers. EGGS that hatch strong vigorous chicks. Mating list and egg records free. F. J. Cuddiam, Box 12, Kingston, Ont.

PURE-BRED ROUEN DUCK EGGS \$1.50 per eleven. A. F. Thornton, Thamesford, Ont.

EGGS WANTED  
Highest cash price paid.

POULTRY WANTED  
We require a large quantity of heavy live hens. It will pay you to sell to

C. A. MANN & CO.  
78 King St. London, Ont.

Please mention Advocate

### Budget Calls for \$17,000,000 Reduction in Tariff Revenue.

Continued from page 1142.

#### Comparison of the Fiscal Years 1918-19 and 1919-20.

During the past fiscal year expenditure upon ordinary account amounted to \$240,000,000 with an additional \$22,000,000 upon capital account and \$450,000,000 on war account. Revenue amounted to \$310,000,000 whereas for the fiscal year before the war, revenue amounted only to \$163,174,394 while for 1908-9 it amounted to only \$85,093,404. Of the revenue for 1918-19 \$147,000,000 represented customs (from which it may easily be calculated that the reductions proposed by the Government are equivalent to an all round reduction of 11½ per cent.) \$30,000,000 represented excise; 21,000,000 post office revenue, \$33,000,000 business profits war tax; \$10,000,000 income tax; \$14,000,000 other war taxation and \$55,000,000 from miscellaneous sources including \$38,000,000 from railways. This represented a surplus of \$48,000,000 above ordinary and capital expenditure, to be applied on war account.

As far as 1919-20 is concerned, main estimates now down total \$437,000,000 and supplementary estimates are still to come. Some account of the main estimates has previously been given, but the estimate of expenditure on ordinary account is \$270,000,000 of which \$102,000,000 represents interest on the national debt. Estimated expenditure on capital account for the coming year is \$50,000,000 and pensions, included in ordinary account, \$30,000,000. Demobilization will require \$300,000,000 so that we have an entire estimated expenditure of \$620,000,000.

Revenue, estimated on the basis of 1918-19, and without regard to tariff reductions, would promise \$280,000,000 so that there is a difference of \$340,000,000 to be made up in some manner, since our revenue would merely provide ordinary expenditure. Borrowing will be resorted to, and a loan will be floated in Canada this year. Commenting on this policy Sir Thomas said:

"If the war were still continuing it would be necessary to recommend heavily increased taxation in order that we might pay a substantial portion of the principal of our war expenditure. If it were not for special circumstances arising out of this transitional period from war to peace that course should be adopted, notwithstanding the ending of the war, because we shall have this year so heavy a volume of what is really war expenditure, that is to say, our outlay for demobilization and all that it involves. We must, however, bear specially in mind the anxieties and burdens of the general public at a time of dislocation, unrest and high prices, and endeavour to wisely bridge over this troubled period by giving such measure of relief as may be practicable, having regard to the heavy financial obligations devolving upon us and our national credit in the eyes of the outside world.

"The cost of living in Canada has, in common with all other countries, gradually increased during the war and is causing hardship to a large portion of our population, especially those of limited means and slender incomes. I am of opinion that for this transitional period we are justified in adopting the policy of meeting only our ordinary expenditure and borrowing for our capital and demobilization expenditure."

#### Cost of Living Committee.

A perfectly well intentioned committee has been appointed by the Government to look into the small matter of the High Cost of Living. We should add, however, that the good intentions are all on the side of the Committee, the Government must not be blamed for having them or they would have appointed a committee that could get something done. If it should accidentally happen that the present committee can carry their good intentions to a successful result, another world's wonder will have been put on record. To say much would be a waste of good paper.

Bertie: "What's that bell around the cow's neck for?" Charlie: "Oh, that's what she rings when she wants to tell the calf that dinner's ready."

## The Farmer-Banker Alliance

You go to your lawyer for legal advice; to the doctor for medical advice; why not to The Merchants Bank for financial advice?

If you want a loan to buy cattle, hogs or equipment—if you want information as to how to invest money—come to those who make a business of financial matters, and are in a position to give you sound and impartial advice.

## THE MERCHANTS BANK

Head Office: Montreal, OF CANADA Established 1864.

With its 27 Branches in Manitoba, 41 Branches in Saskatchewan, 69 Branches in Alberta, 8 Branches in British Columbia, 119 Branches in Ontario, 37 Branches in Quebec, 1 Branch in New Brunswick and 2 Branches in Nova Scotia serves Rural Canada most effectively.

WRITE OR CALL AT NEAREST BRANCH.

ESTABLISHED 1875

## IMPERIAL BANK OF CANADA

CAPITAL PAID UP, \$7,000,000. RESERVE FUND, \$7,000,000

### RAISE MORE HOGS

To produce more hogs is the national demand to-day. If you require a loan to finance increased production, our local manager will discuss the matter with you.

152 Branches in Dominion of Canada.

### Courteous, Painsstaking Service

From the moment you have opened your account with us we look upon you as a friend of the Bank, to be served in every way possible, at every turn.

It is this spirit of "friendly service" that has been largely responsible for this Bank's solid, steady 87 years of progress.

Paid-up Capital.....\$ 9,700,000	Special facilities for banking by mail
Reserve and Undivided Profits.....18,000,000	We invite your account. One hundred and ninety branches. General Office: TORONTO
Resources.....220,000,000	

## The Bank of Nova Scotia

If You Have Money to Invest—  
"Standard Reliance" Serves the Best

INVEST your money in our Mortgage Debentures paying 5½%  
No worry—no trouble—no expense — and absolute safety.

A handy and useful booklet on—  
"PROFITS FROM SAVINGS"  
which gives some very sound financial advice will be sent to you free on request. Write for it to-day.

## STANDARD RELIANCE MORTGAGE CORPORATION

HEAD OFFICE 10-12 KING ST. EAST TORONTO

BRANCH | AYR BROCKVILLE CHATHAM  
OFFICES | ELMIRA NEW HAMBURG WOODSTOCK

# Improve the Quality —Then Increase the Quantity

**S**HEEP have made big returns during the last few years and will **CONTINUE** to give big returns if the maximum production at the minimum cost is obtained. To get maximum returns at minimum cost it is necessary to produce A1 lamb, mutton and wool.

## Requirements for A1 Lamb and Wool

1. Use pure bred rams.
2. Castrate and dock the lambs.
3. Grow summer pasture crops.
4. Finish lambs before selling.
5. Keep fleeces free from chaff.
6. Tie fleeces with paper twine.
7. Keep tags and black wool separate.

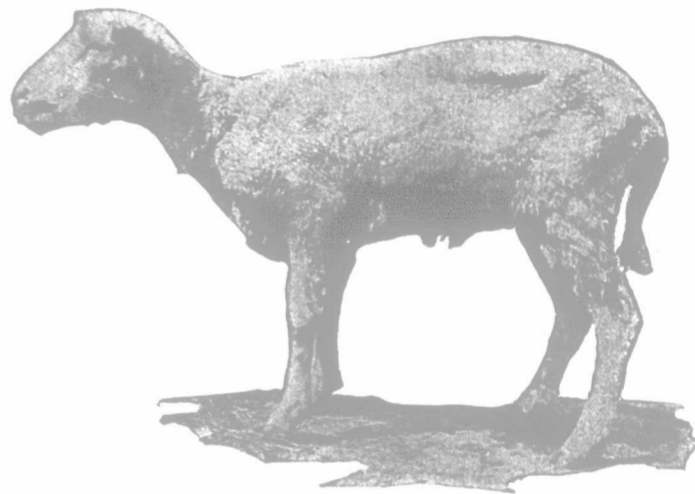
*To get the best market returns sell lambs, sheep and wool through the local or provincial co-operative associations.*

Have no fear of over-supplying the home market. In 1918, \$42,000,000.00 worth of wool and its manufactures were imported into Canada.

The Dominion of Canada Department of Agriculture, through the sheep and goat division, announces a new policy to demonstrate to every sheepraiser on his own farm the value of the **PURE BRED RAM**. Sheepraisers who have never used a pure bred sire and purchase one for their flocks this year will be given a premium of \$5.00 annually for two years. Write the Chief, Sheep and Goat Division for further particulars.

A Directory of Breeders, Pamphlets on the production of A1 lambs and wool and all branches of sheep-raising will be sent free of charge to all who write the Chief, Sheep and Goat Division, Live Stock Branch, Ottawa. They are yours for the writing.

**Live Stock Branch**  
**Dominion of Canada Department of Agriculture**  
OTTAWA CANADA



**A scrub ram**  
His greatest fault—he lived too long.

In a law court last year a judge gave the decision that each lamb out of a pure bred ewe by a pure bred ram was worth \$26 more than if a scrub ram had sired it.

In 1918, over 4,000,000 pounds of frozen Australasian lamb and mutton were consumed in Canada.

**CAP**  
For 24 y  
been cur  
Farmers s  
**SENE**  
Write  
enclo  
Veteri

**V**

Horses b  
bred S  
under  
Weig  
1,2  
sl

Box 8, F

**Abe**

M

Alonzo M

Man

Allo

Angus —

I will

ROBT. M

**ABE**

The present  
some class  
selves and  
Angus, write  
G. C. CHA

Railway con

**Spring**

I have six b  
Middlebrook  
cairns. Fou  
have other c  
heifers safely

Bellwood

R. R. No. 5,

Kennelwo

all are sired

are ready for

PETER A

**AI**

We have for

service. Als

Aberdeen F

**GU**

**FO**

Our stock is

the "Chen"

Choice anim

B. P. H

Gr

**SUNN**

**Messrs**

Halse Gra

Exporters of

cattle and she

You can be

than in any o

enquiry at o

this country i

will be now t

**Graha**

Present of

the Duke

milk and

test. On

other Ros

number of

Charles G

**HEAVES CURED**



The worst case can be helped in a few days' treatment—and a positive cure is guaranteed or your money refunded. Don't sell or turn out a horse suffering with heaves, until you have tried

**CAPITAL HEAVES REMEDY**

For 24 years, this reliable preparation has been curing Horses and saving money for Farmers and Stockmen.

**SEND FOR FREE TRIAL**  
Write today for full weeks treatment free, enclosing 5c. for postage and wrapping.  
Veterinary Supply House, 750 Cooper St., Ottawa

**WANTED**

Horses by Thoroughbred or Standard-bred Stallion, 3 to 4 years. Not under 15.3 hands. Must be sound. Weighing not less than 1,050 nor 1,250. Good long neck and sloping shoulders. Apply

Box 8, Farmer's Advocate, Toronto

**Aberdeen-Angus**

Meadowdale Farm

Forest, Ontario.

Alonzo Matthews Manager H. Fraleigh Proprietor

Alloway Lodge Stock Farm

Angus — Southdowns — Collies

I will leave for England in June to

**IMPORT**

Orders solicited.

ROBT. McEWEN, R.R. 4, London, Ontario

**SUNNY ACRES ABERDEEN-ANGUS**

The present string of young bulls for sale includes some classy herd bull prospects, winners themselves and sired by champions. If interested in Angus, write your wants. Visitors welcome.

G. C. CHANNON, Oakwood, Ontario  
P. O. and 'Phone

Railway connections: Lindsay, C.P.R. and G.T.R.

**Springfield Farm Angus**

I have six bulls from 8 to 15 months. All sired by Middlebrook Prince 5th, a son of Jock of Glencairns. Four of these are show calves. Also have other calves younger, and could spare a few heifers safely bred to same sire.

KENNETH C. QUARRIE

Bellwood Ontario  
R. R. No. 5, Bellwood, C. P. R., Fergus, G. T. R.  
Bell 'Phone Fergus

**Kennelworth Farm Angus Bulls**—The strongest offering we ever had, all are sired by Victor of Glencairn, and a number are ready for service. Prices reasonable.

PETER A THOMPSON, Hillsburg, Ontario

**ANGUS CATTLE**

We have for sale, some nice young bulls ready for service. Also females.

J. W. BURT & SONS

Aberdeen Farm, Hillsburgh, R.R. No. 1, Ont.

**GUERNSEYS FOR PROFIT**

Our stock is rich in "May Rose" "Governor of the Glens" and "Mashers Sequel"—blood. Choice animals for sale, from imported stock.

B. P. HILL & A. N. FAULKNER  
Great Village, Nova Scotia.

**SUNNY SIDE HEREFORDS**

A few choice young cows and heifers, 1 bull calf, 2 bulls 2 years old. A very nice bull 4 years old, would exchange for bull equal merit. See them, they are priced to sell.

ARTHUR F. O'NEIL & SONS  
R. No. 2, Denfield, Ont.  
'Phone Granton

**Messrs. A. J. Hickman & Co.**

Halse Grange, Brackley, England (late of Egerton, Kent)

Exporters of all breeds of stock, draft horses, beef cattle and show and field sheep are specialties. You can buy imported stock through us cheaper than in any other way, and we hope to get your enquiry at once, so that we can fit you out before this country is skinned of good stock, as it soon will be now the war is over.

**Graham's Shorthorns**

Present offering 2 choice bulls sired by the Duke whose dam gave 13,599 lbs. of milk and 474 lbs. of butter fat. R.O.P. test. One dark Red 8 months. The other Roan 13 months. Can also spare a number of females.

Charles Graham, Port Perry, Ont.

**Fake Grain Varieties.**

Each year many farmers are the victims of plausible agents who are selling so-called new varieties. Making extravagant claims they charge a corresponding price and only too often the farmer who naturally desires more productive varieties if obtainable, pays an exorbitant price for a supposedly new and prolific sort, which is either an old variety camouflaged with a new name or else a selection whose qualities are entirely unknown. Being divisible into classes, these agents and their claims can be grouped conveniently as follows:—

First, those who take a high yielding, prolific variety such as Banner or O. A. C. No. 72 oats, give it another name and introduce it as a new variety.

