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Vol. LIII.

LONDON, ONTARIO, MAY 2, 1918.

No. 1336

While the New  
Milling  
Regulations  
Require a  
Higher  
Grinding of  
Wheat,  
We Are Producing in



# PURITY FLOUR

(Government Standard)

The highest grade general purpose flour possible under the new flour milling laws. The same careful wheat selection, the same scientific milling which established the reputation of our high patent brands, permit us to confidently recommend our new flour for all your baking.

**Western Canada Flour Mills Co., Limited**

Toronto . Winnipeg

Flour License Nos. 15, 16, 17, 18.  
Cereal License No. 2-009

# The Nations Need More Corn — And How to Get It

CONSERVE  
YOUR SEED CORN

USE AN ACCURATE PLANTER — THE

## JOHN DEERE 999 PLANTER

IS THE MOST ACCURATE

JUST AS ACCURATE AS IF YOU COUNTED OUT THE KERNELS  
AND DROPPED THEM BY HAND

(Some Methods Now Used for Ensilage are Very Extravagant)

The John Deere 999 Planter while in operation can be changed to plant from two to three and four kernels with one plate, or three to four and five alternately or six kernels to the hill with one plate, and will plant rows from 28 inches to 44 inches in width, and has five hilling distances with the same plate.

For Ensilage the 999 Planter will drill 4 1/2", 6 1/2", 7", 8 1/2", 9", 9 1/2", 11 1/4", 14", 17 1/2". This wide range is made possible by special plate with three sprockets and a foot shift lever. The different distances can be obtained while machine is in motion.

See Your nearest John Deere Dealer or write direct and ask for interesting booklet, "More and Better Corn"

JOHN DEERE PLOW COMPANY LIMITED, WELLAND, ONT.

CULTIVATE

TO PROTECT THE PLANTS AS WELL AS FOR THE  
GOOD OF THE PLANTS BY USING THE

## John Deere Rotating Cultivator Plant Shields

PROVEN THE BEST BY TEST  
ON THE

## JOHN DEERE

LEVEL J-B LIFT

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First Cultivation — Use the John Deere Hoof Shovels  
Second Cultivation — Use the John Deere Combination Hoof Shovel  
and Sweep Rig Equipment.

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Sweet Fresh Ensilage  
down to the last forkful

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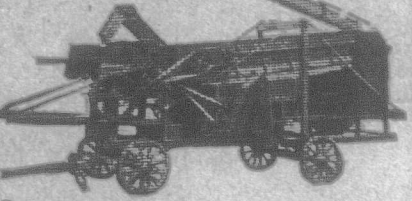
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World's Largest Manuf'rs of Concrete Machinery.

## Fertilizers Will Be Scarcer Next Fall!

Therefore Arrange for Supplies of

# Sydney Basic Slag

AT ONCE

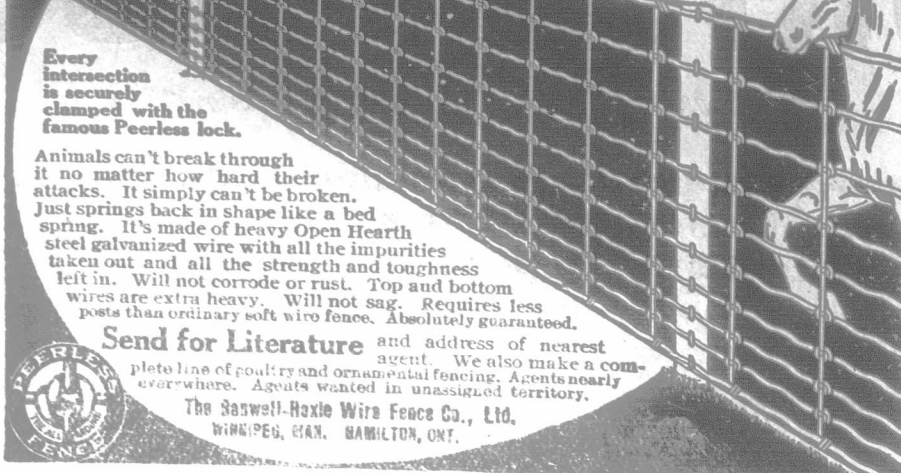
In 1913, the first year of its introduction into Ontario, 230 tons were used on Fall Wheat. In 1917, the consumption was 6,242 tons, and would have been still greater had we been able to supply the goods. We want agents in districts where we are not already represented. To get big crops you must use fertilizer, and Sydney Basic Slag has proven itself the ideal and most economical article on Fall wheat. You will need some yourself this season. Why not take a carload of 20 tons and distribute the balance among your neighbors? Drop us a line and let our general Representative call on you. He will help you to place the carload. Write us now. It may seem early but in these war times arrangements for supplies must be made some time ahead.

THE CROSS FERTILIZER CO., LIMITED  
SYDNEY - NOVA SCOTIA

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

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



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

Send for Literature and address of nearest agent. We also make a complete line of poultry and ornamental fencing. Agents nearly everywhere. Agents wanted in unassigned territory.  
The Saswell-Haxle Wire Fence Co., Ltd.  
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We guarantee every Gilson Silo Filler to cut and elevate more ensilage with the same power than any other blower cutter.

Will Silo Filling Time find you ready?  
Write for catalogue to-day.

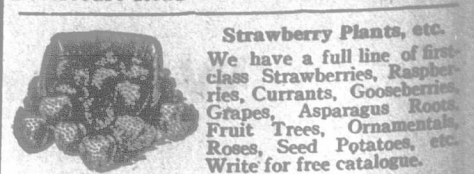


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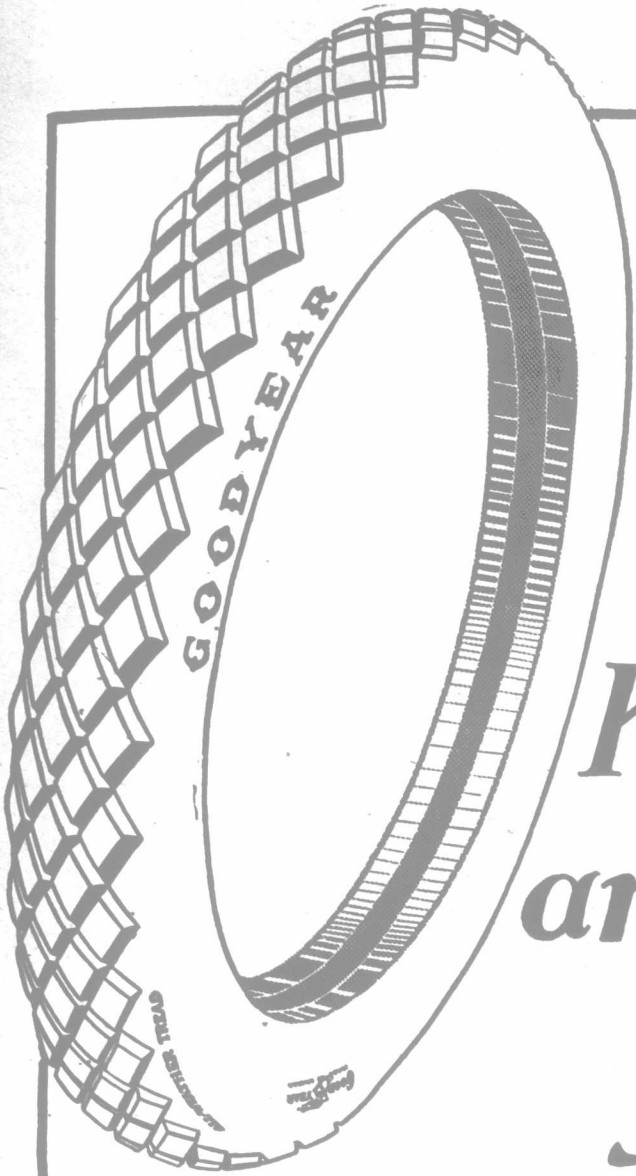
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Hand Picked, White Field Beans, beautiful sample, \$9.00 per bush. f.o.b. Toronto; sacks free. Ask for our price on all kinds of field and garden seeds. If in need of anything in the way of Horse, Cattle, Hog or Poultry Feed, we can supply you.

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## Keep an eye on your Tires

***T***O BE careless with Tires today is a costly waste.

It is more than a waste of money, for it uses up materials, rubber and cotton, and wastes factory time—all of which the nation badly needs.

Tires should be made to run every mile the factory puts into them.

To get less is a proof of careless driving or neglect of the tires.

Many car-owners get over 10,000 miles from Goodyear Tires. More get something like 7,000. Too many get only 4,000 miles.

**Yet, all Goodyear Tires are the same. All have the same strength of fabric. All the same tough, hard-wearing tread.**

When a Tire leaves the Goodyear factory it is good for the highest possible mileage.

Then, why the big difference in actual use? Why should not all car owners get 10,000 miles from their Goodyear Tires?

There is only one answer.

Some men watch their tires more closely than others. They care for them. Save them.

Accidents account for some loss, it is true. But even accidents can be guarded against.

It is every man's duty, at this time, to drive sensibly; to keep an eye on his tires; to spend a little time and thought on them; to get the full mileage that is in them.

### How to Save Tires

1. Keep tires properly inflated.
2. Repair little tread cuts promptly.
3. Avoid severe jolts.
4. Avoid sudden stops, quick starts, skidding.
5. Keep front wheels true.
6. Use French talc in the casing—not too much.
7. Keep out of deep ruts.
8. If you must use chains, put them on right.
9. Wipe off oil, grease and acids, using gasoline.
10. Paint rims to avoid rust.
11. Carry a spare tube.
12. Cover your spare tire.
13. See that nothing scrapes the tires.
14. Don't use a substitute for air.

### This Book Is Sent FREE

We have printed a book which tells plainly how to get the most out of Tires. Look for it in the tool kit, when you buy your car. If you don't find it write to us for a free copy. Keep your tires right, from the start.



*More Help for  
the Car Owner*

Tire-dealers who display this emblem will help you care for your tires. Make use of their services to get greater mileage.

THE GOODYEAR TIRE AND RUBBER COMPANY OF CANADA, LIMITED

**GOODYEAR**  
MADE IN CANADA

# GAS TRACTORS

Don't Buy Estimated H.P. BUT—

Compare cylinder sizes and speed per minute, then you will get what is needed for your work, and value for the investment.

## THE ALLWORK TRACTOR 13-28

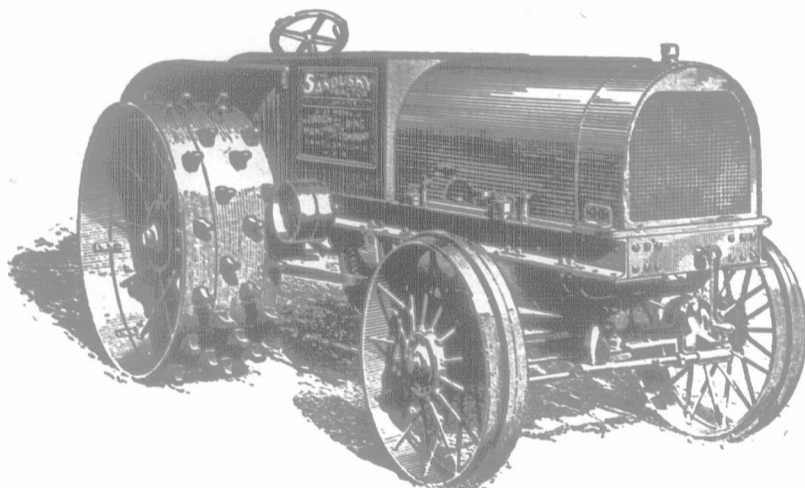
4 cylinders 5x6



AND

## THE SANDUSKY 10-20

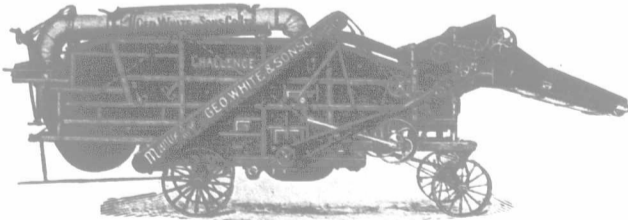
4 cylinders 4 1/4 x 5 1/4



TWO WINNERS IN THEIR RESPECTIVE SIZES

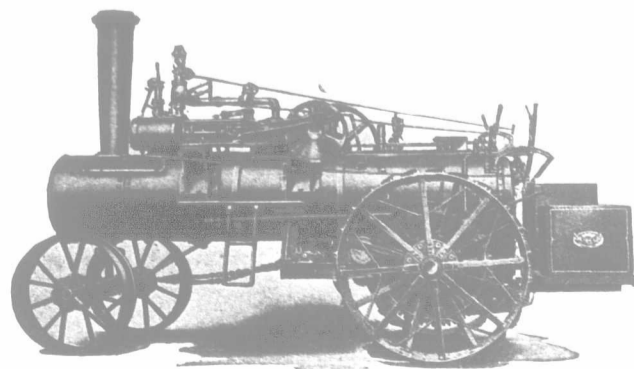
## THE WHITE No. 1 CHALLENGE

Cylinder 24", Body 40"—for gas tractor power



## THE WHITE STEAM TRACTORS

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For any size separator, sawmill or power work.