Second, those who are selling a variety that has been multiplied from a peculiar plant or from extraordinary heads found in the general crop. The producer thinking it a valuable variety, offers it for sale before its qualities are known.

Third, those who are offering for sale to a few limited customers only, a wonderful variety that was produced by a secret process of selection or else has been grown from a few seeds found in the tombs of the ancient Pharaohs.

A fourth class might be made of those who sell a variety for what it is, but make extravagant claims for its yielding ability. This is well illustrated by the Alaska or seven-headed wheat.

The agent in the first case is a financial shark who is obtaining money by false pretences. He perhaps does the least harm of any beyond the confusion created in the nomenclature of varieties and the money which he takes from the farmer.

In the second case the agent may be acting in the best of faith and with the conviction that his claims will be justified by the resulting crop. Perhaps they will be, but the varieties are legion that have been introduced in this way and have been found worthless in comparative tests with standard varieties.

The third agent though, is the real out and out grain fakir and should be liable to prosecution. The farmer who is deceived by his pretences almost deserves to pay the price of his credulity.

It is the right of any person who has multiplied out a selection of grain to sell it for what it is and charge any price he sees fit. Against these well-intentioned, legitimate transactions we have nothing to say beyond warning the farmer, that at the best he is likely only buying an old variety and that exceedingly few of these amateur selections are ever of value.

What is advisable is that in every case before buying a variety that he intends to grow as a general crop, the farmer should consult the reports of his nearest Experimental Station. The remedy for the actual frauds that are perpetrated is in his own hands. As long as he will buy the agents will sell, and the efforts put forth by the cereal stations of Canada for the improvement of crops will continue to be partially frustrated.—Experimental Farms Note.

**Community Drier to Save Perishable Food.**

Cities or villages confronted with the question of saving surplus perishable crops from home and school gardens this season may well consider the construction and operation of a community drier, according to E. L. Kirkpatrick, of the Colorado Agricultural College, who says: "Practically all vegetables, as well as fruits, may be dried or dehydrated and kept in paper bags or paper cartons until needed for use this fall or winter."

"The cost of a satisfactory fan-equipped drier with a capacity of from 500 to 1,500 pounds of raw produce per day will be between \$250 and \$400. The best general-purpose plant is of the combined tunnel and cabinet type, fitted with an exhaust fan at one end and a box heating stove at the other. Pipe from the stove should run below the set of trays or tills throughout the full length of the drier."

"Before undertaking the building of a plant, each community should make a thorough survey of the amount of perishable crops available, decide on a satisfactory building for housing the outfit, and formulate a business plan of operation throughout the season."

**WRIGLEY'S**



**KEPT secret and special and personal for you is**

**WRIGLEY'S**

in its air-tight sealed package.

Three flavours to suit all tastes.

Be SURE to get

**WRIGLEY'S**

Sealed Tight Kept Right

**The Flavour Lasts**

MADE IN CANADA



**Preserves Leather - Kills Axle Friction**

**Imperial Eureka Harness Oil**  
—soaks into leather. Keeps water out. Prevents drying and cracking. Keeps harness strong, soft, pliable—lengthens its useful life and saves money. Comes in convenient sizes.

**Imperial Eureka Harness Oiler**  
—simple and convenient. Should be in every barn.

**Imperial Mica Axle Grease**  
—keeps the metal spindle in contact with the hub-lining. Coats both with a smooth covering of mica and the finest grease. Kills friction and makes axles and wheels last longer and run easier. Helps the horse and saves wagon repairs. Sold in many sizes—1 lb. to barrels.



**IMPERIAL OIL LIMITED**  
Power - Heat - Light - Lubrication  
Branches in all Cities

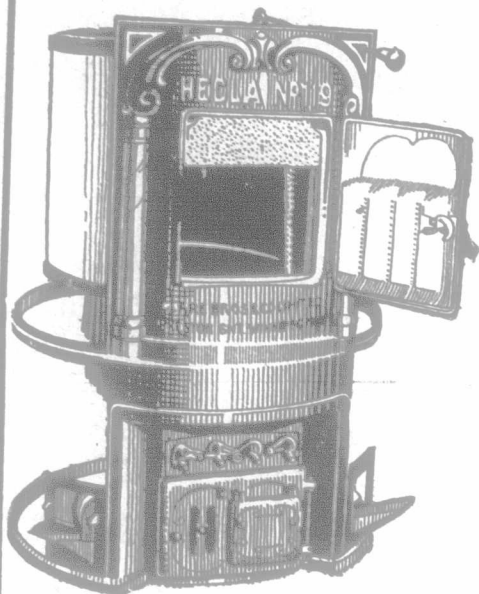
At all Dealers

**Is your neighbor a Subscriber to The Farmer's Advocate and Home Magazine?**

If not send his name in, help him, help yourself—help us. Any Subscriber sending in the name of a new Subscriber and \$1.50 will have his own subscription advanced four months FREE.

# Better Heating—Less Coal

Hecla Furnaces Look After Your Health, Comfort and Pocketbook



PUT a Hecla Furnace in your cellar and know real winter comfort.

Hecla Furnaces are built just as you would have your furnace built, had you the necessary material and factory.

With a Hecla Furnace your home will be entirely free from objectionable gas and dust. Your plants will not wither, or your furniture crack from lack of moisture in the atmosphere. Your coal bills will be materially reduced.

The Hecla Furnace has patented Fused Joints. No matter how hot the fire, they cannot warp or crack, allowing gas and dust to come up through the registers.

## HECLA Mellow Air FURNACE

The only waterpan that gives the proper amount of moisture with the warmth is the Hecla Circular Waterpan. It runs completely around the furnace,

which assures even evaporation, every room getting the same proportion.

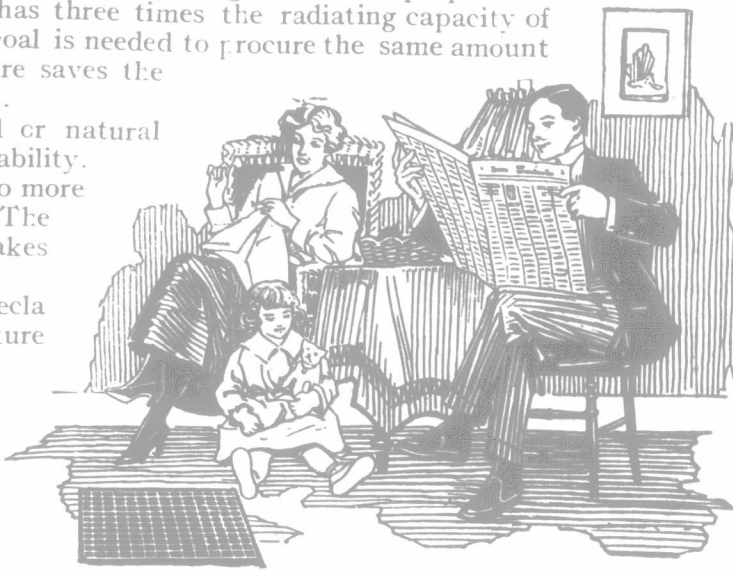
The Hecla Steel Ribbed Firepot has three times the radiating capacity of other furnaces. Hence, much less coal is needed to procure the same amount of heat. By actual test this feature saves the owner one ton of coal in every seven.

Hecla Furnaces burn coal, wood or natural gas without sacrificing any heating ability.

And this perfected furnace costs no more than ordinary heating systems. The comfort it gives, the fuel it saves makes it much cheaper in the end.

Get in touch with your nearest Hecla dealer. Ask him for illustrated literature on the Hecla Furnace. If you do not know him write to us direct. We will send his name and literature free.

CLARE BROS. & CO., Limited  
PRESTON, ONTARIO



### Boog Spavin

Cure the lameness and remove the bunch 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—Boog 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.

## English Dual-Purpose Shorthorns

For sale: Bull calves and young bulls, English bred for milk and beef. The right kind to head Canadian herds to increase profits. From very moderate prices and up. English Large, Black Pigs. A great bacon type, long and deep, thrifty. Come or write.

**LYNNORE STOCK FARM**  
F. Wallace Cockshutt  
Brantford - Ontario

**Mardella Shorthorns**  
Herd headed by the Duke, the great, massive 4-year-old sire, whose dam has 13,599 lbs. of milk and 474 lbs. of butter-fat in the R.O.P. test. I have at present two exceptionally good, young bulls ready for service, and others younger, as well as females all ages. Some are full of Scotch breeding, and all are priced to sell. Write or call. Thos. Graham - Port Perry, Ontario  
R. R. No. 5

## ABERDEEN-ANGUS

We are offering several very choice young bulls of the best breeding. Will be priced to interest prospective purchasers. Inspection invited.

QUEENSTON - LARKIN FARMS - ONTARIO

ROBERT MILLER, Stouffville, Ontario

Has EIGHT of the best young bulls that he has owned at one time, good ages and beautifully bred. Also several cows and heifers, some of them with calves at foot, others in calf to Rosemary Sultan, the Grand Champion bull at head of the herd. Everything of Scotch breeding. The prices are very reasonable, and though the freight is high, it will be paid.

### DUAL-PURPOSE SHORTHORNS

Herd headed by Dominor 106224, whose two nearest dams average 12,112 pounds of milk in a year. Cows in the herd with records up to 13,891 pounds of milk. Cows in calf to Dominator priced to sell. WELLDWOOD FARM, Farmer's Advocate, London, Ont.

**Shorthorns Landed Home**—My last importation of 60 head landed at my farm most popular families of the breed. There are 12 yearling bulls, 7 cows with calves at foot, 24 heifers in calf, of such noted strains as Princess Royal, Golden Drop, Broadhooks, Augusta, Miss Ramsden, Whimble, etc. Make your selection early.  
GEO. ISAAC, (All railroads, Bell 'phone) Cobourg, Ontario

### Pure Scotch and Scotch-Topped Shorthorns

We have several choice young bulls of the best of breeding and ready for service. Two are by Rapheal (imp.), one by Right Sort (imp.), one by Sittyton Selection, and several by our present herd sire, R. M. MITCHELL. R. R. No. FREEMAN, ONTARIO

**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 purple.  
WM. SMITH, COLUMBUS, ONT. Myrtle, C.P.R.; Brooklin, G.T.R.; Oshawa, C.N.R.

### GRAND VIEW FARM SHORTHORNS

Herd headed by Lord Rosewood = 121676 = and by Proud Lancer (imp.). Have a few choice bull calves and heifers left, bred by Escama Favorites, a son of the famous Right Sort (imp.).  
W. G. GERRIE, C.P.R. Station on farm. Bell 'Phone. BELLWOOD, ONTARIO

**Walnut Grove Scotch Shorthorns**—Established 1840. Gained 1st prize at the 1887-88 International Exhibition. We are in a position to supply bulls and females of the best Scotch breeding fit for either show or foundation stock. We invite inspection of the cattle. Write your wants. D. BROWN & SONS, Shedden, Ont. Long Distance 'Phone. Twelve miles west of St. Thomas, P.M., M.C.R.

**Beach Ridge Shorthorns and Yorkshires**—Shorthorn herd headed by Sylvan Power cut in 1915, and sire of the G. Champion bull at Guelph Winter Fair 1918. Young stock of all ages, both sex, for sale; also young cows with calf at foot or in calf to Sylvan Power. We can supply any want in Yorkshires.  
R. D. HUNTER, EXETER, ONTARIO

## Signs of the Springtime.

EDITOR "THE FARMER'S ADVOCATE":

Not a breath of air is stirring. Over the naked woods and bare fields a soft, blue haze is hanging like a benediction.

Occasionally a benignant sun looks out to see what is going on down below, then, well satisfied, retires—for all is well. What though the country side does bear a drab soiled appearance; it is but the honorable scar received in its encounter with ruthless old winter. With the air so full of life and warmth the scar will soon be hidden. Even now, beneath the rotting leaves, or on sunny banks, or by the gnarled twisted roots of some woods monarch, nature has begun to weave the green mantle; and the breezes, sighing pleasantly amid naked branches, tell of it; and alert bird life echoes the good news.

By the big, red barn a farmer tinkers at his cultivator "fixin' her up ready for action." Bare headed, with an apron full of eggs, his wife stands looking on, doubtless giving him good advice. A wiggling, wagging puppy comes cowering on the scene, and, finding a welcome, wildly gambols here and there and round about until his mistress, starting for the house, calls and coaxes him, at which he pricks up his ears, momentarily hesitates, and then bounces after her.

Left to himself the farmer, unable to resist the springtime influence, seats himself on the cultivator tongue to rest and reflect. From afar there comes to his ears the sharp staccato bark of a gasoline engine and the intermittent whining of a circular saw; somebody getting his summer wood cut—Thank goodness he's done with that job; wood all piled, seed grain cleaned; all's ready for the great event—seeding.

Disturber of his thoughts a big white sow, with investigating snout, lumbered past him towards the ditch where the gander, guardian of two consorts, honked defiance at the invader of his particular territory. Up in the echoing barn sparrows chattered and quarrelled over the most nicely situated nesting places. Down below the hens busy at the egg game, cackle-ackle-ackled with such vim that the "rooster" just had to supply a boisterous chorus.

"What a row all creation seems to be kicking up to-day," muttered the farmer to himself "It must be"—"O, you black rascal! If I just had the gun!

The black rascal, a crow, low flying, with impudent caw-caw-cawing passed over and away with a business like flap, flap, flap that bespoke many pressing engagements. What cared he for a farmer; or for that "groundhog" which had just crept hesitatingly from its burrow in the meadow; or for the little greybird songster on the fence; or for that hawk gracefully wheeling and circling high in the sky—a hawk that presently swooped down and hovered for a moment over a tangle of brush and dead grass and then, rising, swept away in the bush where his screaming calls awakened the echoes—truly a crow, though he be a rascal, is an independent rascal.