Rebuilt portable and traction engines. For silo filling and general farm work. Our stock is complete. Write now for descriptive catalogue and Rebuilt list.

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Brandon, Man. LONDON, ONT. Moosejaw, Sask.

# CHEER UP! There's a Hard Summer Ahead

Everyone will have to do his best this year and work harder than ever. But we might as well be cheerful about it.

And there is no use making burdens for ourselves and doing back-breaking work that is unnecessary.

If there is a machine to do a thing, make the machine do it. Save your own strength; you will need it all.

For washing, there is a machine, and a mighty good one. The

# PATRIOT

Spiral Cut Gear

## Hand Washing Machine



is made by a firm that has been making washing machines and wringers for 30 years, and getting more expert at it every year.

The PATRIOT is very easy to work, and certainly not hard to buy, as the price is moderate.

Ask your dealer to show you a PATRIOT, or write to us for particulars.

**Dowswell, Lees & Co., Limited**  
Hamilton, Ontario

# FREE A UNION JACK

If you are willing to assist in the work The Farmer's Advocate is doing, by sending us the name of a new subscriber, with \$1.50, the price of the paper for one year; as a return for your interest and help, we will send you a Union Jack.

## The Twenty-fourth of May is Near

For that day and other holidays and patriotic occasions, a flag the size of the one we will send you, about twenty-seven by thirty-nine inches, would be just the thing to hang in front of your verandah.

We have a number of these flags, but our supply is being rapidly reduced, and when it runs out we will not be able to fill any more requests.

Don't be too late to get one, but cut out the coupon at the bottom and send it to us without delay.

COUPON

THE FARMER'S ADVOCATE & HOME MAGAZINE, LONDON, ONT.

Gentlemen,—Enclosed is the name of a new subscriber to The Advocate and money order for \$1.50, his subscription for one year. Please send me the Union Jack as advertised.

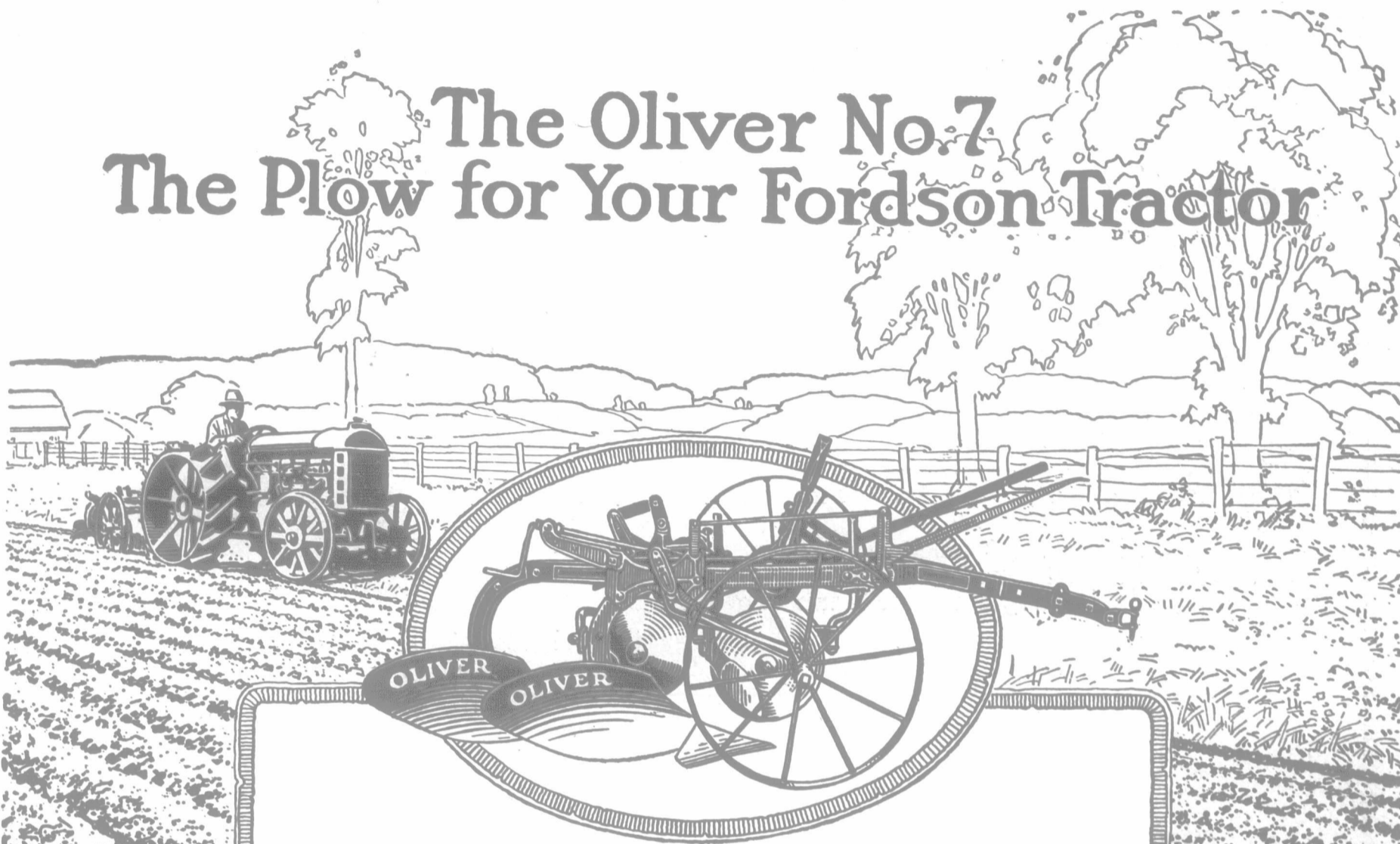
Name of sender.....

Address.....

Name of new subscriber.....

Address.....

## The Oliver No. 7 The Plow for Your Fordson Tractor



**A**FTER long and thorough testing, Henry Ford and Son recommend Oliver Tractor Plow No. 7 as the plow that will work to the best advantage with the Fordson Tractor.

Oliver No. 7 embodies principles of plow construction founded on many years of Oliver progress—sixty years of intensive study of every existing soil condition—close and constant attention to the plow requirements of the tractor since the tractor industry began.

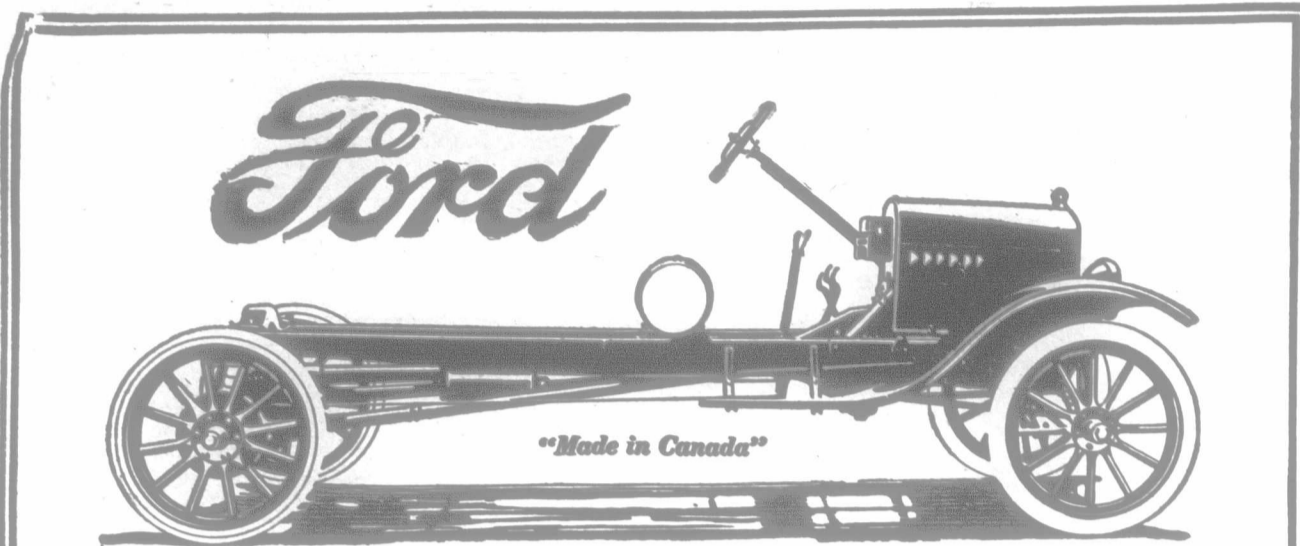
Oliver No. 7 is strictly a one-man machine. A trip lever right at the tractor operator's hand raises or lowers the bottoms. An even depth adjustment lever is right at hand, too.

You will appreciate the high clearance of plows and beams because they will save you time and annoyance—just as the rake between bottoms prevents clogging with trash and makes every second of operating time count in plowed ground.

The Oliver No. 7 plow is sold by the Agents of the International Harvester Company of Canada, Limited, who are distributors for the Oliver line of Plows.

# OLIVER

## Tractor Plows



## A Truck for the Farmer

FARM equipment which will effect a time and labor-saving, and therefore a money-saving, must be carefully considered by every good farmer now-a-days.

The farm wagon, which for years was the most useful of all farm equipment, is now being replaced on the best farms by a sturdy, dependable motor truck. The truck will haul any farm product—fruit, grain, vegetables, stock, fertilizer, or wood—around the farm, or to the town or city many miles distant, in half the time, and at a much lower cost.

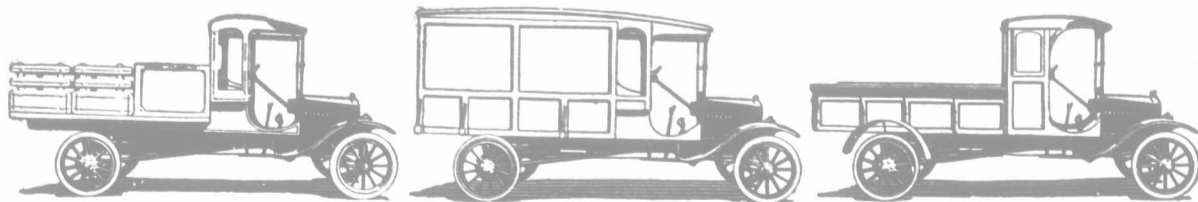
The Ford One-Ton truck is a rapid, economical and very serviceable means of transport. One of these on your farm will save you weeks of time in a single season and will enable you to pass through a crisis of labor shortage with less difficulty.

The Ford truck is supplied as a chassis only. This permits you to select any of the many body styles especially designed for the Ford truck and already on the market. Thus you can mount the one which suits your individual requirements.

Price \$750 f.o.b. Ford, Ont.

See any Ford Dealer in Canada, or write for a catalog

Ford Motor Company of Canada, Limited  
Ford, Ontario



Three of the many body styles that may be mounted on the Ford truck chassis

### Steel Rails

for Reinforcing Bridges and Barn Driveways.

CUT ANY LENGTH

JNO. J. GARTSHORE  
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### STAMMERING

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

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KITCHENER, CANADA

**Just Put Clothes In—the Washer Does the Work**

If you have a gasoline engine—if you have electric power—then no longer need you even work the lever of a hand-operated power washing machine. Let "power" help your work as it does your husband's!