The farmer looked at his watch and started up. Round the corner of the barn shot a boy, his eyes dancing with excitement: "Dad! Oh Dad! What d'ye think old Polly's got?"

Dad looked down with a knowing smile: "Well, and what has she got?"

The boy tugged eagerly at his father's hand: Come and see—"It's a little lamb, the dandiest little fellow!"

The sun peeped out in mellow glory as father and son went out of sight—Spring? not a doubt of it.

THE HIRED MAN.

Bill of the Press Barber Shop is responsible for the following:—

A man came into our establishment, he says, to be shaved, and, being presumably somewhat weary, he fell asleep soon after taking his seat in the chair.

For some minutes one of our staff made valiant attempts to proceed, but finally he paused, and gently shook his customer.

"Excuse me, sir," he said, "but would you mind coming out of your trance for a little while; I find it impossible to shave you while you are asleep."

"Impossible to shave me while I am asleep?" responded the customer wonderingly. "Why is it impossible?"

"Because," explained the barber as softly as possible, "when you fall into slumber your mouth opens so wide that I cannot find your face."



Illustration of a product container, possibly a fertilizer or seed packet.

Fencing, for the plan of d... has earned the "best profits but materials workman honest de customers quality at save speal square de. Let us tell us help yo

The Winnipeg

Brig

It looks for beef years to o is in line the Short We have reasons Secretary which fu

DOMI FREEE W. C.

Sho

W Young milkre Write, g tions, as weight,

J. T. Care of Farmer

I HAVE SHORT All are of service Dams. They are Gilt herd sire, white Prince, Also have sire Primrose Duke him. Inquiry in thing in Tamworth A. A. COLWILL (phone.) Newcas

PATEN Fatherstonhaugh firm. Patent even Bank Buildings, Elgin St. Offices lot free.

the Springtime.

FARMER'S ADVOCATE":  
ch of air is stirring. Over  
ods and bare fields a soft,  
anging like a benediction,  
a benignant sun looks out  
s going on down below,  
fished, retires—for all is  
though the country side  
rag soiled appearance; it  
orable scar received in its  
h ruthless old winter.  
h full of life and warmth the  
e be hidden. Even now,  
tting leaves, or on sunny  
the gnarled twisted roots  
monarch, nature has be-  
the green mantle; and the  
g pleasantly amid naked  
f it; and alert bird life  
news.  
ed barn a farmer tinkers  
r "fixin' her up ready for  
headed, with an apron  
s wife stands looking on,  
g him good advice. A  
g puppy comes cowering  
and, finding a welcome,  
here and there and round  
mistress, starting for the  
d coaxes him, at which  
his ears, momentarily  
en bounces after her.  
self the farmer, unable  
springtime influence,  
the cultivator tongue to  
From afar there comes  
sharp staccato bark of a  
and the intermittent  
circular saw; somebody  
mer wood cut—Thank  
one with that job: wood  
rain cleaned; all's ready  
nt—seeding.  
his thoughts a big  
h investigating snout,  
him towards the ditch  
r, guardian of two con-  
fidence at the invader  
territory. Up in the  
parrows chattered and  
the most nicely situated  
Down below the hens  
ame, cackle-ackle-ackled  
that the "rooster" just  
oisterous chorus.  
all creation seems to be  
muttered the farmer  
ist be"—"O, you black  
had the gun!  
al, a crow, low flying,  
aw-caw-cawing passed  
with a business like flap,  
espoke many pressing  
that cared he for a  
at "groundhog" which  
hesitatingly from its  
adow; or for the little  
on the fence; or for  
ully wheeling and circl-  
—a hawk that presently  
I hovered for a moment  
brush and dead grass  
swept away in the bush  
ing calls awakened the  
crow, though he be a  
endent rascal.  
ked at his watch and  
nd the corner of the  
his eyes dancing with  
"Oh Dad! What d'ye  
ot?"  
own with a knowing  
what has she got?"  
eagerly at his father's  
ee—"Its a little lamb,  
fellow!"  
out in mellow glory  
went out of sight—  
t of it.  
HE HIRED MAN.  
s Barber Shop is re-  
llowing:—  
to our establishment,  
ved, and, being pre-  
weary, he fell asleep  
seat in the chair.  
es one of our staff  
mpts to proceed, but  
and gently shook his  
he said, "but would  
ut of your trance for  
nd it impossible to  
are asleep."  
have me while I am  
the customer wonder-  
ossible?"  
ined the barber as  
"when you fall into  
e opens so wide that  
ce."



SARNIA FENCE

AT LOW

Factory prices—shipped promptly—freely made from our factory direct to you. You will lose money and miss a profit saved if you buy fencing—either woven wire, barb wire, gates or other materials for fence building, if you do not first get our illustrated and honestly descriptive literature, price list and order blank on

SARNIA

Fencing. Ours is a money saving proposition for farmers. Sarnia Fence and Sarnia plan of direct selling and prompt shipping has earned the name and the fame of being the "best in Canada." Lowest in price. No profits but yours and ours. None but best materials used in manufacture. Skilled workmen employed. Business methods and honest dealing used with farmers. Satisfied customers and bank references to prove quality and our reliability. The money we save speaks loudest for that phase of the square deal. Write about your fence plans. Let us tell you exact cost to your station. Let us help you work out your fence problems.

The Sarnia Fence Co., Ltd.  
Winnipeg, Manitoba. Sarnia, Ontario

Bright Prospects

It looks as though the demand for beef will be strong for some years to come, and the man who is in line for greatest profits is the Shorthorn Breeder.

We haven't room to give our reasons here, but write the Secretary for our free publications, which furnish facts.

DOMINION SHORTHORN BREEDERS' ASSOCIATION

W. A. DRYDEN, President  
Brooklin, Ont.  
C. E. DAY, Secretary  
Box 285, Guelph  
Ont. 21

Shorthorn

WANTED

CARLOAD OF

Shorthorns

Young stock backed by milk records if possible. Write, giving full descriptions, as to breeding, age, weight, color and prices.

ADDRESS:

J. T. MAYNARD

Care of Farmer's Advocate, London, Ont.

I HAVE FOUR CHOICE SHORTHORN BULLS

All are of serviceable age and from good milking dams. They are sired by my former Wedding Gift herd sire which was a son of Broadhooks Prince. Also have younger calves by present herd sire Primrose Duke, as well as females bred to him. Inquiry invited. Write me also for anything in Tanworths.

A. A. COLWILL (Farm adjoining Village, Bell phone.) Newcastle, Ont.

PATENT SOLICITORS

Fatherstonbaugh & Co. The oldest-established firm. Patent everywhere. Head office: Royal Bank Buildings, Toronto. Ottawa Office: 5 Elgin St. Offices throughout Canada. Book-let free.

The Rural School.

EDITOR "THE FARMER'S ADVOCATE":

There has, of late, been much discussion pro and con—mostly con—regarding one of the most valuable institutions, the "sine qua non," if you will, of rural society—the rural school. A few further suggestions for its improvement, therefore, may be of interest at this time.

It may be said at the outset that the writer agrees with what has already been discussed in regard to the improvement of school buildings, grounds, etc. But there is, I think, still need of further changes in the present rural school curriculum in order that the institution may better perform its function in the community.

Too much time, in the writer's opinion, is now being devoted to such subjects as geography, arithmetic and grammar. While these are quite important, it seems to me that part of this time might be spent to better advantage. In geography, for example, the child learns a long list of islands in the Pacific Ocean, or the capes and bays on the Atlantic sea board, besides a detailed study of the geography of the continents. Then in grammar hours are spent drilling on fine points, and the subjective mood, etc., which might well be left until the pupil reaches the high school. The same is also true of arithmetic, in which much time is devoted to problems which prove of little practical value in later life.

Now, might not part of this time be used to better advantage? How little the average child knows of nature with which he lives every day. Would it not, therefore, be advisable to devote more time to a study of nature, to such an extent at least, that the boy or girl might have an intelligent knowledge of the common birds, insects, trees and flowers? He would, in this way, become better acquainted with animal and plant life, a study of which would be at once interesting and valuable.

Closely related with these is the study of farm stock. What country boy or girl would not be interested in learning some of the elementary principles of judging stock? Such work might well take the form of an outing, under the guidance, of course, of the teacher, to a well-stocked farm. This might be varied also with demonstration work in butter and cheese-making, which are features of interest to all rural children.

Then, too, I think that a study of art and music should be a feature in every rural school. Of course, drawing is already a part of the course, but how much more significance would be added if the school were provided with a collection of the work of our best artists! It would give the child mind a higher ideal and greatly add to his appreciation of the subject. Who knows but that such a provision would, by thus reaching the child during his early years, be the means of producing artists of those whose talent would otherwise be lost? The same is, I think, true of music, which should be taught in rural as well as urban schools. It is a well-recognized fact that music is most readily learned while the boy or girl is of school age. How many of us have known people who regretted their failure to learn music when they were younger? What better opportunity could be afforded than that of acquiring an elementary knowledge of the subject before leaving the public school? Such a step would not only prove helpful to the child, but would also do much to solve the social problem of rural life.

Besides art and music, the rural school should be provided with a well-chosen library. How much the country children miss in this respect! The cost is not great, and when the value of such an asset in the community is considered, we should not hesitate to make this addition to the equipment.

Last, but not least, is the question of the teacher. Too many of us, in the writer's opinion, are prone to underestimate the value of the rural school teacher. We think merely in terms of "light" work and short hours, and consequently there is little encouragement for this valuable member of society. If we would aim to make the rural school more attractive, offer higher salaries and cooperate as far as possible with the teacher, in making the school a success, together with the introduction of the suggested features, we might then hope for greater efficiency and a higher standard of citizenship in rural communities.

Durham Co., Ont. W. J. C.



HORSES AND CARHARTT OVERALLS

Surely, the same considerations that impel a man to choose a first-class horse should also induce him to buy first-class overalls. The one big thing you will like about my Carhartt Overalls is that they are thoroughbred all the way through, and that means thoroughbred service, neat and finished tailoring and heavy denim cloth; every seam is double stitched; every button is reinforced. Sizes are correct; extra-large handy pockets, high back, high rib and generous seat. Behind it all is my guarantee of satisfaction and 25 years of knowing how.

Jamilton Carhartt  
President  
HAMILTON CARHARTT COTTON MILLS, LIMITED  
Toronto Montreal Winnipeg Vancouver

Harnelbell Shorthorns

Herd headed by Gainford Supreme, one of the best sons of the Great Gainford Marquis.

FOR SALE:

Some choice young cows with calf at foot; also some open heifers and heifers in call to Gainford Supreme.

We have also for sale some choice young bulls. Farm one mile from Islington Station.

SAMUEL TRUESDALE, Manager, Islington, Ont.

HARRY MCGEE, Proprietor, 61 Forest Hill Road, Toronto, Ontario

THE PLASTERHILL HERD of SHORTHORNS

CANADA'S OLDEST DUAL-PURPOSE HERD

Herd headed by Green Leaf Record 96115; sire, Cressida's Hope (imp.); dam, Green Leaf (Imr.). The majority of our females are bred to this sire. Others calving now are due to the service of Dictator, whose two nearest dams average 12,000 lbs. of milk in one year. We have one high-priced bull calf from Burnfoot Lady, a 10,500-lb. R. O. P. cow. If you want a well-bred bull—a good individual and from good record dams, come and see our present offering. We also have one two-year-old bull by Barrington Record (imp.), and have bred several heifers to him. Inquiry invited. You will appreciate our price list.

ROSS MARTINDALE - - - CALEDONIA, ONTARIO

Grand River Dual-Purpose Shorthorns

Several choice young bulls by our former herd sire, Commander, a son of the great sire, Burnfoot Chieftain, and Missie, the 7,500-lb. R.O.P. three-year-old. These calves are from dams that have milked as high as 72 lbs. per day. We also have females of similar breeding and in calf to our present senior sire, Prince Lavender, which is a son of Buttercup, the 16,596-lb. yearly record cow. Come and see the line-up of big cows in our herd. They have size and quality, good pedigrees and are great producers.

HUGH SCOTT :: :: CALEDONIA, ONTARIO

R. O. P. DUAL-PURPOSE SHORTHORNS

Herd headed by Brant Hero =113223= with good milk backing on both sides. Foundation cow Maud =108683= with record of 11,861 lbs. milk testing 4.32% fat, has given four heifers and one bull. This bull, calved April 4th, 1919, is now for sale, as are also two grandsons of this cow, one (roan) calved Nov. 17th last, the other (red) calved Dec. 14th. The dam of the roan gave 4,300 lbs. milk 6 months testing 4.7%, is still giving 21 lbs. a day. Two grandams of the red bull average 12,698 lbs. and 527 lbs. fat. These bulls are a good straight thrifty pair-fed bunch and are priced to sell. Visitors welcome at farm.

GROVER C. ANDERSON, R. No. 1, Waterford, Ontario

SPRUCE GLEN FARM SHORTHORNS

Four bulls (thick mellow fellows) from 9 to 13 months—Reds and Roans. Also a few choice heifers and two grade yearling heifers from heavy milkers. Priced to sell.

JAMES MCPHERSON & SONS - - - DUNDALK, ONTARIO

Spring Valley Shorthorns

Herd headed by Sea Gem Pride =96365= Present offering includes two real herd headers. One imported in dam, the other by Sea Gem's Pride and from a show cow. A number of other good bulls and a few females. Write for particulars. Telephone and telegraph by Ayr

KYLE BROS., R. 1, Drumbo, Ont.

I HAVE FOUR RED BULLS

Two imported, also a few females for sale.

J. T. GIBSON - - - DENFIELD, ONT



# "IDEAL" FARM FENCE IS DIFFERENT

The "IDEAL" LOCK is the Mark of Distinction—The Mark of Quality—The Last and Best in Farm Fence.