Of course you realize that a washing machine, even run by hand, is quicker, easier, better than washing by muscle-power. But here's a washer that does everything—all you have to do is "turn on the juice."

**Maxwell**  
Power Bench Washer

will do the washing while you do other work! No need to watch it—it can't go wrong. It will do the wringing too. Easy to operate—simple and strong in construction—perfect in mechanism. Made in one-, two-, or three-tub size; operated equally well by 1/6 h.p. electric motor, or any gasoline engine. Write us to-day for full particulars—it will be time well-spent.

38 MAXWELLS LIMITED, Dept. W ST. MARYS, Ont.

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**Wood Stave Silos Are Best**

Wood meets the two chief requirements of a silo perfectly. Wood will keep in the heat of fermentation that is necessary for the ripening of the silage. And wood keeps out the excessive cold, reducing freezing to a minimum. Cement, tile or brick are all porous, consequently heat or cold will pass through quickly and the silage is partly spoiled.

**BURLINGTON CABLE BAND SILO**

is the product of 18 years' experience in silo-building and practical farming. Over three thousand are in use throughout Canada, and their owners are well satisfied.

The seven-strand Cable Band, which hoops this silo, is used exclusively by us. It gives and takes up as the silo expands or contracts when full or empty. It is stronger than iron and insures rigidity of construction.

These silos are easily erected, require no special skilled help, and may be put up in 10 to 15 hours.

Buy Direct from the Maker. Get our price list. Everything supplied complete, with simple instructions for erection.

THE NICHOLSON LUMBER COMPANY, LIMITED  
Burlington Ontario

**Profits in Silage**

**A BISSELL SILO MEANS MONEY FOR YOU**

A Bissell Silo will make your Corn go twice as far, you can feed twice as much stock. It means cheaper costs of producing Beef and Pork. It means increased production of Milk and Butter.

**Why Waste Your Corn Crop?**

You can preserve it in a Bissell Silo, in Succulent form and therefore more palatable, and relished by cattle than dry feed! The old methods of shocking corn are wasteful. 25 to 30 per cent. of its value is lost. The Silo is the greatest money and labor saver on the farm to-day.

Write us to-day for Catalogue, and full description of Bissell Silo.

**T. E. BISSELL**  
Co. Ltd., Elora, Ont.  
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**IRON AGE**

GARDEN TOOLS

Answer the farmer's big questions: How can I have a good garden with least expense? How can the wife have plenty of fresh vegetables for the home table with least labor?

**IRON AGE** Combined Hill Sander and Drill Takes the place of many tools—sows, covers, cultivates, weeds, ridges, etc., better than old-time tools. A woman, boy or girl can push it and do a day's hand-work in 60 minutes, 30 combinations, \$4.50 to \$30.00. Write for booklet.

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SHIPPERS! Consign your carloads to  
The E. L. RICHMOND CO.  
DETROIT

The Old Reliable Firm. In business a quarter of a century.  
References—Any Bank.

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## CORRECT STYLES AT ECONOMY PRICES

**S**OME of the merchandise is priced at less than it would cost to make it to-day. Months ago, before the present high costs, our buyers bought the fabrics, hence we can afford these striking values. As prices of clothing of all sorts are steadily advancing, you will be wise to buy now and buy right at EATON prices. You will have to pay more later on for goods not up to the same standard as these. But don't delay if you wish to avoid being disappointed.

You will be dollars in pocket by taking full advantage of the values shown here, and by making your future selections of requirements in any line from the EATON catalogue. Prices will be higher later on, so order now. If you haven't a catalogue, write to-day for your copy, so that you may share fully in the savings it presents.



Note the Low Price of this Shantung Silk Dress 7.25

Color: Natural Only  
 58-1294. Designed in a decidedly smart style, with long roll collar of white paillette silk giving a graceful line to the bodice. Note the unusually effective belt, with its trimmings of white pearl buttons and embroidery in contrasting shade.  
 Bust sizes: 32 and 34, 36 and 38, 40, 42 and 44. Price: 7.25

Checked and White Voile Dress 5.95

Colors: Heli and Green, Tau and Sky, Rose and Green, Navy and Green  
 58-5220. The checked material fashions belted coat style; waist made with large collar and cuffs of the white voile. Stylish plain skirt of the white voile is finished with deep band of the checked fabric to match waist.  
 Bust sizes: 32 and 34, 36 and 38, 40, 42 and 44. Price: 5.95

Woman's Serge Suit Priced at Less Than Present Cost of Production 14.75

Notably Good Value is this Jean Cloth Middy Dress at 3.95

Color: White Only  
 58-9228. The coat-style Middy features becoming pointed novelty collar. An effective touch of color is gained by contrasting stitching on skirted fronts. Long sleeves have turn-back cuffs. Two deep patch pockets are conveniently placed. Skirt buttons from waist, making laundering an easy matter. Has separate belt, so may also be worn with blouse if desired.  
 Bust Size: 32 and 34, 36 and 38, 40, 42 and 44. Price: 3.95

Specially Priced Striped Voile Frock 4.75

Colors: Pink and Blue, Blue and Green, Heli and Blue, Black and Navy  
 58-5217. Fashioned in one-piece style, and the bodice has panel at back and front showing the stripes running horizontally. A hemstitched border of white lawn outlines the large collar. Full-length sleeves are finished with deep cuff. The well-cut skirt is designed in tunic effect, and has a deep belt.  
 Bust sizes: 32 and 34, 36 and 38, 40, 42 and 44. Price: 4.75

Misses' Dress of Fancy Plaid Voile Low-priced at 4.50

Colors: Sky with Tan Stripes, Pink with Green Stripes, Green with Mauve Stripes  
 58-541. New-style roll collar and deep turn-back cuffs on long sleeves are composed of hemstitched white organdie edged with effective lace. White pearl buttons close front of surplice waist, and trim the novel, applied pockets. Full, but straight-hanging skirt features three wide tucks, and is joined to waist beneath all-round belt.  
 Sizes: 14, 16, 18, 20. Bust: 32, 34, 36, 38. Waist: 23, 24, 25, 26. Length: 34, 35, 36, 37. Price: 4.50

We pay shipping charges on orders of \$10 and over in Ontario, Quebec and the Maritime Provinces



200  
 Voile Blouse Economically Priced at 2.00  
 Color: White Only  
 78-X00. The fronts are of soft voile embroidered in a charming design. Note the rounded neck-line, with its two rows of hemstitching. Lace edges the pointed collar of plain voile, and hemstitching tops cuff on full-length sleeves.  
 Bust sizes: 34 to 46. Price: 2.00



225  
 Japanese Toyo Panama Hat—Special at 2.25  
 Colors: White with Black, White, Sage Blue, Rose or Emerald Green Ribbon  
 50-846. On this Japanese Toyo Panama Hat the new pencil-curved brim is a noteworthy feature. Trimmed with corded ribbon, cleverly arranged in turn-back loops in front. Head size 24 ins. Measures about 13 ins. from front to back and 12 ins. from side to side.  
 Price: 2.25

Splendid Values in the new Ready-to-wear Hats, Panamas and Trimmed Hats. Be Sure to See Pages 138-151 in our Spring and Summer Catalogue.



150  
 Exceptional Value in the New Coarse Braid Sailor at 1.50  
 Colors: All Black or Navy  
 50-845. Band of corded ribbon with tailored bow trims this smart and decidedly inexpensive hat. Head size 23 1/2 ins. Measures 15 ins. from back to front and 13 1/2 ins. from side to side.  
 Price: 1.50

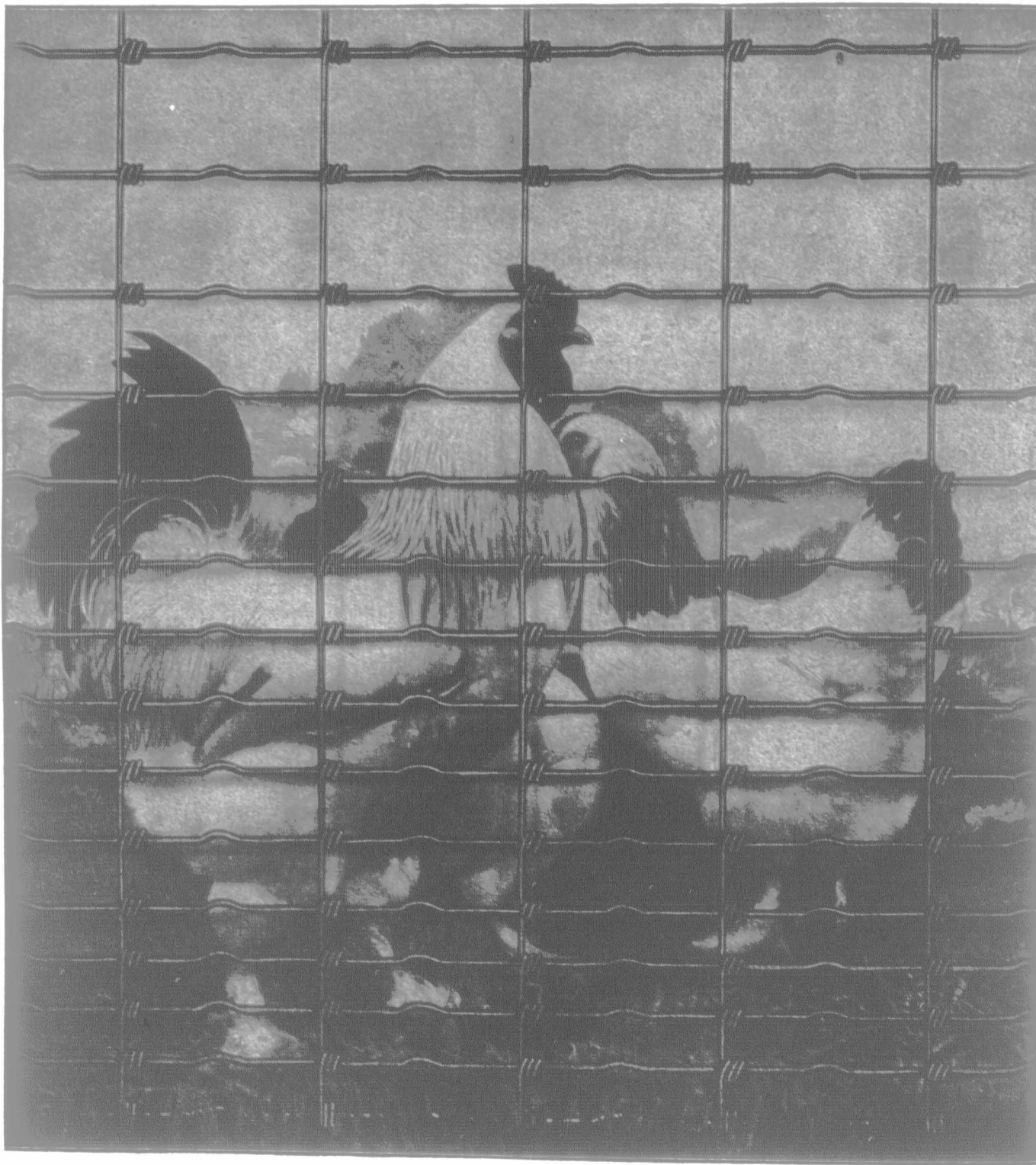


285  
 Splendid Value is this Habutai Silk Waist at 2.85  
 Colors: Ivory, Flesh, Rose, Mauve, Navy, Black  
 78-X55. The unusual collar is fashioned of white picot-edged silk, and buttons on to revers. Full-length sleeves have deep cuffs with picot-edged turn-back finish of white silk to match collar. This blouse, obtainable in several colors, closes with white pearl buttons. Bust sizes: 34 to 46. Price 2.85

THE T. EATON CO LIMITED TORONTO CANADA

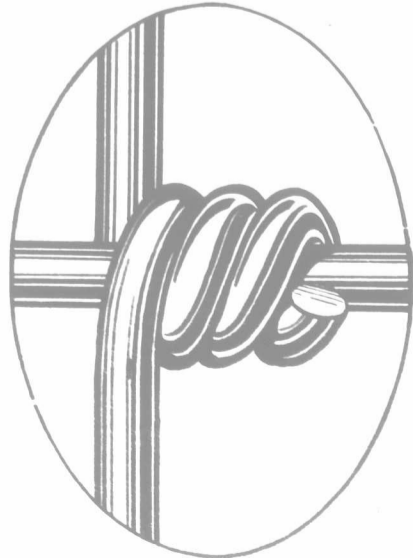
# AMERICAN

## Farm, Poultry and Garden Fences



### Poultry Designs

- 21 Bars — 58 inches high
- 19 Bars — 48 inches high
- 18 Bars — 43 inches high
- 16 Bars — 35 inches high
- 15 Bars — 48 inches high
- 14 Bars — 43 inches high



MANUFACTURED BY

**THE CANADIAN STEEL & WIRE CO., Limited, Hamilton, Canada**

### Farm Designs

- 11 Bars — 55 inches high
- 10 Bars — 52 inches high
- 9 Bars — 49 inches high
- 8 Bars — 45 inches high
- 8 Bars — 32 inches high
- 7 Bars — 41 inches high

*Barbed Wire, Coiled Wire, Staples*

LIII.