## BUY THIS FULL VALUE FENCE

Every Farm Owner appreciates and wants the best of material and workmanship in the fencing he buys. In Heavy "Ideal" Fence you get the best quality of full gauge No. 9 hard steel evenly galvanized wire, perfectly woven into a fence that will give utmost service.

THE "IDEAL" LOCK

When you put up "Ideal" You're Through—No Repairing—No Tinkering—No Regrets.

**FREIGHT-PAID PRICES** To any station in Old Ontario, (except electric), on all orders of \$15.00 or over, Remittance to be sent with order.

### Heavy "Ideal" Fence

Made Throughout of No. 9 Hard Steel Galvanized Wire. Carried in Stock in 20, 30 and 40-Rod Rolls.

Style No.	Price Per Rod	Description	Spacing of Horizontals in Inches
4330	30c.	4 Bar 33 In. 9 Stays	11-11-11
5400	37½c.	5 " 40 " 9 "	10-10-10-10
6300	42c.	6 " 30 " 9 "	4-5-6-7-8
6403	43c.	6 " 40 " 9 "	7-7-8-9-9
7400	49c.	7 " 40 " 9 "	5-6-6-7-7½-8½
7480	51c.	7 " 48 " 9 "	5-6½-7½-9-10-10
831	60c.	8 " 31 " 12 "	3-3-3-4-5-6-7
8420	56c.	8 " 42 " 9 "	6-6-6-6-6-6-6
842	61c.	8 " 42 " 12 "	6-6-6-6-6-6-6
8470	58c.	8 " 47 " 9 "	4-5-6-7-8-8-9
847	63c.	8 " 47 " 12 "	4-5-6-7-8-8-9
935	70c.	9 " 35 " 12 "	3-3-3-4-5-5-6-6
948	69c.	9 " 48 " 12 "	6-6-6-6-6-6-6-6
9481	77c.	9 " 48 " 15 "	3-4-5-6-7-7-8-8
9500	63c.	9 " 50 " 9 "	4-4-5-6-7-8-8-8
950	69c.	9 " 50 " 12 "	4-4-5-6-7-8-8-8
1050	75c.	10 " 50 " 12 "	3-3-3½-4½-5½-6½-8-8-8

### Medium Heavy "Ideal" Fence

Top and Bottom Wires No. 9, other Wires No. 12. Carried in Stock in 20, 30 and 40-Rod Rolls.

630	30c.	6 Bar 30 In. 12 Stays	4-5-6-7-8
641	31c.	6 " 41 " 12 "	7-7-8-9-10
6410	29c.	6 " 41 " 9 "	7-7-8-9-10
726	34c.	7 " 26 " 15 "	3-3½-4-4½-5-6
834	42c.	8 " 34 " 15 "	3-3½-4-4-5-6½-8
930	42c.	9 " 30 " 15 "	3-3-3-3-3-4-5-6
936	43c.	9 " 36 " 15 "	3-3½-4-4½-4½-5-5½
949	48c.	9 " 49 " 15 "	4-4-5-6-7-7-8-8
1150	54c.	11 " 50 " 15 "	3-3-3-4-4-5-6-7-7-8
1448	64c.	14 " 48 " 15 "	2½-2½-2½-2½-2½-3-3-3½-4-5-5½-6

### "Ideal" Poultry Fence

Top and Bottom Wires No. 9, other Wires No. 13. Carried in Stock in 10 and 20-Rod Rolls only.

1848	80c.	18 Bar 48 In. 24 Stays	1½-1½-1½-1½-1½-1½-2¼-2¼-2¼-2¼-2¼-2¼-2¾-3-3-3-3-3-3½-4-4½-5-6-6
2060	88c.	20 " 69 " 24 "	1½-1½-1½-1½-1½-1½-2¼-2¼-2¼-2¼-2¼-2¼-2¾-3-3-3-3-3-3½-4-4½-5-6-6

Catalogue describing fully all styles of "Ideal" Farm Fence, Gates, Lawn Fence, etc. will be sent free on request. Our name behind "Ideal" Fence is your guarantee that it will satisfy or money returned.

Mail your order now—to-day. All orders shipped at once.

**IDEAL FENCE AND SPRING COMPANY OF CANADA, LIMITED**  
1050 McDougall Street WINDSOR, ONTARIO  
(Formerly The McGregor-Banwell Fence Co., Limited, Walkerville, Ont.)

### ANTICIPATION

will be greater than  
**REALIZATION**  
if you are not using a  
**Good Shorthorn Bull**

I have a few imported ones ready for service, as well as several of my own breeding. The price is not high.

**WILL A. DRYDEN**  
Maple Shade Farm Brooklin, Ont.

### Imported Shorthorns

SIRES IN SERVICE:

**Imp. Collynie Ringleader** (Bred by Wm. Duthie)  
**Imp. Clipper Prince** (Bred by Geo. Campbell)  
**Imp. Orange Lord** (Bred by Geo. Anderson)

We are offering a large selection in imported females with calves at foot or in calf. A few home-bred females, 19 imported bulls and 8 home-bred bulls, all of serviceable age. If interested, write us, or come and see the herd.

**J. A. & H. M. PETTIT** - Freeman, Ontario  
Burlington Jct., G.T.R., half mile from farm. Phone Burlington.

**Dual-Purpose Shorthorns**—A grandson of Greengill Victor 2nd 58739, and First Choice 83253; also grandson of Benachie imp. 98057 and Royal Bruce imp. 89909. Priced reasonable, as I am short of help.  
**VALMER BARTLETT, R. R. 2, Canfield, Ont.**

**Shorthorn Bulls and Females**—Herd headed by Ruby Marquis, a son of the great Galford Marquis (imp.) Our calves now coming are all by this sire. We are also offering a few females in calf to him. Get our prices before buying elsewhere.  
**PRITCHARD BROS., R. R. No. 1, Elora, Ont.**

### Color and Health.

(BY M. FOSTER HALL, IN THE "DAILY MAIL," LONDON.)

The effect of color on the mind and body in its relation to physical and mental well-being has hitherto been so little considered and understood that one has looked forward with interest to hear something of the result of recent experiments in this direction, on some of our wounded and nerve-shattered soldiers, especially in cases of shell-shock and nervous breakdown.

If the scientific employment of color can yield, as it undoubtedly has already done in several cases, bodily healing and mental control, surely the sooner the subject is intelligently studied and understood the better.

Many commonly used phrases already prove that colors have been popularly associated with corresponding mental conditions—"seeing red," "a fit of the blues," "rose-colored glasses," and many others.

Thus red is stimulating and exciting in its effect on most people; hence "seeing red" describes the mental condition of one in a violent temper or in an unusually excited state.

Blue is calming and soothing in its action, even reducing bodily inflammation, as well as controlling violent mental emotion and passion, and in some cases will produce depression and melancholia.

Severe fits of madness have been subdued and overcome by the action of light from blue and violet glass; while melancholia has been successfully treated by rays from red glass.

It is significant that many patients suffering from brain disorders evince a strong objection to certain colors—these should never be placed near them, and the colors employed should be those which are obviously agreeable to the subject, as these, by their action on the brain and nerves, doubtless supply some mental deficiency.

To many people in health yellow and gold has a wonderful effect on the brain, stimulating and increasing its power for work.

An ideal combination, the writer has found, is a room of soft blue with bowls of yellow flowers. It is at once stimulating and restful, giving clearness of thought and mental activity.

On the morally sick the influence of color can scarcely be over-estimated; the grey gloom of prison walls and of the stone quarries of Portland must have an appalling effect on the degenerate brain of the hardened criminal; while the deadening and depressing influence on first offenders must be terrible and cruel.

When enlightened and humanitarian methods are employed in our prisons, and when the true aim of punishment is to uplift and regenerate and not merely to punish, then all that is beautiful and elevating will not be eliminated from their environment.

The present system helps to fill our prisons and to deaden and stultify the moral nature of the prisoners.

One can scarcely imagine a man employed in gardening and agricultural work plotting murder, not can one think that the gloomy surroundings of a prison can possibly bring out any latent good which waits for some encouragement.

Even our workhouses are devoid of color and are more like prisons, with their comfortless rooms and colorless surroundings, than homes for the aged and helpless, many of whom have spent their lives in working for and enriching the country; and they surely have a right to the best we can give them when their work is done.

Color and light are God's messengers. His joyous gifts to all, and they should be denied to none.

A more materialistic aspect of color influence was recently demonstrated by the experiment of placing working girls in two separate rooms, one room prepared with red, the other with blue paper; those in the red room were more active and did more work but were inclined to quarrel and talk, while those in the blue surroundings worked steadily and quietly, but were less active and energetic.

A well known humorist was being shaved by Sid, and was forced to listen to many of his anecdotes. Sid had to strop his razor, and when he was ready, brush in hand, to commence again, he asked: "Shall I go over it again?" "No thanks," drawled the customer. "It's hardly necessary. I think I can remember every word."

are our Pist wea vac cup lari soo Res flow peri w an pin The 14 To

### Fig

Lice tortur other plants profits

**PI**  
kills li fowls, not irr poultry tain in At y cans, w Write P

### Hols

15 ready for with 32.7 lbs. b the most conser

R. R. NO.

**Brain and Health.**

TER HALL, IN THE "DAILY MAIL," LONDON.)

of color on the mind and relation to physical and being has hitherto been so red and understood that one forward with interest to of the result of recent in this direction, on some of and nerve-shattered soldiers, cases of shell-shock and down.

tic employment of color can undoubtedly has already done es, bodily healing and mental y the sooner the subject is studied and understood the

monly used phrases already colors have been popularly ith corresponding mental seeing red," "a fit of the colored glasses," and many

stimulating and exciting in most people; hence "seeing s the mental condition of at temper or in an unusually

ming and soothing in its ducing bodily inflammation, ontrolling violent mental passion, and in some cases depression and melancholia. of madness have been overcome by the action of ue and violet glass; while as been successfully treated ed glass.

cant that many patients brain disorders evince a on to certain colors—these be placed near them, and employed should be those viously agreeable to the se, by their action on the res, doubtless supply some cy.

ople in health yellow and nderful effect on the brain, d increasing its power for

mbination, the writer has n of soft blue with bowls of It is at once stimulating iving clearness of thought ivity.

ally sick the influence of ely be over-estimated; the prison walls and of the of Portland must have an on the degenerate brain ed criminal; while the depressing influence on must be terrible and cruel. tened and humanitarian oloyed in our prisons, and aim of punishment is to erate and not merely to ll that is beautiful and not be eliminated from nt.

system helps to fill our eaden and stultify the the prisoners. cely imagine a man em- ening and agricultural urder, not can one think surroundings of a prison ing out any latent good some encouragement.

rkhouses are devoid of e like prisons, with their s and colorless surround- s for the aged and help- om have spent their lives d enriching the country; ave a right to the best hen their work is done. t are God's messengers, o all, and they should be

rialistic aspect of color cently demonstrated by of placing working girls ooms, one room prepared ther with blue paper; room were more active rk but were inclined to hile those in the blue ked steadily and quietly, ve and energetic.

a humorist was being nd was forced to listen anecdotes. Sid had to nd when he was ready, o commence again, "No go over it again?" "No of the customer." "It's I think I can remember

**All Cows Are Alike to the EMPIRE**

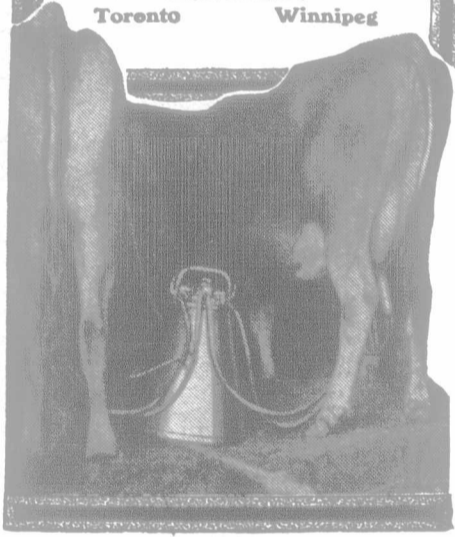
**H**ARD milkers or easy milkers—nervous or calm cows—large or small teats—even or uneven udders—they are all alike to the Empire. It milks them all. And Empire teat cups stay on without surcingles or harness.

**EMPIRE MILKING MACHINES**

are now equipped with our new Super-Simple Pistonless Pulsator. No wearing pistons to leak vacuum. It operates teat cups with absolute regularity. Cows like it. It soothes and quiets them. Results in greater milk flow and also increases period of lactation.

Write for 1919 Catalog No. 11 and name of nearest dealer who will demonstrate the Empire for you without obligation.

**The Empire Cream Separator Co. of Canada, Limited**  
146 Craig Street West  
MONTREAL  
Toronto Winnipeg



**Fight Lice!**

Lice must be conquered. They torture your fowls, cattle and other live stock, and kill your plants. In short, they sap your profits.

**Pratts' Powdered Lice Killer**

kills lice, mites and insects on fowls, plants and animals. Does not irritate the skin or lungs of poultry. Harmless to use. Certain in results.

At your dealer's in sifter top cans. Write for new book on care of Poultry. It's FREE.

**Pratt Food Co. of Canada, Ltd.**  
328L Carlaw Ave.  
Toronto.



**Holstein Bulls**

15 ready for service, 1 younger. From dams with 32.7 lbs. butter in 7 days to those priced for the most conservative buyer. Females also.

**R. M. HOLTBY**  
R. R. NO. 4, PORT PERRY, ONT.

**Questions and Answers. Miscellaneous.**

**Children's Home.**

What is the address of the Children's Home in London where I might get a child about two years of age? F. E.

Ans.—Write Mr. Kelly, Secretary of the Children's Aid Society, City Hall, London.