EL

The hardest

Canada has called.

Early seeding tory crop.

No real man sacrifices for de

Grow as muc is worth every p

It is not to farm should hav

This year is tribution of mar

Patience and nation in good s

Plan, if possi sary for the live

A little large be a reasonable year.

Agriculture i so lacked organi helpless giant.

Good readin tional thought a entire country.

More rain th season will be r grass than usual

We admire loathe the man less slain by bru to protest.

It is about ti on a war basis. is in the best int may yet be a re

Canada, sinc place among the to third in the li must be accompl

The Kaiser's in Germany. I the mighty one higher and "safe

If Germany year the men ar decision an Alli come in 1918, th 1919.

The farmer's labor difficulties, an extra effort wh in this country la total population thousand in 1910 And 1918 will see



# The Farmer's Advocate and Home Magazine

PERSEVERE  
AND  
SUCCEED

ESTABLISHED  
1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

LIII.

LONDON, ONTARIO, MAY 2, 1918.

1336

## EDITORIAL.

The hardest workers in Canada are on the land.

Canada has never been found wanting when duty called.

Early seeding is a favorable start toward a satisfactory crop.

No real man or class of real men will object to further sacrifices for democracy.

Grow as much food as possible this year. The cause is worth every possible sacrifice.

It is not too late yet to put in a garden. Every farm should have garden vegetables.

This year is bringing the crisis of the war. A distribution of man-power must be made.

Patience and steadfastness have stood the British nation in good stead in many a time of trial.

Plan, if possible, to grow the bulk of the feed necessary for the live stock this year on the home farm.

A little larger acreage of mangels and turnips might be a reasonable safeguard against a corn failure this year.

Agriculture is the big interest of Canada, but it has so lacked organization in the past as to be a more or less helpless giant.

Good reading, national in character, develops national thought and a oneness of public opinion over the entire country.

More rain than we have been getting early in the season will be necessary if the stock are to get more grass than usual this year.

We admire the man who loathes killing, but we loathe the man who would stand by and see the helpless slain by brutal war lords and would not lift a hand to protest.

It is about time this country was properly organized on a war basis. All men should be doing that which is in the best interests of the nation. National service may yet be a reality.

Canada, since the war began, has risen from ninth place among the wheat-producing countries of the world to third in the list. Producers are doing well but more must be accomplished.

The Kaiser's family is said to be the safest family in Germany. It will not always be so. Some day the mighty one and his six sons will fall hard, and the higher and "safer" they get the harder they'll fall.

If Germany is determined to force a decision this year the men and means must be found to make that decision an Allied victory. If the decision does not come in 1918, then the sinews of war must be ready for 1919.

The farmer's biggest problem is to overcome his labor difficulties, and he must be given credit for making an extra effort when we read that the area in field crops in this country last year was 5,095 acres per thousand of total population, as compared with 4,794 acres per thousand in 1910, and 3,713 acres per thousand in 1900. And 1918 will see a bigger acreage still.

## The Public Desires a National Press.

Last year the United States Congress passed a War Revenue Bill, the provisions of which included the establishment of a zone system in regard to the transmission of periodicals through the mails which, when it becomes law July 1 next, will increase enormously the postage charges which publishers are called upon to bear. The zone system operates with a heavily advancing rate as the distance from the place of publication increases, and so works to the disadvantage of the publishers of papers of a national character. The Act in the United States makes a big increase in the rates for the first year with further almost, if not quite, prohibitive increases for the second and third years after it comes in force. The first zone is up to 300 miles, the second zone from 300 to 600 miles, the third from 600 to 1,000 miles, the fourth from 1,000 to 1,400 miles, the fifth from 1,400 to 1,800 miles, and the sixth over 1,800 miles, and the rates for the second zone are twice as much as for the first, for the third three times as much, and so on, the postage to the sixth zone being six times as much as to places in the first zone. It is claimed by publishers of national papers and magazines in the big Republic that the new rates mean an increase in postage charges of from 50 to 900 per cent., and already there is a noticeable and increasing number of suspensions and amalgamations of publications.

On the face of it there does seem to be a reason why a higher rate should be paid for carrying printed matter a long distance than for taking it a short distance, but when we look into the matter closely we find any such arrangement decidedly unjust and discriminatory. It is placing a tax on intelligence and education. It will have a tendency to break down rather than build up a national press and will certainly encourage a provincial, local, sectional and separate-thought press in its stead. No country desires sectional thinking; all should work for national and rational thinking. Such an Act is not only harmful to publishers but also to business and the people generally. Trade, religious and farm papers together with the biggest and best national magazines will be most affected by such an Act. Those organs most independent of parties and cliques—those whose influence for good is immense will be called upon to carry the heaviest burdens. It is very questionable whether a government in a producing country can afford to strangle good periodicals which undoubtedly are factors in the production from the farms, in the manufacturing power of the factories, in the raising of money for charitable and religious organization work, as well as in disseminating religious knowledge and the building up of higher life in the homes.

Moreover, no postal department is created as a money-making proposition. The Post Office Department in any country should plan to be self-sustaining, but raising war revenue by such an increase in rates on periodical literature can scarcely be upheld. Why should, for instance, John Smith be called upon to pay several times as much for a Toronto publication because he lives in Vancouver as he would have to pay if he lived in Hamilton? There is no reason. Why should those people on the edges of civilization in new districts be deprived of the best national reading because of a zone system making the price of the reading prohibitive. Farm women and children far off from the centres of publication should not be discriminated against. Neither should dwellers in any town or city be deprived of getting a national newspaper published at some distant place. Such a policy is narrow and unjust. Surely national intelligence and national education count for more than the few extra paltry dollars which a zone system of carrying periodicals by mail will ever collect. All papers are willing to pay their income and other war taxes, but such a direct tax as this working as it does directly against the formation of a national public opinion is, as President Wilson said, a "Mischievous blunder."

Suggestions of a similar law have been heard in Canada, but so far no such foolish and uncalled-for action has been taken. Canadian publishers have a fair rate, which applies not only to all Canada but to all parts of the British Empire. Outside of the twenty-mile free zone, which is a foolish arrangement, no matter where the reader resides in the Empire prices for Canadian publications in so far as postage is concerned remain the same. And so it should remain. We sometimes think, however, that it would be good policy to deny the use of the mails to periodicals which use fake methods of putting on subscribers' names, and which do not insist upon getting a stated subscription price, as revealed by their books.

## The Relation of Live Stock to Crops.

During the last two or three seasons, which on the whole have not been favorable ones for agriculture in Ontario, one fact has been driven home. Wherever live stock has for years been fostered on the farm the soil has been less subject to adverse conditions and crops have done well. Recently we had occasion to comment on the thrifty appearance of a pure-bred herd, and the owner remarked: "We have plenty of feed. We have always fed a lot of cattle here and the soil is very fertile. Last year the crops did so well they went down." In a dry season or a wet one the soil with plenty of humus incorporated with it does not parch with the heat or become water-logged with the excessive moisture; it is more or less immune to adversity and so is the farmer who relies upon it for the yields. Humus and available plant food are the results rather than the cause of good farming, and behind it all are the herds and flocks which consume the products of the soil and return the residue in the proper condition to form a partnership with the acres that will, in turn, yield still more. Live stock and good farming go together, and this the past few seasons have abundantly proven.

## Why Pure-breds Are Carried at Half Rate.

Breeders of pure-bred live stock are aware that the Canadian railroads carry pedigreed animals, in less than carload lots, at half the tariff rate. There is a limit to the distance, of course, but the policy is to develop the live-stock industry of the Dominion to such an extent that the revenue of transportation companies may be increased through a larger volume of commercial stocks to be moved, and a more prosperous agriculture in general. Good live stock means good farming, bigger crops, and more tonnage for the railroads. The late J. J. Hill was aware of the extent to which a railroad must depend on agriculture in the territory through which it runs, and the development of the agricultural resources, along live-stock lines, of the country invaded by his locomotives was a part of the wonderful scheme which brought him fame as a builder and operator of roads. Since September, 1912, the Union-Castle Company's liners have been carrying pedigreed animals free of charge from Britain to South Africa. Up to January 1, 1918, this Company transported 2,770 cattle, 333 horses, 513 sheep, and 212 hogs, the estimated value of which totalled £203,312. Britain now imports from that colony around 22,000 tons of beef and mutton, which goes largely to help feed the army. In 1916, the total was only 7,928 tons, and in 1915 no more than 2,324 tons. The exports of meat from South Africa are rapidly increasing, and the Union-Castle Company will not have occasion to regret their free freight policy.

There is a feeling amongst breeders and shippers that, in some cases, the minimum weight upon which the railway agents are instructed to base charges is too high. This should be adjusted equitably, for the history of railroading furnishes ample evidence that pure-bred

## The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

Published weekly by  
THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.

Agents for "The Farmer's Advocate and Home Magazine",  
Winnipeg, Man.

### 1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday.

It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.

### 2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries, 12s., in advance.

### 3. ADVERTISING RATES.—Single insertion, 20 cents per line, agate. Flat rate.

### 4. THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.

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London, Canada.

live stock is a wonderful stimulus to agricultural production and rural development. In view of these facts nothing should be allowed to impede the wide distribution of foundation stock which means so much to a young country like Canada.

### Take Good Care of the Wool Clip.

At this time when all products of the farm are so much needed, either to feed the population at home, or clothe and sustain those near the seat of war, every effort should be made to conserve. Applied to wool, this means that while still on the sheep it should be kept clean and free from foreign matter. Shearing should be done on a clean surface and the clip should be kept in a dry place until marketed. Tying with binder twine or strings made of wool results in a loss; use paper twine. So critical has the situation become that the United States Government has asked the wool merchants of the country to suspend private trading and to offer all the wool and tops owned, whether on spot or to arrive, to the Federal Government. It has also been reported that prior to this order the manufacturers were requested to reserve all their looms suitable for the manufacture of military fabrics for Government use. The activities of the United States Government are a good indicator of conditions on this continent in respect to wool, and these suggest that every effort should be made to care for it properly so the looms of the nation or those of our Allies may clothe our armies in a satisfactory manner.

Those city women who suggest that women from our cities and towns should replace the farm women in the homes of the country while the latter go out to the field and help the men, are more enthusiastic than sensible, or more selfish than generous.

### The Rod-of-Iron Rule.

BY SANDY FRASER.

I wis oot at church last Sunday and oor meenister gave us an unco'guid sermon that I'm thinkin' to repeat for yer benefit, if ye'll tak' the time to be listenin' to it. He took for his text that verse where it says: "He shall rule them with a rod of iron." "In the first place," says he, "I want to tell ye that according tae the note in the margin the correct reading o' that passage is "He shall shepherd them with a rod of iron," and it makes quite a difference in the meaning ye are likely to tak' oot o' it, too. It's one thing to be ruled and anither thing to be treated in the way a shepherd generally treats his flocks. And when a shepherd uses a "rod o' iron," or a rod o' any kind, it is usually wi' the intention o' benefiting those that it is used on. It's juist here that the difference comes in between the God that the nations of auld used to believe in and the God that the maist o' the civilized world believes in at the present day. The auld-fashioned Ruler o' the Universe was a kind o' an over-grown man that was likely tae strike ony o' his earthly children dead at ony minute if they werena humble enough an' forgot to pray an' praise at the proper times. They sized God up according tae the standard they had for measuring themselves, an' they took it for granted that He wad do, in ony particular case, juist what they wad do themselves. But at the present day the majority o' humanity hae a different idea o' "the Power that gave us being," and we look on God as One who is more interested in oor welfare than we are oorselves, and who is continually trying to get us on the right track an' to keep us there in spite o' oor persistence in tryin' tae get intae the ditch again. So this is why we are inclined tae think that the correct translation o' oor text is "He shall shepherd them" instead o' "He shall rule them." It sounds as though we were being led instead o' being driven, that we were being guided along the right way instead o' being forced into it against oor will. It looks as though it wis the only way to develop character an' build up a real man. If we persist in daein' what we ken is wrang we'll be allowed to do it, and then after we've experienced the consequences and got intae a mair reasonable state o' mind we'll be shown some way or ither to get back on solid ground again. We're unco' ignorant an' inclined to follow oor feelings rather than what conscience we hae, an' there's na doot that it must tak' infinite patience tae deal wi' us; but as luck has it we're dealing wi' a Power that has juist that quality, which is the only reason, I'm thinkin', that we are gettin' a chance to go on an' finish the job o' makin' men oot o' oorselves.

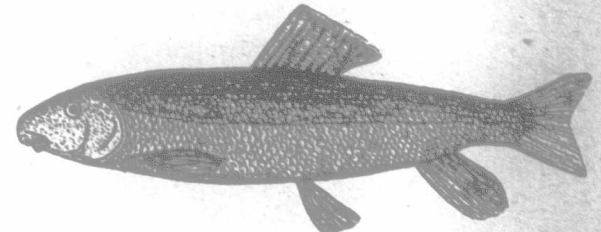
Noo, to get back tae oor text, I've been wonderin' if we can't apply it to the conditions that we ken exist in the world to-day. This war is on oor minds noo mair than ever, an' for the last few weeks things hae no' been goin' ahead in a way calculated tae encourage the friends o' liberty an' humanity. Noo here is juist where, maybe, oor text is going tae fit in. It says: "He shall shepherd them with a rod of iron," and what is to say that that is no' the experience that the nations o' the Allies are undergoing on the fields o' France? This war is the natural result o' wrong thinking on the part o' man but there is that higher Power, that we were talkin' aboot, to be taken intae account in dealing wi' the outcome o' it all. We all ken that the interests o' the world will be best served by the final victory o' the armies o' freedom an' democracy. It will mean world-progress, a lang step in the right direction, while, on the ither hand, defeat would mean a setback that naething but years o' struggle by future generations would overcome. But since we ken that we hae Right on oor side there's no sort o' need o' contractin' a fit o' the "blues" over the outlook. We can't be beaten if we don't get discouraged an' quit. We hae Russia for an object-lesson on this point, an' I don't think we need ony better warning. A peace that comes before its time is naething short o' spiritual death for the nation. And noo as to these reverses an' losses we hae been enduring off and on throughout the war, an' mair especially in the last few weeks on the Western front. Why are these things coming to us if we are on the side o' right? Juist because, although we fight for right, yet as a nation and as individuals we are not right. What was France before the war? Naething but a nation o' pleasure-seekers that made this world every-thing and took no account o' ony possible future existence or gave no thought to the real purpose of living. Was England any better? Vera little, what wi' the ruination o' one class by too much money an' the degradation o' the ither by too little. For all her braggin' auld England had a good way to travel before she would hae been a full-sized democracy. So, dae ye think that we hae ony right to say that, takin' it all in all, we could hae got along juist as weel wi'oot sae muckle "shepherdin' wi' a rod o' iron?" I dinna think it. In fact, I feel sur that there is juist one thing that will help mankind frae going tae the bad entirely and that is discipline. We need it in this country as well as they do in Europe, but in as much as we hadna run sae far oot o' the way here as they had over there, apparently, we are no' under the necessity o' takin' oor medicine in as heavy doses as they are. Though they are heavy enough for some, we ken that.

"And the proof that this medicine is having its effect on the nations is being brought to us every day. Those that hae known France in the past and wha know her to-day tell us that a spiritual rebirth came to her with the heroism o' her soldiers and that the things of real an' lasting value are the things that count in

France, in this fourth year o' her fight for freedom. An' the same is true o' England, an' America, an' Canada an' ilka nation in the struggle. In different degrees maybe, but we see the change juist the same. Extravagance an' laziness hae pretty nearly got their knock-out blows an' intemperance is in a fair way to come by the same fate. There's no occasion for discouragement. All we want is a little mair insight intae things. It will help us to see a purpose in the 'rod o' iron' an' maybe gie us the courage to endure. I ken it's easy to talk but when the chance comes to throw what little light we hae on the road that is dark enough for sae mony, I'm thinkin' we shouldna pass it by. There are some amang us that are beginnin' tae think we may be beaten in this war after a'. To these I juist want to say that it isn't possible. We hae the right on oor side, an' while we're willin' tae wark an' tae fight, how can we lose?"

### Nature's Diary.

A. B. KLUGH, M.A.



Common Sucker.

I have an enquiry from E. B., Simcoe, Ont., in regard to the life-history, habits, etc., of the Common Sucker.

The Common Sucker belongs to the family Catostomidae, and one of the main peculiarities of this family is the form of the mouth, which is usually greatly protractile and has fleshy lips. It is this peculiar form of the mouth which gives the common name, "Sucker" to the species of this family.

This family is a large one, embracing some fifteen genera and more than seventy species, two of which occur in Asia, while the others are inhabitants of the fresh waters of North America. The family includes not only the species commonly known as Suckers, but also those known as Mulletts, Redhorses, Buffaloes and Quill-backs.

As food fishes the species of this family do not hold a high rank, as their flesh while it is of good flavor is very full of bundles of fine fagot-bones. None of the species are game-fishes, as they rarely take a hook except on a set-line.

In Ontario we have nine species belonging to this family, the commonest being the Common or White Sucker, the Northern or Long-nosed Sucker and the Common Mullet or Redhorse.

The range of the Common Sucker is from Quebec and Massachussets westward to Montana and Colorado and southward to Missouri and Georgia. It sometimes attains a weight of from three to four pounds, though the average weight is from one and one-half to two pounds. It spawns early in the spring, soon after the ice goes out, forcing its way up the flooded streams and through the swiftest rapids to reach the spawning beds. At this time it is often found in very small streams and is easily speared, thrown out with a pitch-fork, caught with a dip-net or even with the hands.

A small race of this species occurs in ponds and in streams which are blocked by dams so that the fish cannot run down to the lakes. These fish never grow to a greater length than about five or six inches, and they do not lose the dark marking typical of the young of this species, but they evidently breed as the supply is maintained.

The Common Sucker is brownish or olive-colored above, and white beneath, and the males in spring have a rosy flush.

The Northern Sucker is larger than the last-mentioned species and attains a weight of five pounds, and a length of from two to two and one-half feet. The head is long and slender and is depressed and flattened above. It is found from the St. Lawrence to the Missouri, and the Columbia and northward to Hudson Bay and Alaska.

The Common Mullet is deeper through the body than either of the Suckers, and is olive-greenish with strong, brassy reflections and with the tail and lower fins red. It reaches a weight of from four to five pounds, and a length of about two feet.

The Mullet runs up the streams to spawn early in spring, and after spawning retires to deep waters.

The range of the Mullet is from the upper St. Lawrence to Nebraska and south to Arkansas and Georgia.

The food of all three species consists of aquatic insects and small crustaceans.

Another member of this family is the Drum, which occurs from the upper St. Lawrence and Lake Champlain to Lake Huron. This species is much deeper at the "shoulders" than the Suckers and the Mullet, and the mouth is nearer the apex of the muzzle and not so markedly inferior as it is in the case of the aforementioned species. It is sometimes called the Carp Sucker, Lake Carp or Buffalo.

### Diseases

Tetanus, commonly met with, may result from harness gall, or follow puncture result of a pur most liable to castration, op setons, and it of a blister. access to the by injuries or by the object disease may b spasm of the v and uncontrol of a rigid cont but of a consta disease is techn ing to the group term "Tetanus muscles of mas trismus, or loc and superior p it causes an e curvature of t When the musc a curvature of quarter of the called tetanus two forms mer horses and we some particular voluntary musc greater or less

Symptoms.— period after a to twelve days animal will be nose protruded has a wild, exci champ his jaws is often a flow become acceler are drawn with cessory eye-lid, orbit, and is call out more or less disturbed, as by greatly excited, over the eye, t tail suddenly e especially those and tense. At the course of tw and frequent somewhat slow, to work for a noticeable, but quickly, become become general t by action of the The jaws usually cases it being i sufficiently to all fifty cent piece, remains. The li The action of th difficult. A hus patient attempts formed with a di muscles of the a and feels hard, though the spa Excitement, med etc., cause parox light, when the a diminish in inte continue to incr retain the stand unable to rise, a suffers intensely

Treatment.— the early stages if even a slight m to drink or suck dermic injections anti-tetanic seru treatment. This veterinarian. It in all cases, henc to risk the expe system the anim in a cool, dimly noise and excite present. If una slings. If possib mouth, but wher be acted upon b of eserin or areo daily of one-hal equal quantity in many cases. to mix with dar of Scheel's stren but attempts to the excitement d from medicines

## THE HORSE.

### Diseases Resulting From Wounds.

#### Tetanus.

Tetanus, commonly called lock-jaw, is not infrequently met with as a result of wounds or operations. It may result from a very trivial injury, as a saddle or harness gall, cracked heels, etc., but is more apt to follow punctured wounds, and frequently occurs as a result of a punctured foot. The operations which are most liable to be followed by tetanus are docking, castration, operations for rupture, the insertion of setons, and it has been known to follow the application of a blister. The disease is due to a germ which gains access to the circulation through the raw surfaces caused by injuries or operations, or may be introduced directly by the object that inflicts a punctured wound. The disease may be described as a powerful and painful spasm of the voluntary muscles, which is long-continued and uncontrollable. The spasm of the muscles is that of a rigid contraction, the intensity varying in degree, but of a constant and non-intermittent character. The disease is technically known by different names, according to the groups of muscles principally involved, but the term "Tetanus" is used to denote it generally. When the muscles of mastication alone are involved it is called *trismus*, or lock-jaw. When the muscles of the back and superior portion of the neck are chiefly involved it causes an elevation of the head and a downward curvature of the spine, and is called *opisthotonus*. When the muscles of one side only are involved it causes a curvature of the body, drawing the head and hind quarter of the side affected towards each other and is called *tetanus lateralis*, or *pleurosthotonus*. The first two forms mentioned are usually those met with in horses and we notice that, while the spasms involve some particular set of muscles more severely, all the voluntary muscles of the body are usually affected to a greater or less degree.

**Symptoms.**—The symptoms appear in a variable period after an injury or operation, but usually in eight to twelve days. A general stiffness and rigidity of the animal will be noticed, he moves with difficulty, the nose protruded and the tail usually elevated; the eye has a wild, excited, nervous expression; he will usually champ his jaws and sometimes grind his teeth, and there is often a flow of saliva from the mouth. Respirations become accelerated and the nostrils dilated; the eyes are drawn within their sockets, which causes the accessory eye-lid, that is lodged in the inner angle of the orbit, and is called the *membrana nictitans*, to be pushed out more or less over the eye. If the patient be suddenly disturbed, as by a slap on the head or neck, he becomes greatly excited, the *membrana nictitans* shoots suddenly over the eye, the nose becomes more protruded, the tail suddenly elevated, and the superficial muscles, especially those principally involved, become very hard and tense. At first the pulse is little altered, but in the course of two or three days it usually becomes hard and frequent. The progress of the disease is usually somewhat slow, and a horse will sometimes continue to work for a few days after the first symptoms are noticeable, but the symptoms gradually, sometimes quickly, become more marked, and when the spasms become general the position of the body will be regulated by action of the most powerful muscles chiefly involved. The jaws usually become more or less firmly set, in some cases it being impossible to separate the incisor teeth sufficiently to allow the introduction between them of a fifty cent piece, in other cases slight motion of the jaws remains. The limbs are extended and difficult to move. The action of the bowels is checked, and urination is difficult. A husky cough is usually noticed when the patient attempts to swallow, which act is usually performed with a difficulty which gradually increases. The muscles of the abdomen are rigid, the belly looks small and feels hard, and respirations are difficult. Although the spasm is continuous its intensity varies. Excitement, meddlesome attendance, strong light, noises, etc., cause paroxysms of great severity. In a modified light, when the animal is kept quiet, the spasms usually diminish in intensity. In severe cases the symptoms continue to increase until the animal can no longer retain the standing position, he falls and is usually unable to rise, and struggles violently and apparently suffers intensely until death ends the scene.