**Cattle Stable.**

I am contemplating building a cattle stable to accommodate twelve head, but am not conversant with the requirements of a cattle stable. I was planning on having the cattle face the centre, would like to know how wide to make the feed alley, the depth for stalls, and what space to leave for rear passage-way. How wide should the stalls be? I was thinking of building the walls of cement blocks and putting in a re-inforced concrete ceiling, with a 12 or 14-foot frame and galvanized structure on this wall. I was planning on a practically flat roof, covered with tarred roofing. W. A. K.

Ans.—The idea of having the two rows of cattle face each other is a very good one. You will find 5 feet plenty narrow enough for the feed alley and there should be at least 5 feet behind the cattle—that is, for convenience. The stalls should be about 5 feet deep and 3½ feet wide. For large cattle they should be a little wider. You will need 18 to 20 inches for mangers. The cement-block walls should be satisfactory, but we have not had any experience with a concrete ceiling. This would come rather expensive as considerable re-inforcing would have to be done, and steel and wire are expensive. A flat roof might be all right, but you will not find it nearly so convenient in putting in the hay and grain as if you had a hip-roof barn.

**Veterinary.**

**Abscesses.**

This winter and spring and less frequently other years, our cattle have had swellings filled with pus or blood on various parts of their bodies. Calves have commonly had them on their cheeks, older animals anywhere, frequently on the legs. When left alone the swellings eventually disappear, in some cases burst.

Ans.—These abscesses are the results of either bruises, a species of blood poisoning or tuberculosis. It will be wise to have the herd tested in order to discover whether tuberculosis is prevalent in it. All that can be done in treatment is to lance each tumor to allow escape of pus and then flush out the cavity 3 times daily until healed with a 5 per cent solution of carbolic acid or one of the coal tar antiseptics, and give the patient 1 to 6 drams (according to size) of hyposulphite of soda 3 times daily. V.

**Gossip.**

E. O. Baldwin, a Jersey breeder of Coaticook, Que., whose advertisement of Jerseys appears in these columns, writes that he has just sold two carloads of pure-bred Jersey cows to B. H. Bull & Sons, of Brampton. There were 24 splendid animals in the shipment, which reflect credit not only on the breed and the breeder but on the large herd at Coaticook, Que., where visitors have an opportunity of seeing one of the largest and best equipped stables in the Dominion.

The twentieth anniversary of the International Live-Stock Exposition will be commemorated by the introduction of several important new features, one of which is the launching of an International Grain and Hay Show, with \$10,000 in premiums. A nation-wide non-collegiate live-stock judging contest of the champion teams from the various States will also be staged. Several scholarships and many attractive prizes will no doubt stimulate interest in the contest. Practically every department of the Exposition will show increased offerings both in regular and special prizes.

**Shinn-Flat Protects Property**

**Worry No More About Lightning.**  
Lightning cannot harm any building equipped with Shinn-Flat Lightning Rods—this we guarantee when we make the installation.

**Shinn-Flat**

**LIGHTNING RODS PROTECT**

Shinn-Flat Lightning Rods are installed by men who have been carefully trained under the direction of Prof. W. H. Day—Canada's well known authority on Lightning Prevention.

Professor Day realizing the importance of efficient Lightning Rods scientifically installed is now devoting his entire time to advancing the use of Shinn-Flat conductors. You will profit by these services.

**FREE!**—Our illustrated book Lightning "Cause and Control" by Professor Day describes Shinn-Flat Rods and tells how the reduction in the insurance premiums pays for cost of installation.

**SHINN MANUFACTURING CO. OF CANADA, Limited**  
Factory and General Offices GUELPH - ONT. Prof. W. H. Day, Sec. and Manager



**Lightning Can't Strike IF Shinn Gets There First**

**Hospital For Insane, Hamilton, Ontario**

We have yearling grandson of King Segis Alcartra Spofford—a splendid individual. Also fine bulls of younger age, prices reasonable Apply to Superintendent.

**Highland Lake Farms**

For Sale: Two extra good (30-lb.) thirty-pound bulls ready for heavy service. Priced to sell. Also younger ones by a son of May Echo Sylvia.  
**R. W. E. BURNABY - JEFFERSON, ONT.**  
Farm at Stop 55, Yonge St. Radial

**29 Pounds Butter—103 Pounds Milk**

This is the seven day butter record and the one day milk record of the dam of my last bull of serviceable age—an exceptional bred youngster and a choice individual. Also have a month old bul whose dam and sire's dam average 34.36 lbs. of butter in 7 days, 135.07 lbs. of butter in 30 days and 111 lbs. of milk in 1 day. If you want bulls of this breeding I can save you money.

**D. B. TRACY** HAMILTON HOUSE HOLSTEINS OF QUALITY Cobourg, Ontario.

**Raymondale Holstein-Friesians**

A herd sire of our breeding will improve your herd. We have sons of our present sire, Pontiac Korndyke of Het Loo (sire of \$12,750 Het Loo Pietertje) and also sons of our former sire, Avondale Pontiac Echo. Several of these are of serviceable age, and all are from good record dams. Quality considered, our prices are lower than anywhere else on the continent. These youngsters should not remain long. Write to-day.

**RAYMONDALE FARM** Vaudreuil, Que. **D. RAYMOND, Owner** Queen's Hotel, Montreal.

**Manor Farm Holstein-Friesians**

If it's a herd sire you want, write me. I have sons of both my senior and junior sires, King Segis Pontiac Posch and King Korndyke Saddle Keyes. All from good record dams. Choice bull calves at present to offer—average for two nearest dams, up to 34.71 lbs. butter to seven days. Correspondence solicited. Visitors welcome.

**GORDON S. GOODERHAM, Clarkson Ont.**

Stations: Clarkson and Oakville. Farm on Toronto and Hamilton Highway.

**Silver Stream Holsteins—Choice Bulls**

We have six from 7 to 14 months old, sired by King Lyons Colantha, the records of his six nearest dams average 30.10 lbs. butter in 7 days, and by King Lyons Hengerveld 5 nearest dams average 31.31 and from R.O.P. tested dams. Individually as good as their breeding. If interested, write for particulars and prices or better come and see them. Jacob Mogk & Son, R.R. 1, Tavistock, Ont.

**Cedar Dale Farm**—The Home of \$15,000 Sire—Lakeview Johanna LeStrange, the \$15,000 son of the 38.06-lb. Lakeview LeStrange, is our present herd sire. We have young bulls sired by him and females bred to him—at right prices. Also have bulls of serviceable age by our former herd sire, Prince Segis Walker Korndyke, son of King Segis Walker.  
**A. J. TAMBLYN, Cedar Dale Holstein Farms, one mile from C.N.R. Station, ORONO, ONT.**

**Elderslie Farm Holstein-Friesians**

Special offering—One bull fit for service, fine individual; dam gave 195.26 lbs. milk, 782.50 lbs. butter for year. He is a son of Judge Hengerveld De Kol 8th, who's a 32.92 lb. grand son of De Kol 2nd. Butter Boy. We have others younger equally as well bred. Write at once for prices or better come and see them. (Take Kingston Rd. cars from Toronto, Stop 37.) **A. MUIR, Scarboro P. O., Ont.**

**Holstein Bulls and Females**—Only four bulls left—of serviceable age. All are from good dams, and their individuality should sell them. Two are sired by May Echo Prince, ¾ brother to May Echo Sylvia. Can also spare a few nice straight heifers and young cows bred to our 33-lb. sire Gypsy Pontiac Cornicopia. Prices right. **JOS. PEEL, Port Perry, Ont.**

**Alluvialdale Stock Farms Offer For Sale**

Two young Registered Holstein bulls fit for service. Dams official tested of Johanna strain, sire, Sir Gelsche Walker whose 7 nearest dams average 30 lbs. butter in 7 days. Write for price and pedigree. **T. L. Leslie** Norval Station, Halton County, Ont.

**WALNUT GROVE HOLSTEINS**

I am offering a choice lot of bull calves sired by May Echo Champion who is a full brother of world's champion May Echo Sylvia; also a few cows just fresh. **C. R. JAMES** (Take Radial Car from Toronto to Thornhill) Richmond Hill, R.R. No. 1, Ont.

**6 BULLS BY KING SEGIS PONTIAC DUPLICATE**

Brother to the \$50,000 bull. Three of these are ready for service and all are show calves. Write us also for females. We are pricing a number of heifers, bred to our own herd sire, Sylvius Walker Raymondale, a grandson of the great May Echo Sylvia. We now have bull calves a few months old by this sire. Let us know your wants. **R. W. WALKER & SONS, Manchester Station, G.T.R. Port Perry, Ont. R.R. No. 4.**

Nothing for sale at present; except bull calves, born after January 1st. 1919  
**WALBURN RIVERS & SONS**  
PIONEER FARM, R. R. NO. 2, INGERSOLL, ONTARIO



For Gasoline Engines, Tractor, Auto or Stationary  
**POLARINE OIL**  
STANDARD GAS ENGINE OIL  
For Kerosene Engines Tractor or Stationary  
**POLARINE OIL**  
HEAVY  
**POLARINE OIL A**  
IMPERIAL KEROSENE TRACTOR OIL  
IMPERIAL KEROSENE TRACTOR OIL EXTRA HEAVY  
(Recommended by many tractor manufacturers)



*A Correct Lubricant for every Farm Machine*



For Open Bearings of Farm Machinery  
**PRAIRIE HARVESTER OIL**  
—very heavy body, resists cold, won't thin out with moisture  
**ELDORADO CASTOR OIL**  
—a thick oil for worn and loose bearings

**NO ONE LUBRICANT WILL DO FOR ALL**

Farm machines differ in structure and in service and so require different types of oils and greases. Farm tractors require different lubricants from trucks and automobiles—different parts of the same engine or motor having different duties to perform cannot be properly lubricated with the same oils and greases. Good lubrication will save you hundreds of dollars every year over poor lubrication. Imperial Farm Lubricants provide the right kind of oil or grease for each farm machine. From the Imperial Line you can select a lubricant that gives the greatest operating efficiency for each.



Look over the Imperial brands recommended here. These names are all recognized by Canadian farmers as standards of high quality. Imperial Farm Lubricants are scientifically formulated and carefully made. There are no superiors and few equals. Properly used they will increase the years of service from your automobile or tractor and all the other machines on your farm. Imperial Lubricants come in one-half, one and four-gallon sealed cans; in steel half barrels and barrels. The kind you want in the size you need can be delivered to you promptly anywhere at any time.

**IMPERIAL OIL SERVICE**

Even though you are using Imperial Farm Lubricants exclusively, we hope that you will talk over your lubrication needs with the *Imperial Oil man* near you. He is well posted on farm lubrication. Put his knowledge to the test.



For Steam Cylinder Lubrication, whether Tractor or Stationary Type.  
**CAPITOL CYLINDER OIL**  
—the standard product for steam cylinder lubrication



**THRESHER HARD OIL**  
For Grease Cup Lubrication of Bearings, a clean solidified oil high melting point.

**IMPERIAL OIL LIMITED**  
Power · Heat · Light · Lubrication  
Branches in all Cities

**Questions and Answers.**  
Miscellaneous.

**Chick Weed.**  
What is the name of the enclosed weed? Is it injurious to cattle?  
A. L.  
Ans.—The weed received at this office is one of the Chickweeds. It is not considered injurious to cattle.

**Sharing Property.**  
A mother makes her will leaving the property to her five daughters. In case one daughter died, would the four living sisters get her share or would it go to her children?  
C. R.  
Ans.—Unless otherwise specified in the will, the share would go to her children.

**Pedigree of Horse.**  
Is the horse Athol King a Shire or a Clydesdale? Is he imported or Canadian-bred? Is he registered, and if so, in what book?  
K. W. B.  
Ans.—This is a Clydesdale horse, imported in dam. March, 1907. He is recorded in Volume 18 of the Clydesdale Herd Book and his number is [9178].

**Share Farming.**  
A owns an ideal stock farm, but, knowing nothing about farming, cannot work it. B who has had some experience in farming offers to work the farm on shares. A is to put in a certain number of cows and B the same; B is to do all the work and get half the profit. As B was unable to put in the crop this year himself, A gave some assistance. How should they share in regard to the crop? As there is more pasture than the stock could use this year, some of the land was rented. Who is entitled to the rent?  
A. B.  
Ans.—Dividing the proceeds equally would seem like a reasonable agreement. This will mean a division of the crops sold, as well as of the increase in live stock. In cases where the owner of the place furnishes land, stock and implements, it is customary for him to get about sixty per cent. of the returns, and the man who does the work forty per cent. Where the owner assisted in putting in the crop, his share should be about ten per cent. more than that of the man on the place. In regard to letting the pasture, it would look reasonable to divide the rent between A and B, as under the circumstances we understand that B puts in the same number of stock on the place as does A. He would therefore be entitled to use this pasture, if needed, for his stock. It is rather difficult to lay down a hard and fast rule for dividing the profits, when a farm is worked on shares. There are a number of things which must be taken into consideration and should be specified when the agreement is drawn up.

**Miscellaneous.**  
1. A mare had a colt on May 14. How long should it be before I could drive her?  
2. Is it legal to sell anything after one has advertised it in a sale bill?  
3. What is a cure for a cow that gives curdled milk?  
4. What is a cure for pigs which seem to be crippled? They are fed on skim-milk, oats and barley chop.  
H. M.  
Ans.—1. It is not advisable to drive the mare for two or three weeks, and then care should be taken that she is not turned in with the colt when in a heated condition.  
2. It may be legal to sell, but it is not good practice. Intendant buyers at the sale expect to have an opportunity of bidding on everything advertised.  
3. Milk sometimes is curdled when the cow is nearing the end of her lactation period. Very little can be done for this and as a rule the milk is all right when the cow freshens again. If the trouble is due to caked udder, administer 1½ pounds of salts in a pint of water, and bathe the udder with warm water. Rubbing gasoline on the udder will also help to reduce the swelling. The curdling may be due to injury to the quarter and the trouble would be helped by bathing.  
4. Once the pigs become crippled there is not much that can be done until you can get them out on grass, when they usually recover. Feed lightly on laxative feed and give 1 to 4 ounces of raw oil or Epsom salts; 1 to 3 grains of nux vomica administered three times daily may bring relief.