**Treatment.**—If the jaws become firmly locked in the early stages, there is little hope of recovery, but if even a slight motion remains, which enables the patient to drink or suck fluids, recovery may result. The hypodermic injections of large doses of a serum known as anti-tetanic serum, is considered the most successful treatment. This should be administered only by a veterinarian. It is very expensive and not successful in all cases, hence the owner in some cases does not care to risk the expense. As it is a disease of the nervous system the animal should be kept as quiet as possible in a cool, dimly-lighted apartment, removed from all noise and excitement and where other animals are not present. If unable to stand he should be placed in slings. If possible, a purgative should be given by the mouth, but when this cannot be done the bowels should be acted upon by the hypodermic injection of a gram of eserine or arecoline. The hypodermic injection twice daily of one-half to one dram of carbolic acid in an equal quantity of glycerine has given good results in many cases. If he can either eat or drink, it is well to mix with damp food or water about twenty drops of Scheel's strength of prussic acid three times daily, but attempts to drench him should not be made, as the excitement defeats all benefit that may be derived from medicines and good care. When recovery is about

to take place the symptoms gradually disappear, the jaws become relaxed and extreme nervousness decreases. When a case is going to prove fatal, the symptoms increase in severity, despite treatment and care. It should be remembered that in the treatment of tetanus, quietude is probably of more value than medicinal treatment, hence none but the attendant should come near the patient, unless a veterinarian be in attendance.

WHIP.

### More and Better Horses Needed.

EDITOR "THE FARMER'S ADVOCATE":

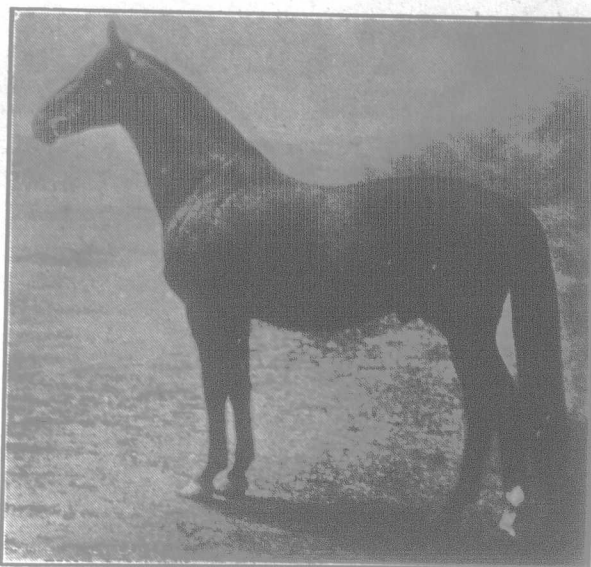
Now is the time to emphasize the desirability—indeed the necessity—of breeding all good mares to the best available stallions this spring.

The breeder of good Percherons never faced a more favorable future. Draft horses are urgently needed for war, city and farm use. Not more than 1,000,000 of the 21,000,000 horses on the farms and ranches of the United States will, at maturity, weigh over 1,600 pounds and classify as drafters. No other nation has draft seed stock in sufficient supply to produce a draft surplus of consequence. The United States alone can be counted upon to produce the draft horses, which the world needs.

Exports of horses to Europe for war purposes from September 1, 1914, to January 31, 1918, a period of 41 months, totaled 983,899 horses valued at \$207,283,114 and 343,435 mules at \$67,390,991. In addition to this the United States Army purchased more than 300,000 head of horses and mules between June 1, 1917 and March 1, 1918.

Additional purchases for war use depend on the length of the war, transport space available and number of troops used. One horse or mule is reckoned on every four men put in the field, exclusive of cavalry; and the importance of cavalry, somewhat obscured during the last three years, is likely to receive greater emphasis as the battles approach open field warfare.

WAYNE DINSMORE.



A Real Thoroughbred.

## LIVE STOCK.

J. A. Countryman & Son, Illinois, had an average of \$91 for their herd of Poland Chinas.

At the Weaver and Garden Shorthorn Sale at Upper Mill Farm, Iowa, an average of \$1,155 was made on 46 head.

At the third annual sale of Berkshires by Hood Farm, Massachusetts, 75 head averaged \$176. One sow brought \$370, and another one \$350.

The Central Shorthorn Breeders' Association held a sale in Kansas City early in April when 191 head averaged \$282. Of this number 116 were bulls and their average was \$227.

Herefords are bringing good prices. W. I. Bowman & Co., Kansas, realized \$33,485 for their herd of 107. The 74 cows and heifers averaged \$326. The Main & Hager sale of 60 Herefords, at Harlan, Iowa, averaged \$518.

### What the World Owes the Shorthorn.

EDITOR "THE FARMER'S ADVOCATE":

There is not a country in the whole world to which the English or the Scotch Shorthorn has not gone forth, on missionary duty. There are very few places in which the breed has failed in its mission work, after it has enjoyed a thorough "try out".

We in Britain cannot overlook the enormous influence the Shorthorn has exercised on the commercial cattle stocks of the whole American Continent, both North and South. The pioneer cattle breeders of the United States drew extensively on British Shorthorn

herds to grade up the cattle of their country, and at the same time many fine pure-bred herds were established. Think of what the Shorthorn has done for the cattle of the Argentine. The native stock of that country has been graded up to a marvellous degree of quality by the continued use of high-class Shorthorn bulls on the large estancias there, and for many years now the best customers for all our highest class Shorthorns have been Argentine breeders, and unless they had found the purchase of these high-priced sires a lucrative investment they would not send over as they do year by year for as many of the plums of the breed as can be pulled from the family tree.

The influence of the Shorthorn has now reached South Africa, and the Australian continent has for years imported good Shorthorns from Britain. To Russia, Japan, Spain, Germany, France, Belgium and Holland have exportations been sent in pre-war days.

The Shorthorn's true value has been in its pro-potency; a power which the breed seems to possess in excess of most, if not all, other breeds. No matter what kind of animal is mated with a high-bred Shorthorn the offspring is certain to show strong Shorthorn characteristics. It may be asked why the Shorthorn exercises a greater influence than any other breed in cross-breeding. The answer is that all the principal Shorthorn types have been established by a system of close breeding practised by master minds, and that in no other breed of cattle has pedigree and purity of blood received so much attention.

The raiser of commercial stock, whether for dairying or beef purposes, turns to the Shorthorn sire as being the most reliable and the most likely to beget the class of stock they require, knowing full well that the Shorthorn, above all other breeds, possesses in combination the attributes of a high-class grazing and milking animal. If we take the dairying interest, for example, we find that the great majority of the dairy herds in Britain are headed by a Shorthorn sire, and although in many ordinary or small farmers' herds the cows are cross-breds of various types, yet they more or less show evidence of the Shorthorn sire.

The same applies in breeding for beef purposes alone. Are not the popular Blue-grey cattle of Northern England and the Border-land of Scotland the result of crossing the white Shorthorn bull with the Galloway or Angus cow, and what is the influence of the Shorthorn in this case? The Galloway is a hardy, small, late maturing breed, and never attains any great size at any period of life. The Aberdeen-Angus cannot be called a large breed; but the Shorthorn cross gives scale, size and earlier maturing characteristics, and it is quite safe to say that no class of beef animal is more popular with butchers all over Britain than the Angus or Galloway Shorthorn crosses.

#### The Blue-Grey Cross.

Blue-grey cattle are highly esteemed both by grazier and feeder. They are hardy and suitable for varied conditions, and can be fed to great weights. On many farms of a high-lying and poor character herds of Galloway cows are kept and mated as stated, with a white Shorthorn bull. In choosing a bull for this purpose the importance of a good, well-bred one cannot be over-estimated. He should be well-fleshed, early maturing and possess plenty of size. On such farms calving takes place usually in April and May, the cows suckling their calves throughout the summer. The calves are weaned in October, and the cows are then wintered out, receiving in bad weather a small allowance of hay. The calves are also usually wintered out and receive about 3 lbs. concentrated food, and 7 lbs. to 8 lbs. meadow hay. The advantage of this system is that most of the stock is wintered outside with the aid of home-grown foods (chiefly hay) together with very little purchased food. The young cattle are quite hardy enough to be wintered outside in this manner (a shelter shed is very useful, however) and are preferred as summer grazing cattle, while these open-air conditions undoubtedly guard against tuberculosis.

The cattle are grazed during the second summer of their lives, and if on good pasture are likely to become fat, when they may be sold to the butcher, or if this is not done may be fed off in the autumn and winter months, making choice fat cattle when about two years old. Many blue-greys are sold in the autumn when about eighteen months old as feeding cattle and are keenly competed for in the sales and markets; others are wintered out and make excellent cattle for grass-feeding in the following year. The calves when weaned are usually fat, and would make excellent veal, but so highly are these valued by graziers that the butcher is unable to compete with them in the market.

In many districts where dairying is carried on good Shorthorn cows are mated with a Galloway bull. In this way very similar blue-grey cattle are bred. These calves are, as a rule, brought up on the pail, and bring splendid prices either as weaned calves or store cattle, and, like the Shorthorn-Galloway cross, they do equally well. By both methods calves are sometimes produced which are either black, red or roan, but the prevailing color, if bred correctly, is blue-grey.

#### Other Commercial Crosses.

The bulk of the excellent store cattle which are now sent over from Ireland are of the Shorthorn-Angus cross, and it is well to look for a moment and consider what the Shorthorn has done for Irish cattle breeding. It is almost impossible to estimate the value of the Shorthorn influence on cattle breeding in that country. Even from the little Kerry cows and others of the non-descript sort excellent store cattle have been bred by some of the premium bulls of the Shorthorn type, and the continued use of well-bred Shorthorn bulls for some years has produced a revolution in the cattle stock

of Ireland. As showing the powers of prepotency possessed by high-bred Shorthorns one can quote the case of the Hereford and Shorthorn cross. The Hereford is as ancient and as pure a breed as the Shorthorn, yet if a Shorthorn bull is used on Hereford cows the produce will show much more of the Shorthorn than the Hereford in appearance and markings. This cross is very popular in middle England.

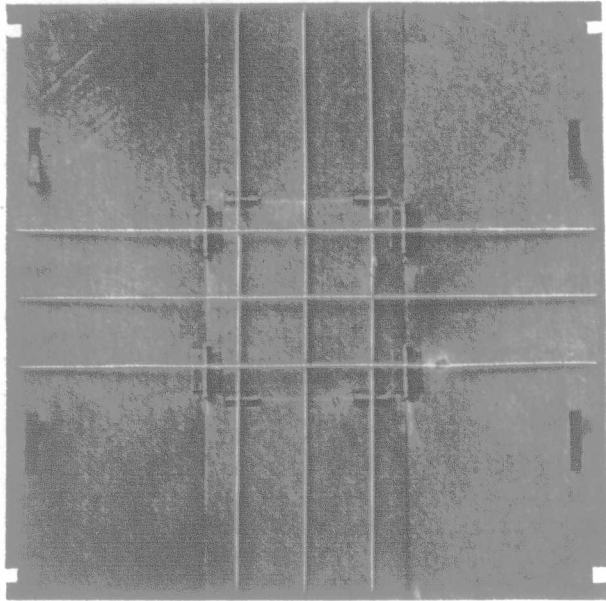


Fig. 1—The Folding Box Ready for the Fleece.

#### Three Types of British Shorthorns.

Now, let us analyze the British Shorthorn a little more closely. One of the peculiarities of the Shorthorn is that it has within itself animals not only of various colors, but also of different types and distinct characteristics. In regard to color there is the red, white, and roan, the three recognized standard colors of the breed, but these again must be subdivided into red and white, dark roans and light roans, and even the whites are not always of the same shade, some being of a more creamy hue than others. At one time there were practically only two distinct types of Shorthorn, the Bates and the Booth, but later on the Cruickshank or Scotch type was added, which was more or less evolved by a process of skilful breeding and selection out of the other two.