**Cream Wanted**

Ship yours to us, as we must have it to supply our well-established trade with good quality butter. Therefore, we are prepared to pay you highest market price paid. We furnish cans and pay express charges. References any bank.

**Mutual Dairy & Creamery**  
743 King Street West  
Toronto - Ontario

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.

JUST JERSEYS

**Baldwin's**

REGISTERED

COATICOOK, QUE.

**City View Ayrshires**

Write or come and see. We have them milkers, heifers and young bulls; all tracing to the best Canadian records.

James Begg & Son,  
St. Thomas, Ont.

**LAKESIDE AYRSHIRES**

Our bulls took the Senior Championship, Junior Championship and Grand Championship in Sherbrooke, and first in their respective classes at Quebec, in addition to taking the special prize for the best bull on the grounds any breed. We have others like them. Write for catalogue.

**Geo. H. Montgomery**  
Dominion Express Building, Montreal

**D. McArthur, Manager**  
Philipsburg, Quebec

**Westside Ayrshire Herd**—I can price females with records up to 12,000 lbs. milk, and have one fine young bull, 14 months old, a maternal half-brother of two young bull calves, with dams giving 65 lbs. per day in mature class and 45 lbs. per day as 3-year-old. Write, or come and see them.

DAVID A. ASHWORTH, Denfield, R. 2, Middlesex Co., Ont.

**A Fourteen Months' Ayrshire Herd Sire**

A Show Bull with his four nearest dams averaging 12,500 lbs. of milk and 470 lbs. of fat in R.O.P., beautifully marked and a real herd sire. Price \$225, freight paid in Ontario. Write us about our herd of R.O.P. producers. Visitors welcome. Wilson McPherson & Sons St. Anns, Ont.

**Brampton Jersey Bulls**

We are offering a half dozen young bulls of serviceable age at prices that should clear them fast to make room for our coming importation. These bulls are all from R. O. P. dams and sired by our Bright Prince and Raleigh herd sires.

**B. H. BULL & SONS**

BRAMPTON ONTARIO

**The Edgeley Champion Herd of Jerseys**

Our present offering is a year-old bull calf, the 20th May. His two grandams will average 1,100 lbs. butter, and 17,500 lbs. milk. His sire is a son of Sunbeam of Edgeley, and his dam's dam is Fanny of Edgeley. His two grandams won 1st at Guelph, in aged class, in 1916 and 1918, and on re-test in 6 months have given 9,000 lbs. of milk, and are giving 47 lbs. a day now. He is a double grandson of the Champion cow, Sunbeam of Edgeley. Anybody interested please write at once.

James Bagg & Son, (Woodbridge, C.P.R.; Concord, G.T.R.) Edgeley, Ontario

**The Woodview Farm JERSEYS**

**LONDON, Ontario**

**JNO. PRINGLE, Prop.**

CANADA'S MOST BEAUTIFUL JERSEY HERD  
Herd headed by Imported Champion Rowner, winner of first prize with five of his daughters on the Island of Jersey, 1914, second in 1916, and again first in 1917. We are now offering for sale some very choice bull calves, ready for service, sired by imported bulls and from Record of Performance imported prize-winning cows. Also some cows and heifers. Prices right. We work our show cows and show our work cows.

JUNE 15

**Tractor**

The Simp 3-plow Tractor Suitable Filling and

Individual be driven by Do your own and save exp Write for information want THE ROBT COMPANY Also Steam

**Summ**

The Sheep for Our Oxf Re We have at ewes and rams ewe lambs—the and breeding s

**PETER**  
R R No. 1  
H. C. Arkell

**F**  
Shropshire ewe Clydesdale Sta W. H. Pug Shropshire lambs, good size

**JOHN MIL**

**F**  
Some extra cho bination of the Farm and Dy early in June

**J. V. Cummings'**

**Meadow**  
Sows bred, ot litters re bred a

**G. W. MINER**

**Inver**  
Still to the fore, and ready to br in as ye're passi Hadden, Peffer

**Big Type Ch**  
arrived, includ side, sired by th tional O. I. C. s pigs for sale. J

**Maplehurst H**  
offering: A ch from the leading years. We also offering: One White Leghorn 4. Mitchell, O

**TA**  
Boars ready for also young sows JOHN W. TO



**Questions and Answers.**  
Miscellaneous.

**Chick Weed.**  
Name of the enclosed weed? Is it imported or Canadian? Received at this office the Chickweeds. It is not injurious to cattle.  
A. L.

**Leaving Property.**  
Makes her will leaving the farm to her five daughters. In the event of her death, would the four daughters get her share or would it go to the eldest?  
C. R.

**Grade of Horse.**  
I have a Shire or a Shire imported or Canadian registered, and if so, in what grade?  
K. W. B.

**Clydesdale Horse.**  
I have a Clydesdale horse, registered, born March, 1907. He is in volume 18 of the Clydesdale and his number is 9178.  
A. B.

**Share Farming.**  
I have an ideal stock farm, but am having trouble about farming, cannot get the share to work. I have had some experience in share farming, but do not know how to put in a certain number of shares; B is to do all the work, and A is to get half the profit. As B is to do all the work in the crop this year, I am having some assistance. How are you in regard to the crop? Is it better pasture than the stock farm, some of the land is for pasture?  
Who is entitled to the proceeds?  
A. B.

**Share Farming.**  
I have an ideal stock farm, but am having trouble about farming, cannot get the share to work. I have had some experience in share farming, but do not know how to put in a certain number of shares; B is to do all the work, and A is to get half the profit. As B is to do all the work in the crop this year, I am having some assistance. How are you in regard to the crop? Is it better pasture than the stock farm, some of the land is for pasture?  
Who is entitled to the proceeds?  
A. B.

**Miscellaneous.**  
I had a colt on May 14. I would like to know if it is a safe thing to do.  
H. M.

**Selling a Cow.**  
I have a cow that I would like to sell. I would like to know if it is a safe thing to do.  
H. M.

**Cure for Pigs.**  
I have a pig that I would like to sell. I would like to know if it is a safe thing to do.  
H. M.

**Not Advisable to Drive.**  
I have a pig that I would like to sell. I would like to know if it is a safe thing to do.  
H. M.

**Legal to Sell, but it is.**  
I have a pig that I would like to sell. I would like to know if it is a safe thing to do.  
H. M.

**Opportunity to Buy.**  
I have a pig that I would like to sell. I would like to know if it is a safe thing to do.  
H. M.

**End of Lactation.**  
I have a pig that I would like to sell. I would like to know if it is a safe thing to do.  
H. M.

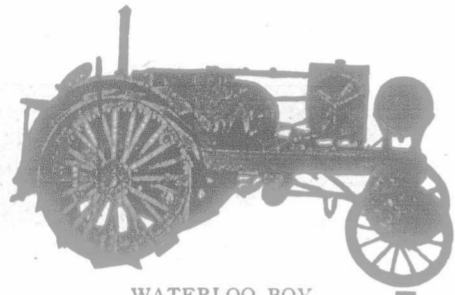
**Curdling Milk.**  
I have a pig that I would like to sell. I would like to know if it is a safe thing to do.  
H. M.

**Helped by Bathing.**  
I have a pig that I would like to sell. I would like to know if it is a safe thing to do.  
H. M.

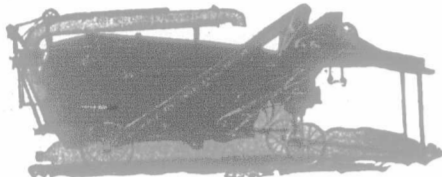
**Helped by Bathing.**  
I have a pig that I would like to sell. I would like to know if it is a safe thing to do.  
H. M.

**Helped by Bathing.**  
I have a pig that I would like to sell. I would like to know if it is a safe thing to do.  
H. M.

**Tractors and Threshers**

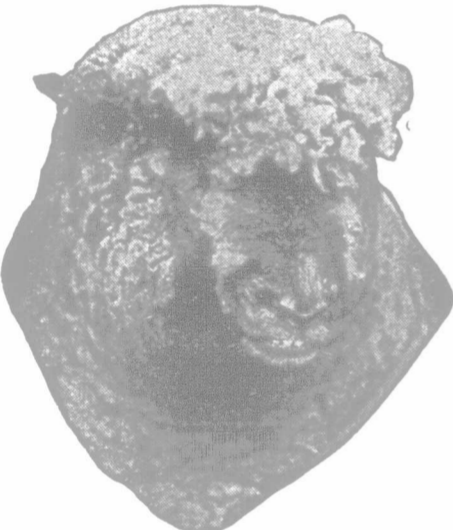


**WATERLOO BOY**  
The Simplest, most Accessible, most Powerful 3-Plow Tractor on the Market.  
Suitable for hauling 3 Plows, Threshing, Silo Filling and General Farm Work.



Individual Farmers' Threshers, suitable size to be driven by small Tractors and Gasoline Engines. Do your own threshing. Keep your farm clean and save expense.  
Write for free catalogue, prices and any information wanted.  
**THE ROBT. BELL ENGINE & THRESHER COMPANY, LIMITED, Seaford, Ontario**  
Also Steam Tractors, and large size Threshers

**Summer Hill Oxfords**



The Sheep for the Producer, Butcher and Consumer.  
**Our Oxfords Hold an Unbeaten Record for America.**

We have at present a choice offering of yearling ewes and rams, as well as a lot of good ram and ewe lambs—the choicest selection of flock-heads and breeding stock we have ever offered.  
**PETER ARKELL & SONS**  
R. R. No. 1, Teeswater, Ontario  
H. C. Arkell, W. J. Arkell, F. S. Arkell

**FOR SALE**

Shropshire ewe lambs and young ewes, two Clydesdale Stallions, four Shorthorn bulls.  
**W. H. PUGH - Myrtle Station, Ont**  
Shropshires and Cotswolds—A lot of young ewes in lamb to imp. ram, and ewe lambs, good size and quality, at reasonable prices.  
**JOHN MILLER, Claremont, Ont.**

**For Sale**

Some extra choice improved Yorkshire pigs, a combination of the Macdonald College, Experimental Farm and Dyne's breeding; will be ready to ship early in June; price \$25 a pair.  
**J. VIPOND & SON**  
Cummings' Bridge, Ontario  
**Meadow Brook Yorkshires**  
Sows bred, others ready to breed. Six large litters ready to wean. All choicely bred and excellent type.  
**G. W. MINERS, R.R. No. 3, Exeter, Ont.**

**Invergie Tamworths**  
Still to the fore, w' a bonny bunch o' gilts, bred and ready to breed; a few weaned laddies. Ca' in as ye're passin' or write me a bit note.  
**Leslie Hadden, Pepperlaw, Ont., R.R. No. 2.**

**Big Type Chester Whites**—Our fourth importation has just arrived, including an 800-lb. sow with litter at side, sired by the 1,000-lb. Champion of the National O. I. C. show. Ten litters March and April pigs for sale. **John G. Annesser, Tilbury, Ont.**  
**Maplehurst Herd of Tamworth Swine**—Present offering: A choice lot of young stock, either sex, from the leading herd of Canada for the last 15 years. We also have standard-bred horses. Present offering: One first-class young stallion; S.-C. White Leghorns. **D. Douglas & Sons, R.R. No. 4, Mitchell, Ont.**

**TAMWORTH'S**

Boars ready for service—a choice lot to select from, also young sows bred for spring farrow. Write: **JOHN W. TODD, R. R. No. 1, Corinth, Ont**

**Questions and Answers**  
Miscellaneous.

**Trees Not Bearing.**

I have two crab apple trees which for three years have had no fruit, although they blossom heavily. What is the cause of the non-yield?  
T. A. N.

Ans.—It is difficult to give a satisfactory explanation as to why the trees do not bear. It is generally due to the blossoms not being fertilized. A period of wet weather during the time the trees are in blossom very often results in a poor set, owing to the bees being unable to work. There are some varieties of fruit which blossom profusely every year but seldom bear fruit. In some cases the bud moth working in the blossom prevents the setting of fruit.

**Smoking.**

A soldier just returned from France, is smoking cigarettes and wants to stop the habit. However, it has such a hold on him that he appears unable to give them up. He would be willing to try any cure for it. Where could he get something to cure the cigarette habit?  
H. R.

Ans.—We do not know of any treatment which would be effective. If the man really wishes to give up the habit, it rests with himself to do so. This of course will require some will-power and there may be a craving for cigarettes for a time, but if one resolutely makes up his mind not to smoke he would in time be able to overcome this craving.

**Drainage.**

What depth will a person have to dig a ditch before he can turn water on his neighbor's land?  
C. M.

Ans.—We do not know if there is any specified depth. If the natural outlet is through your neighbor's farm, it is necessary for your neighbor to make an outlet which will carry the water off the land. Of course, any expense entailed in improving the outlet for the benefit of your farm would have to be borne by you, or at least to the extent to which it benefits you. For instance, in the case of tile you would be expected to supply part of the labor and to pay the difference in the size of tile necessary to take the water off your farm.

**Hungarian or Millet.**

Which is preferable to sow for hay, Hungarian or millet? When is the proper time to sow, and how much seed should be used per acre?  
J. D.

Ans.—Japanese Panic millet has given the heavier yield for hay over a period of five years, at the Ontario Agricultural College. However, Hungarian Grass gives a good yield and can be sown later than the varieties of millet. About 25 lbs. of seed are used per acre on land that has been carefully cultivated. For sowing the latter part of May or early in June, the Japanese Panic millet would be preferred, but if seeding is delayed until late in June the Hungarian Grass, which requires a shorter season for growth, would be more suitable.