These three types of Shorthorn have in recent years been so intermixed that the distinguishing characteristics have to a great extent been lost. Still, close observers can see the thick, blocky carcass of the Cruickshank; the fiery head and eye of the Bates; and the Booth style of horn very often all appearing on the same animal. Then, again, whereas other breeds are noted either for beef or milk alone, as the case may be, the Shorthorn is bred on beef lines, on dairy lines, or on dual-purpose lines, so that in regard to color, type and general characteristics the Shorthorn is in altogether a different category to any other breed of cattle. All this must seem somewhat perplexing to those who do not know the story of the breed, and not only is it perplexing to the uninitiated, but these peculiarities render it extremely difficult to breed true to type in any herd without pursuing the system of line (or close) breeding.

Once the various types were sub-divided. Each of the most celebrated Bates families had characteristics peculiar to themselves. For instance, the Duchesses, were noted for their high-bred appearance and grandeur of carriage. "Character" was written all over them, and the pose of their head, the formation of their horns, their round, prominent eyes and altogether majestic appearance placed them at one time at the head of the breed. They broke the "world's records" in prices and as an outcome nearly "broke" the breed. Like the Duchesses, the Barringtons, which are the chief branch of the family, have always possessed characteristics peculiar to themselves and distinct from others of the Bates families. They have a certain strength of head and a sort of Roman nose peculiar to themselves, and the bulls of the Barrington tribe are almost invariably of strong masculine character, but to-day are losing their distinctive appearance.

Now, the Booth type was of quite a different stamp to that of Bates. A pure-bred Booth animal could always be picked out by the head and horn and noticeable character. Booth cattle had "triangular" heads. The horns were somewhat strong and coarse, with very often an upward tendency, and although the Booth cattle had not the style and grandeur of some of the best Bates sort they had longer quarters, thicker flesh and better-sprung ribs, and were altogether much better "show" cattle.

Cruickshank cattle, however, changed everything and created a mixed type. A good deal of the style and high-bred appearance of the old-time Shorthorn has been lost, but shorter legs, thicker and more blocky carcasses, and quicker feeding propensities have been gained, but in those herds in which heavy milking qualities have been made, Scotch blood has been used very sparingly and a good deal of the older type has been maintained as the outcome. It is the height of folly to use to any considerable extent Scotch bulls on milking Shorthorns. Perhaps for one generation a Scotch bull may be used, for the purpose of establishing a certain robustness of constitution, but if the Scotch

lactation, are now kept and preserved. Cumberland and Westmorland counties are full of cattle eligible for "The Book", but hitherto left outside of it by their owners who have "never bothered" about keeping pedigree charts until they observed that there was a genuine and long-continued call for their cattle. They are now "getting together" and stock which can pass the qualifications as to ancestry and yield, are bounding upwards in monetary value, which is as it should be.

ALBION.

## Caring for the Season's Wool Clip.

There can be no question as to the importance of wool at this time. The civilian population of this country cannot fail to notice it in the occasional purchases of wearing apparel and similar necessities. Ordinary clothing is becoming a problem, but there are millions of men in uniform who have prior claims to such comfort as wool provides. The man who cares for his clip as a patriotic duty is doing something for the Great Cause, and, at the same time, bringing to himself a greater reward for time and labor expended.

Many flocks have, no doubt, been shorn ere this, but in the great majority of cases wool is still on the sheep's back. In this condition, and later when shorn, it requires certain care to make it most acceptable to the manufacturers, and most valuable as a commodity for which the grower expects the highest market price. A fleece full of burrs and dirt, tied with binder twine and kept in a damp place is not such as will command the same valuation as clean wool properly folded, tied with paper twine and kept apart from excessive moisture until placed on the market. Formerly wool was wool,

with a large blanket or piece of canvas as an improvement on the hard floor. The relative comfort enjoyed by the sheep will cause them to remain more quiet and thus facilitate shearing.

Before rolling the fleece, shake it lightly so as to remove all loose dirt. All heavy tags or badly-discolored locks should be removed and never included with the fleece. Always pack these separately, for when mixed with clean fleeces the color of the good product is damaged. Spread the fleece, skin side down, on a swept floor; the outer edges are then folded over, and after that, commencing at the tail and neck ends, the fleece is rolled up compactly. Never use binder twine in tying the fleece. The sisal from such twine becomes incorporated with the fibres of the wool, but it does not take the dye in the same way, so cloth containing this sisal is very much lessened in value. In some cases the neck-piece is pulled out and twisted into a band. This, however, is inadvisable, for the rope thus made is very difficult to untwist, and consequently this method of tying depreciates the value of the wool. There is a paper twine which is very well suited for the tying of wool. All the co-operative associations require its use, and it is easily obtained through the executive of these organizations.

The wool should be tied in all cases; when untied, fleeces fall apart in shipping or handling, and far too great a portion of such wool is put into the low grades, because it cannot be kept in condition to classify properly.

Anyone shipping wool in large quantities should obtain wool sacks, the standard size of which is around 7½ feet long and 40 inches wide. These will hold in the neighborhood of 200 to 240 pounds. One of these sacks will hold about 20 fleeces. Where a farmer has a small number of fleeces, say from

five to twelve, clean jute bags are sometimes used. Care should be exercised, however, to see that these bags are turned inside out and properly shaken, so as to avoid the chance of loose fibres along the seams mixing with the wool.

The wool box for shaping and tying a fleece of wool, illustrated herewith, helps considerably in putting the fleece into proper condition and in tying. Pamphlet No. 14, of the Live Stock Branch, Ottawa, describes the folding and the dimensions of this box in the two following paragraphs. The illustrations are taken from the same pamphlet.

#### Description of Fleece Folding Box.

It is necessary to keep the fleece as intact as possible during shearing. Fold sides and ends of fleece to centre with clipped or skin side out; then place on folding board after paper twine has been threaded on the board, as shown in the accompanying illustration. The sides and ends of the box should then be brought into the position illustrated in figure 3, and held together by means of wooden cleats.

Material required will consist of a board 9 feet long by 1 foot wide and 1 inch thick, which may be cut into two pieces 3 feet long and three pieces 1 foot long. The pieces should then be hinged in the manner shown in the illustration of the open box. For convenience it is advisable to use springs to hold the end board upright when compressing the fleece. The foregoing description represents the size most suitable for all grades of fleeces, except Coarse or Lustre. The latter will require a box of greater proportions. Two inches added to all dimensions will make it sufficiently large to contain, without difficulty, fleeces of the average size of these grades.



Fig. 4—Proper Method of Folding Fleece.

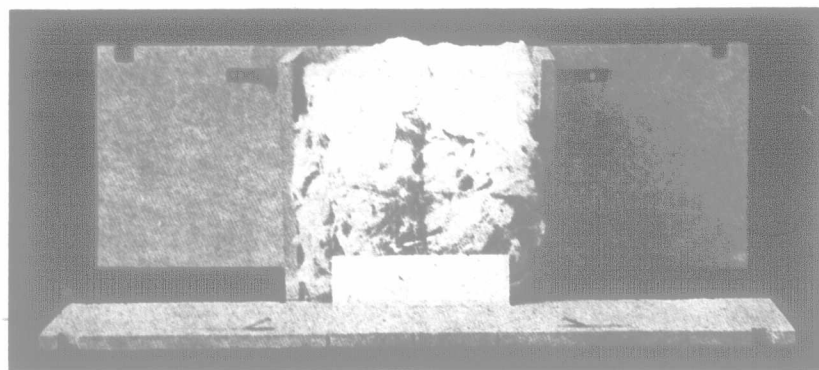


Fig. 2—Fleece-folding and Tying] Box; Fleece Tied.

but now with a thorough gradin, system in vogue, conducted by the growers themselves, quality is recognized and appraised at its actual value.

#### Care Prior to Shearing.

Poorly-fed sheep possess a harsh fleece which lacks oil and which frequently is made up of weak fibres. Periods of ickness or unthriftiness cause weak sections in the wool where breaks occur when any strain is exerted on

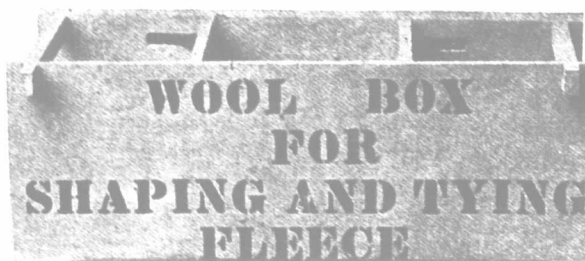


Fig. 3—The[Fleece-folding Box.

them. Proper feed racks should be used in order to keep hay and chaff out of the wool, and burrs should be avoided. Sheep running on plowed land before shearing are likely to get dirt incorporated with the fleece, and this is objectionable. Keep the wool clipped behind at all times so as to prevent the formation of dung locks. Never use oil-paint or tar in marking sheep. These are insoluble and must be cut from the fleece, for they will not scour out. There are proprietary materials on the market which give a fairly permanent brand under ordinary conditions, and yet scour perfectly in the mill. Do not wash the wool on the sheep's back. If washing is practiced at all this is, perhaps, the best method, but the buyers prefer to have wool in the grease. The weight lost in washing will not be compensated for by sufficient increase in price, so the wool should be marketed in its natural condition.

#### Precautions at Shearing Time.

Never shear sheep when their wool is wet or damp. The fleece should be dry and kept dry after shearing. Damp wool will ultimately take on a yellowish color, which decreases its value, for it cannot then be used in the manufacture of white yarn. More than that, it may be attacked by mildew which will impair the tensile strength of the fabric. Thus, of course, all has a direct bearing on the price.

When beginning operations at shearing time, select a smooth, clean surface, free from all dirty or chaffy material. Straw in the wool is not only valueless, but it materially decreases the value of the product. A bundle of hay or straw spread on the cleared surface and covered

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**Points to Keep in Mind.**

The following points taken from a Manitoba Government pamphlet are well worth remembering in connection with the care and handling of wool:

1. Keep wool clean before and after shearing. It means money to you.
2. Dock tails from all lambs. This will eliminate tags.
3. Don't wash the wool. Sell all wool in the grease.
4. Don't shear wet sheep.
5. Don't roll tags in the fleece with good wool.
6. Don't use binder twine for tying fleeces.
7. Don't mix gray and black fleeces with white. Keep them separate.
8. Don't ship tags mixed with clean fleeces. Keep them separate.
9. Use wool sacks.
10. Don't use dirty bags.
11. Don't sell locally. Get the highest price.

**Canada Wool Offered to the Manufacturer.**

EDITOR "THE FARMER'S ADVOCATE":

One of the most important meetings of sheep raising in Canada was recently held in Ottawa. It comprised a conference called by the War Trade Board of a Committee of Wool Growers appointed at the National Convention of sheep raisers in Canada early in February, with a committee of the manufacturers, wool dealers and wool pullers.

The manufacturers feared they may not have sufficient Australian and New Zealand wool allotted to them by the British Government to serve their purposes, and consequently, might require American and Canadian wool to meet their needs. At present, American wool cannot be exported to Canada except for the purpose of manufacture of American Government orders, and they claim Canadian wool was most frequently shipped out of the country, either on consignment or direct sales, without themselves being given an opportunity to bid upon it.

The growers were eager to assist the manufacturers in any reasonable fashion that at the same time would insure Canadian wool being sold at a price equal to the American market for this product, and drew their attention strongly to the likelihood of an exodus of sheep from Canada to the United States should Canadian prices fall below the level of those in that country. They, therefore, pressed the desirability of an unrestricted market for Canadian wool, and the advantages which would accrue to the Canadian sheep raiser if Canadian wool went into the United States without the present restrictions imposed by the latter country, whereby the Government exercises an option upon all imported wool at July 30, 1917, prices less 5 per cent. At the same time they were willing to present their wool to the Canadian manufacturer before export, for his purchase at the export price should he desire it.

The result of the conference is expressed in the following resolution:

"That the Canadian War Trade Board request that the U. S. War Trade Board continue to allow the free export of Canadian-grown wools, both fleece and pulled, to the U. S. A. on the basis that grading is permitted in the same without exercising government import options, and, further, to encourage the import of foreign free wools, that the Canadian Government remove the embargo at present in effect which prohibits the re-export from Canada to the U. S. A. of foreign free wool now held or in future imported into Canada, the export of this to be under license."