**Late Sown Crops.**

I have a field which was cultivated for oats but owing to the continued wet weather I could not get it sown. What late crop is there that I could seed down with?  
M. L. S.

2. A field of 8 acres was double disked and harrowed and then was sown broadcast. It was soaked with water for many days. Is the grain likely to rot in the ground? The land is fairly well drained. Another field of 8 acres is still uncultivated. What could I sow there to seed down with?  
M. L. S.

Ans.—1. We doubt if there is any late crop which you could successfully seed down with. You might sow buckwheat for grain and millet for hay, and we have known a fair catch of seeds to be secured with either crop. However, it is not usually customary to seed down with these crops.

2. If the water lies on top of the ground there is danger of the grain rotting. However, when the soil is underdrained there is less danger and in all probability the grain will come up all right. Quite a number of farmers are summer-fallowing fields which they had intended putting in to spring crops, rather than risk any crop at this late date.

**Let Us Know Your Brick Requirements Now**

Once the building season really opens up it is hard to meet the demand for a quality product like—

**MILTON BRICK**

We can ship NOW, from full stocks of Red and Buff Pressed, or the famous Milton "Rug" in varied shades. Let us know your needs.

**MILTON PRESSED BRICK CO., LIMITED**

Head Office: Milton, Ont. Toronto Office: 48 Adelaide St. W.

**THE GENERAL ANIMALS INS. CO. OF CANADA**  
71 A ST. JAMES, MONTREAL.

**LIVE STOCK INSURANCE**

AGAINST LOSS THROUGH DEATH BY ACCIDENT OR DISEASES

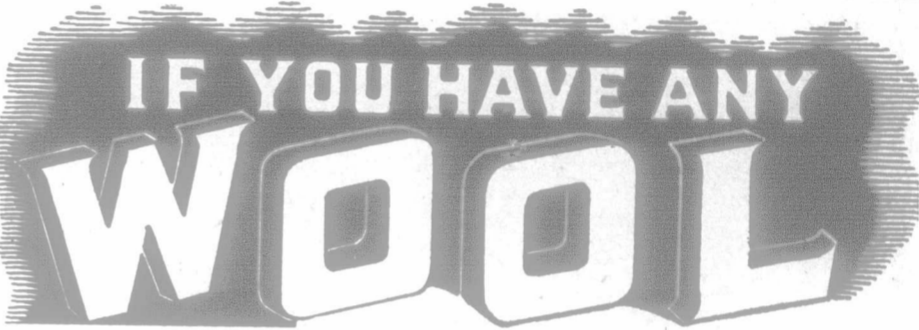
SPECIAL RATES for Registered Cattle and Horses. Short term insurance at low rates for Show Animals, Feeding Cattle, Animals shipped by rail or water, In-foal mares, In-calf cows, Stallions, etc.

WRITE US FOR FREE PROSPECTUSES

Address: THE GENERAL ANIMALS INS. CO.

71 A St. James Street, Montreal.

JOHN H. HARRIS, Inspector, 31 Scott Street, Toronto. Phone Adelaide 2740



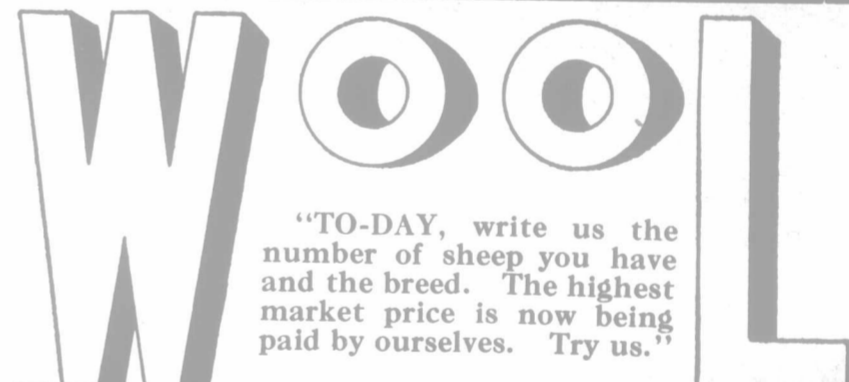
**SHIP IT DIRECT TO US**

Our Prices Are Highest—Let Us Prove It.

Before selling your Wool to anyone, write to us for prices, telling how many fleeces you have and breed of sheep clipped from.  
Address as follows:

**John Hallam Limited**

110 HALLAM BUILDING  
TORONTO



"TO-DAY, write us the number of sheep you have and the breed. The highest market price is now being paid by ourselves. Try us."

**W<sup>M</sup> STONE SONS LIMITED** ESTABLISHED 1870 **WOODSTOCK ONT.**

**WE BUY**

**FLEECE WOOL**

Write or Phone us before selling

The HARRIS ABATTOIR CO., Limited, Strachan Avenue, TORONTO

**OXFORD DOWN SHEEP**

America's Pioneer Flock

Present offering is between ninety and a hundred shearing and two shear rams. Flock headers a specialty. Also a number of shearing and two shear ewes of the best breeding, and ram and ewe lambs. All registered. Prices reasonable. **HENRY ARKELL & SON, 70 Beatty Ave., Toronto, Can.**

**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, ONTARIO**  
Langford Station on Brantford and Hamilton Radial.

**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.

**Young Yorkshire Pigs For Sale**

5 boars and 4 sows 6 weeks old, sired by a Weldwood boar. This is a litter of good ones. For further particulars apply to **David A. Ashworth R. No. 2, Denfield, Ont.**

## What is a double acting baking powder?

A double-acting baking powder is one that starts its action in the mixing bowl and finishes it in the oven.

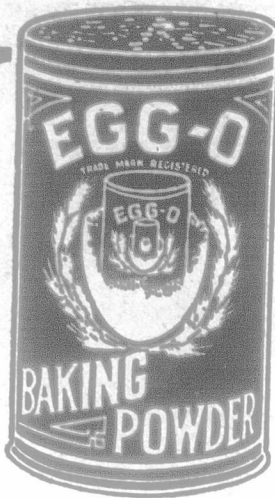
Ordinary baking powders develop their full strength in the mixing bowl and you have to hurry your cakes into the oven. Then, you are always afraid that the oven is not just hot enough, or that a door will slam or something else happen to cause the cakes to fall.

You don't have to hurry or worry when Egg-O Baking Powder is used. Egg-O rises only *partly* in the bowl. You may let the dough stand 15 or 20 minutes or longer—doing so will give better results. When put into the oven, Egg-O continues its action—this *second* action being so steady and strong that a cake is not likely to fall even if it does get an unexpected jar.

# EGG-O Baking Powder

is double-acting and just what is needed to make a light baking with the heavy Government Standard flours.

Egg-O Baking Powder Co., Limited, Hamilton, Canada



## Our School Department.

### Will the School Garden Survive the Holidays?

Much of the benefit to be derived from the school garden is lost simply because it is abandoned during the holiday season and becomes over-run with weeds before school re-opens in the autumn. The same teacher may not return to the district, and a new one will not take the same interest in the plantation as though he or she had supervised it from the beginning. Even should the same teacher return, the first sight of the garden is likely to be so discouraging as to snuff out the enthusiasm which caused the garden to be started in the first place.

Planting has been so belated this spring that the usefulness of the garden is considerably reduced. By the end of June the young plants will barely be started, and if they are over-shadowed and robbed by the more sturdy weeds which are sure to grow up, the outcome will be nothing short of disappointment to pupils, teacher, and the whole community. A neglected garden would furnish an abundance of subject matter for lessons on weeds and insects, but such can be found almost anywhere so a school garden is hardly necessary for this purpose.

To make a school garden a complete success, it is necessary to have it cared for during July and August, while the school is closed. Who is to shoulder this responsibility? The teacher may not be spending his or her vacation in the community, and the pupils could not be expected to look after the garden without some organization among them which had competent officers. There must be someone to get the children out to work and to give the command.

In the Rainy River District there is a school where the children are organized and take the same care of the garden during holidays as when school is in session. There method was described in our School Department, May 29, and is worthy of consideration. An advanced pupil who was good at weeding and hoeing was chosen to captain the school children. Four assistants were also named, each of which was leader of a small group of pupils. When the Captain saw that there was work to be done, she would telephone to one of the assistants who got his or her group of workers together at the garden. There is a suggestion in this arrangement for other school sections.

If the teacher remains in the neighborhood, the problem is more easily solved. Before the school term expires the children might be divided into groups and they would hold themselves in readiness to turn out and work when their respective turns came.

Trustees might be expected to assume some of the responsibility which a school garden throws upon the section, but trustees are often exceptionally busy during July and August and probably could not find the time be they ever so willing. The school garden is a community affair instituted for the education and benefit of the children of the community. Viewed from this angle, there might be some local organization, such as a women's institute, farmers' club, or improvement association of some kind that would take this matter in hand and see that the school garden is helped to survive the holiday season.

Surely, many schemes have been tried in an endeavor to solve this very difficult problem in connection with school gardens. If anyone can suggest a method or an arrangement that has proved successful, we should be very glad to give it publication in the School Department. Holiday season will soon be here and we know many teachers would be glad to learn of some practical way to insure the life and usefulness of their gardens. If you have an idea send it along and have it published.

### How One Teacher Proceeds

In a letter to the School Department a teacher, who has been particularly successful with her agricultural work, writes as follows:

"Since September 1917 my work along this line has been with four entrance classes, comprising over one hundred pupils. Before that time I taught some parts of the work as nature study and elementary science to third-book classes. A course at the O. A. C., Guelph, proved very helpful in giving zeal and confidence to supplement and continue the subject of agriculture in its various branches.

"In outlining my work for the year I am guided by that which is likely to create interest by being practical. Special attention has been given to the study of poultry and the results are widespread. Many children now have poultry, and, judging from the questions asked and discussions following, they are not only keeping poultry but are studying the business side of the question.

"The benefit of school and home gardens is seen in the many and varied exhibits entered by the pupils at the fall fair. The study of flowers gives the pupils pleasure and a common interest in making the school-room brighter. At time of writing we have several varieties of winter and spring-flowering bulbs in bloom, and as these were planted and cared for by the pupils they take keen interest in watching development. I hadn't realized before that boys are really fond of flowers. We expect boys to be alert in a lesson in practical science, and here, perhaps, is the branch of agriculture that creates most interest, for boys and girls alike are alive to any experiments that are tried. The far-reaching effect of these can be seen only by visiting the homes."

The accompanying illustration shows the London Normal School students observing a nature-study lesson being taught by Principal John Dearness. Public school pupils are gathered around the Jersey heifer, which was the subject of the lesson.

When transplanting cabbage into the school garden it might be well to use the felt tar-paper disc on some plants and leave others unprotected. If cabbage maggot is prevalent this treatment will demonstrate preventive measures.

A lesson on the bee should prove instructive and intensely interesting.



A Nature Study Lesson Being Taught at the London Normal School.

## Dependability



THE IDEAL GREEN FEED SILO is noted for its dependability. Once erected, it is there to stay because it represents the best silo-building knowledge, embodying right design, specially selected materials, skilful workmanship and the benefit of long experience in silo manufacture.

The IDEAL can be depended upon to cut down the cost of wintering cows and more milk at less cost invariably follows its installation.

The De Laval Company is dependable—the largest manufacturers of dairy supplies in Canada.

Write today to our nearest sales headquarters for our silo catalogue, which contains much valuable information about silos and silage.

### THE DE LAVAL COMPANY, Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA.

Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos. Alpha Gas Engines, Alpha Churns. Catalogues of any of our lines mailed upon request.

MONTREAL PETERBORO WINNIPEG VANCOUVER

50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

When writing advertisers will you kindly mention The Farmer's Advocate.

Pasture

The season farmer should to supplement cows during we have no rainy weather more, it is a which are al milk flow for ing at the rig to their maxi subsequent fe a return.

The farmer of corn silage for mid-summ well solved, fo economical fe ly, owing to harvesting w will find the silage, but t deter them fr if not greater as to have a s

Of the annu and cut and place of silag peas I part a the rate of 23 the best. Th addition of obtainable an small piece of be used, a st possible, and later so that coming on at t at the rate of above would g following year two or three seeding of oat is a hot weat to feed off w

A strip of ear come in nich on to the afte feeding.

If desired extended by first crop of would provide green feed for rum would be mentioned clo etc., the corn was taken off, of double cro It would, of co such a field qu

In some cas crops would t which case pr crop would so Such a crop c bushels per ac parts of oats, should be sow should be pas inches in heig is available th pasture upon t a small field i should only b or two every They should b the field is ve not be allowed to head out, o will cease.—E

The lawyer client gloomy. breach of prom was how muc have to pay. to speak a few I know all th angrily. "Sai and fear not the man of lav have advised, nothing."

A returned s friend wife aft when she aske you bring me a this little bulle my side," he a gee," sighed w German helmet

Lady.—"Wh train late?" Brakeman.— before us is be before besides."

**Pasture Supplements For Dairy Cows.**

The season is now at hand when the farmer should consider how he is going to supplement the pasture for his dairy cows during the coming dry season, for we have no guarantee that the present rainy weather will continue. Furthermore, it is a well-known fact that cows which are allowed to go down in their milk flow for lack of supplementary feeding at the right time, are hard to get back to their maximum production again, and subsequent feeding does not give as high a return.

The farmer who has on hand a surplus of corn silage which he can carry over for mid-summer feeding has the problem well solved, for there is no better or more economical feed to be had. Unfortunately, owing to the poor crop and poor harvesting weather last year, very few will find themselves with a surplus of silage, but this misfortune should not deter them from preparing for an equal if not greater acreage of corn this year so as to have a surplus for next.

Of the annual crops which can be grown and cut and fed green, thus taking the place of silage, probably a mixture of peas 1 part and oats 1 1/2 parts, sown at the rate of 2 1/4 bushels per acre is one of the best. This could be improved by the addition of vetches if the seed were obtainable and not too expensive. A small piece of land near the barn should be used, a strip being sown as early as possible, and another some three weeks later so that fresh green feed may be coming on at all times. Red clover sown at the rate of 10 pounds per acre with the above would give early green feed for the following year. A good crop to be sown two or three weeks after the second seeding of oats is common millet. This is a hot weather crop, and would be ready to feed off when the oats were finished. A strip of early forage corn would then come in nicely and carry the cows over on to the aftergrass, late corn and stable feeding.

If desired the above scheme can be extended by sowing fall rye where the first crop of oats was taken off. This would provide the very earliest form of green feed for the next spring, which in turn would be followed by the previously mentioned clover, peas and oats, corn, etc., the corn being sown where the rye was taken off, thus developing a system of double cropping in regular rotation. It would, of course, be necessary to manure such a field quite frequently.

In some cases such a system of soiling crops would entail too much labor, in which case probably an annual pasture crop would serve the desired purpose. Such a crop can be grown by sowing 3 bushels per acre of a mixture of equal parts of oats, barley, and wheat. This should be sown as early as possible, and should be pastured when it reaches six inches in height. If a sufficient acreage is available the cows can be allowed to pasture upon this constantly, but if only a small field is available then the cows should only be allowed on for an hour or two every morning and evening. They should be kept off altogether when the field is very wet. The grain should not be allowed to get so far advanced as to head out, otherwise all bottom growth will cease.—Experimental Farms Note.

The lawyer looked serious, and his client gloomy. It was a clear case of breach of promise, and the only question was how much the young man would have to pay. The lawyer felt it his duty to speak a few words of warning. "Oh, I know all that," interrupted his client angrily. "Same old saying: 'Do right, and fear nothing.'" "No," corrected the man of law. "In this case I should have advised, 'Don't write, and fear nothing.'"

A returned soldier had scarcely greeted his friend wife after his return from France, when she asked eagerly: "And dearie, did you bring me a lot of souvenirs?" "Only this little bullet the doctor took out of my side," he answered gravely. "Aw, gee," sighed wifey, "I wish it had been a German helmet."

Lady.—"What's the matter; is our train late?"

Brakeman.—"Sure, ma'am, the train before us is behind, and we were behind before besides."

**Compare the tone and value**

The only way to get a true idea of the exceptional values of our "Phonolas" is to compare them with other cabinets selling at about the same prices.

We venture to state that you cannot get another phonograph at \$25 equal to the

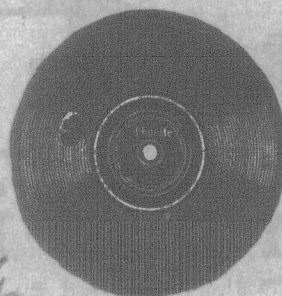


cabinet at that price. Certainly Model B at \$61 is unexcelled value. It is 17 1/4 inches wide, 18 3/4 inches deep, and 12 7/8 inches high—a good-sized instrument, with a double-spring, easy-winding, quiet motor and a surprisingly large volume of tone.

It would be hard to compare our magnificent "Organola" model with any other, because this is the only phonograph in the world with tone control pipes which include every note in the scale and give wonderful clearness and volume to the music.

We are able to give these exceptional values because we make our "Phonolas" complete in our two large plants in Canada at Kitchener and Elmira.

"Phonolas" play all makes of disc records. Ten models, ranging from \$25 to \$340.

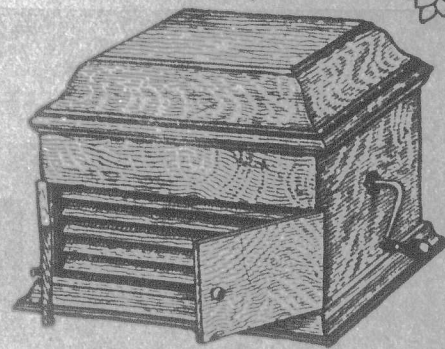


Phonola Double Disc Records 90c

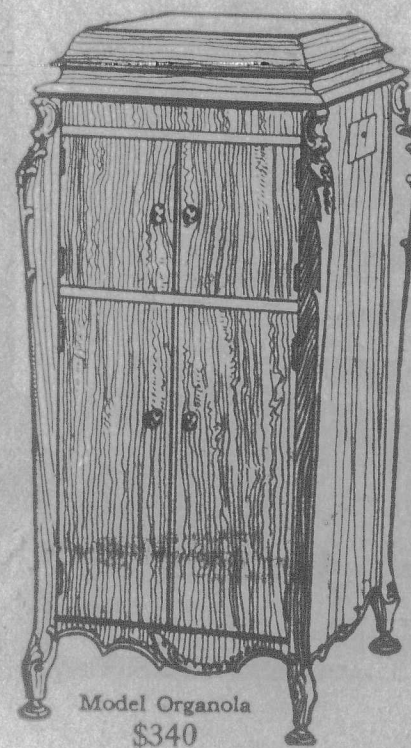
**"PHONOLA" RECORDS**

They are beautiful, clear, full-toned records — played with a sapphire point. No needles to change. A new list of double disc records every month.

The Phonola Co. of Canada LIMITED  
Kitchener, Canada



Model "B" \$61



Model Organola \$340

DEALERS: There are some localities in Canada where we require good, live representation. Write for our proposition.

**FROST & WOOD BINDER**

Let the example of thousands of satisfied and successful farmers who have bought Frost & Wood Binders influence you. A Binder is a mighty important purchase.



Light draft and fast, clean, easy work, guarantee more acres cut per day—the F. & W. Binder is the result of many years experience with Canadian conditions.

**Remember, your PROFIT lies in the last few bushels**

As in every other business, the bulk of your output goes to pay for labor and expenses of all kinds which must be paid before you get your profit. This means that it is the bushels "at the end" that bring your net profits. Therefore, in justice to yourself, use a Binder that will harvest every possible head of grain—no matter what

the crop is like, heavy or light, tangled or lodged or straight. That means just the one make—FROST & WOOD. It has the light draft, the big elevator capacity, the sure cutting and binding attachments, and the wide and easy reel adjustment that brings every possible straw to the knives.

The Frost and Wood is the Binder of the day. See it at our nearest Agent's or write for our Binder folder and you'll readily see why.

**THE FROST & WOOD CO. Limited**  
Montreal SMITH'S FALLS St. John

Sold in Western Ontario and Western Canada by

**COCKSHUTT PLOW CO. Limited**  
BRANTFORD, ONT.

**ment.**

ny schemes have been tried or to solve this very difficult section with school gardens. that has proved successful, very glad to give it publica- School Department. Holiday on be here and we know s would be glad to learn ical way to insure the life s of their gardens. If you send it along and have it

**Teacher Proceeds**

to the School Department ho has been particularly h her agricultural work,

ember 1917 my work along been with four entrance ising over one hundred e that time I taught some rk as nature study and ce to third-book classes. O. A. C., Guelph, proved givng zeal and confidence and continue the subject in its various branches.

g my work for the year y that which is likely to y being practical. Special en given to the study e results are widespread. now have poultry, and, he questions asked and owing, they are not only but are studying the he question.

it of school and home in the many and varied by the pupils at the fall y of flowers gives the and a common interest e school-room brighter. riting we have several ter and spring-flowering and as these were planted y the pupils they take watching development. d before that boys are owers. We expect boys ession in practical science, os, is the branch of agri- gates most interest, for alike are alive to any t are tried. The far- f these can be seen only omes."

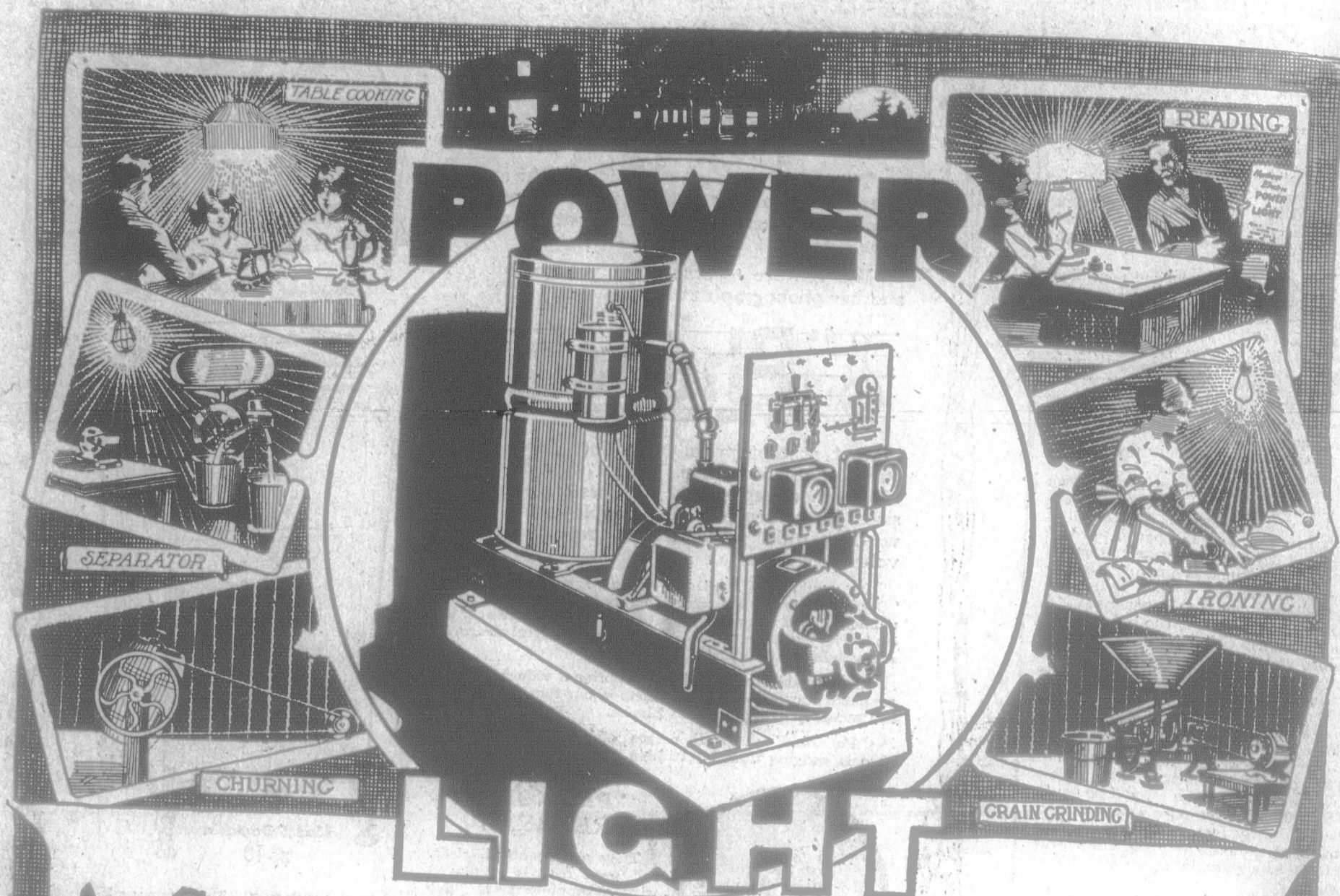
ying illustration shows normal School students ure-study lesson being pncipal John Dearness. pils are gathered around hich was the subject

nting cabbage into the might be well to use the c on some plants and protected. If cabbage ent this treatment will ventive measures.

e bee should prove in- nsely interesting.



Normal School.



# As Sure as the Sun Sets in the West so Sure will you Need Electricity on the Farm

**A**PART from altering international boundary lines, the war has shown farmers how to concentrate; how to devote their time and energy to big and important things. But what about the little jobs? Somebody has to do them; to turn the cream separator, churn, grindstone, grain grinder, saw wood, pump water, etc. These are the chores that the

## Northern Electric POWER and LIGHT

will do for you. Jobs that take muscle and time from the big end of farm work. Then, too, there is the domestic side of farming. Electricity in the home means wholesome freedom from many daily drudgeries. It will run the washing machine, iron, vacuum cleaner, sewing machine, operate the toaster and many other electric household utensils. It will flood your house and outbuildings with a safe, bright, clean and economical light. No oil lamps or lanterns to bother with.

Think what a help and convenience Electric Power and Light will be to you on the farm if you make it the Northern Electric way.

The system is entirely automatic; not even a button to press. No complicated parts or unnecessary frills to get out of order. Built for real hard work and long service with economy of upkeep. As simple and easy to look after as the Northern Electric Telephone you know so well.

NORTHERN ELECTRIC POWER and LIGHT is guaranteed absolutely reliable. Plenty of power; plenty of light. Progressive farmers all over Canada are buying the Northern Electric system because of its honest dollar-for-dollar value.

There is a Northern Electric system for every requirement. All types, all sizes, either direct connected or belt driven, operating from 15 to 1000 lights or their equivalent in power for farm work.

May we send you some interesting illustrated leaflets? You are not obligated in any way. Fill in and return coupon today.

### Northern Electric Company LIMITED

MONTREAL HALIFAX OTTAWA TORONTO LONDON WINNIPEG  
REGINA CALGARY VANCOUVER

L.F.A.  
111  
**Coupon**

Northern Electric Company  
LIMITED  
(address nearest house)

Dear Sirs,  
I want to know more about Northern Electric Power and Light. Please send me further particulars and literature, on the understanding that I in no way obligate myself to purchase.

NAME \_\_\_\_\_  
P.O. ADDRESS \_\_\_\_\_  
COUNTY \_\_\_\_\_ PROV \_\_\_\_\_