N. STANSFIELD.

Sheep and Goat Division, Ottawa.

**THE FARM.****The Cultivation of Flax For Fibre.**

The flax plant (*Linum usitatissimum* L.) is an annual with delicate roots, a slender wiry stem, narrow leaves and blue, sometimes white flowers. The fibre, to which it owes its strength and its value, is situated near the outside of the stem, the central woody part or "shove" being of no commercial value. The flowers on the same individual plant open in succession and in consequence all the seeds do not ripen at the same time. Each seed-boll or capsule is dry when ripe and contains ten or fewer brown seeds. The capsules open by a series of narrow chinks, but these are not sufficiently wide to allow the seeds to fall out.

When flax is sown thinly each plant is extensively branched and shrub-like and the ripening of the capsules extends over a much longer period, as the number of flowers is much greater. Such a plant has little value for fibre. When the seed is sown sufficiently thickly each plant produces a tall, unbranched stem like that of a forest tree, and has only a few flowers at the top. This is the type of plant aimed at in growing flax for fibre.

A climate where there is a considerable amount of moisture in the air and where the crops are not liable to suffer from drought is the most suitable. This being so, the western part of British Columbia, southwestern Ontario, the valley of the St. Lawrence and the Maritime Provinces may be expected to produce the best flax.

A soil that is suited for the growth of cereals and other farm crops may be expected to give similar results when sown with flax. Where choice is possible a sandy loam is to be preferred. As uniformity in all

characters is the most important point in connection with the production of flax fibre, it is advisable to choose a field that is as level as possible and has a uniform type of soil so that the moisture-holding capacity will be similar throughout.

Flax should not be sown on the same land oftener than once in five to seven years. Its exact place in the rotation varies, but the common practice is to sow after wheat or some other cereal, or on land that has been in sod.

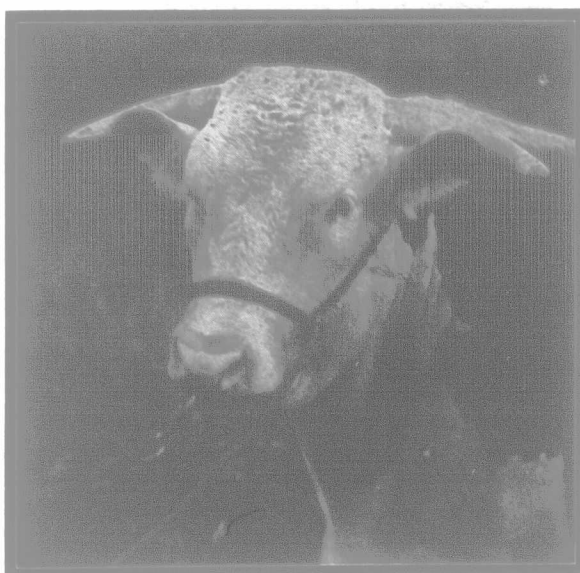
Stable manure should not be applied to a crop of flax. It is much better to manure heavily some previous crop in the rotation. The most important artificial fertilizer for flax is potash. As this is not available at present it may be possible to apply wood ashes, or in districts near the sea to apply seaweed to some previous crop.

It is very important that the land should be reduced to a fine state of tilth. It should be ploughed to a moderate depth in autumn and worked in spring to pulverize it thoroughly. Only land that is free from weeds should be sown with flax. Any weeding after the seed germinates must be done by hand and must be done with great care to avoid injury to the young plants. The land is sometimes rolled before sowing the seed, as it is held by some farmers that this practice facilitates the covering of the seed to a more uniform depth and makes the seed-bed more compact.

Various varieties of flax are grown, some being blue-flowered, others white-flowered. Blue-flowered flax is considered to give a slightly better quality of fibre. The seed used should be that of a fibre-producing flax and not that of a flax grown solely for oil. If possible, Russian or Dutch seed should be obtained or else the produce of such seed grown in Canada.

Flax seed often contains immature seeds and weed seeds, and it is very desirable that these should be got rid of by rescreening and recleaning. It is usually impracticable to do much weeding among a growing flax crop, and weeds are a great nuisance at harvesting time.

Flax is subject to several diseases which may be carried by infected seed. Before sowing, the seed should



An Example of Hereford Character.

be treated as follows: Spread the seed on a clean floor or canvas in a thin layer. Use one ounce of formalin to ten quarts of water and apply two quarts of the mixture to each bushel of seed by means of a knapsack sprayer. Mix the flax seeds thoroughly until each seed is covered with the solution. Continue stirring the seeds until they are dry.

Flax should always be tested for germination before sowing, otherwise it is impossible to tell what amount of seed to use. If the seed gives after three days a germination of 95 per cent. or over,  $1\frac{1}{2}$  bushels of seed will suffice. With a germination of 85 to 95 per cent.,  $1\frac{3}{4}$  bushels per acre should be sown, and if the germination falls between 75 and 85 per cent., 2 bushels of seed will be necessary. About 56 pounds are reckoned to the bushel.

The best time to sow will depend on the character of the season which, however, cannot be foreseen. It will consequently be a good plan to sow half the crop as early as the land can be got into proper condition, and the rest about a week or ten days later. This will also have the effect of distributing the labor somewhat at harvest time. Flax when quite young can withstand a considerable amount of frost. In fact, only a frost sufficient to freeze the ground solid is likely to injure it.

The seed is usually sown broadcast, and a calm day should be chosen. If sown by hand, care must be exercised to have the distribution uniform as the seed is slippery. It may be drilled in rows four inches apart and then cross harrowed. It should be covered about half an inch deep and the surface is usually rolled. If the land contains a considerable amount of clay it will be advisable not to roll it as the surface may become too much compacted after rain. In this case it should be rolled before sowing. Clover is frequently sown with flax and makes a considerable growth the first year.

Flax for fibre is always pulled up by the roots. As it has a slender root there is not any difficulty in this, as much flax as can easily be grasped between the hands being caught just below the seed-bolls at

each operation. Great care should be taken to keep the root-tips quite uniform and any soil adhering to the roots should be knocked off. The handfuls of flax are laid on the ground and are afterwards tied in bundles of about eight inches in diameter. The bundles should be tied rather loosely, a few stalks of the flax being generally used for the purpose. The bundles are then set up in stooks to dry. It will be found to be an advantage to tie the bundle not in the middle but nearer the upper end. Each bundle may then during wet weather be spread out at the base and will stand alone. After rain it will dry much more quickly than in the stook. Any short patches of flax should be pulled separately and kept separate from the rest of the crop through the various stages. An average worker will pull an acre in four days. At present, experiments are being conducted with machines for pulling flax, but more thorough testing will be necessary before any of them can be recommended. In case a crop of flax is over 30 inches in length there seems to be no very strong objection to cutting it, provided it is cut very close to the surface of the ground and that the cutting machine is very sharp and that great care is taken to avoid tangling.

Flax is ready for harvesting when about half the seed-bolls are ripe. If crushed between the fingers the seed-boll will be found to be quite dry and the seeds dry and brown. At this time the lower half of the stem will be yellow and devoid of leaves as a general rule. The rest of the seeds will ripen subsequently in the sheaf. Over-ripening before pulling should be carefully avoided as the quality of the fibre will suffer in consequence.

The dry flax may be stacked or housed until time is available for removing the seeds. This can readily be done during the winter months when other work is slack. The seeds can be removed by crushing the capsules between rollers, care being taken not to injure the seeds or the stalks. An alternative method is "rippling" which consists in pulling handfuls of flax over and between iron teeth placed close enough to pull off the capsules which can be crushed afterwards by a wooden mallet. The deseeded flax straw should then be tied up again in uniform, rather loose bundles of the same size as before, the band being in the same position. The flax should be kept dry until early summer when it is retted. If flax is rippled a few days after pulling it can be retted the same season. The rippled capsules should in that case be spread on a clean floor and turned frequently until quite dry.

The object of retting is to bring the flax into such a condition that the fibre may be easily separated from the worthless woody portion or "shove." There are two methods of retting in common use, dew-retting and water retting. In the former, the flax is spread in a thin layer on the surface of the grass and turned several times at intervals of a few days according to the weather. Two acres of grass land will be required for one acre of flax. Dew-retted flax is not so uniform in quality and brings a considerably lower price than water-retted flax.

For water-retting it is necessary to dig a tank about  $3\frac{1}{2}$  feet deep and about 6 feet wide. A pond 60 feet long and 6 feet wide will be sufficient for one acre of flax, but it is better to make several small retting ponds. The tank should be dug several months before it is required, and if possible on a clayey soil. It will be a great convenience if it is so constructed that the water can be run off before the flax is taken out. It should be situated near a small stream, the water of which can be diverted to fill the dam. Beginning at one end of the dam the flax bundles are placed nearly erect with the root-ends downwards, but should not be pressed too closely together. All the flax in any one pond should be put into it on the same day. When the flax bundles have been put into the pond, stones of moderate size are placed on top as the bundles are liable to rise after fermentation begins. The water should then be turned on and allowed to flow until the flax is well covered after which no water should be allowed to flow through unless leakage has occurred. If the flax rises above the water during the process of retting it should be pushed down with a fork and more stones added.

Water containing lime is not suitable for retting. In this case, the dam may be filled beforehand with rain water provided that it has been constructed at the bottom of a slope. It will be more troublesome to put the flax into the dam if it is already full of water. The same pond can be used any number of times if the water is changed after each operation. The best temperature for retting is 72 degrees F., but flax can be retted at a lower temperature, a longer period being required in that case. After the flax has been in the water for five days it should be examined once or twice daily to see if the right stage has been reached. If the flax stem when bent breaks across sharply and the outer fibre can be readily peeled off clean from the central woody core it is sufficiently retted. The test should be made about half way up the stem. When it is being taken out of the dam any adhering mud should be washed off. After removal from the dam it is set up on end to drain, after which it is spread on the grass to dry. It is possible in suitable weather to dry it without spreading by opening out the bundles partly and inclining them against a fence or low wooden rail. When quite dry it should be carefully stacked or housed.

**Scutching.**—This is the term applied to the separation of the fibre from the woody core. The machinery required is comparatively simple and consists of a "brake" and a "scutching stock." The former consists of grooved rollers between which the flax straw is passed and the hard, woody core is crushed and broken into short lengths. The latter consists of a revolving wheel with wooden or iron blades which beat out the woody

"shoves" from a handful of broken flax when held against them. A small oil engine is the most convenient source of power, but electric or water power, if obtainable, will do equally well. Scutching is generally carried on during the winter months and should only be done by an experienced workman.

**Yield.**—About two tons of dried flax straw with the seed on are considered an average yield per acre. The average yield of flax seed per acre for the whole of Canada for the five years from 1911 to 1915 was 11½ bushels, while the average yield in the Province of Ontario, where the crop was grown primarily for fibre, was for the same period 16½ bushels per acre. With proper attention an average yield of 450 pounds of scutched fibre per acre should be obtained.

Flax fibre is absolutely necessary for the construction of aeroplane wings. Flax, therefore, is an indispensable munition of war. Russia and Belgium formerly supplied five-sixths of Great Britain's demand; now they supply little, if any. Consequently, and despite the greatly increased acreage of flax in Ireland in 1917, Great Britain has not now more fibre on hand than is sufficient to keep the mills running one and a half days a week. To further complicate matters, the flax seed crop in Ireland was perilously near a failure last year. So serious indeed was this seed shortage that the members of the Irish Linen Industry held a meeting in Belfast last January to consider the situation. Finally it was agreed that £2,000,000 should be provided to plant 10,000 acres in Ireland with Western Canada oil seed, as a monster experiment to prove whether or not this inferior variety of flax could be utilized as a fibre crop. The Ontario-grown flax is a fibre flax. It is the seed of this kind of flax that should have been used in Ireland, if it had been available.

In 1917 thirty-three flax mills were operated, 6,000 acres were planted, and 2,600,000 pounds of fibre and 45,000 bushels of seed were produced. Our flax business last year had a total value of \$2,000,000. Moreover, the seed produced will accomplish a vital mission abroad, as a large part of it has been shipped to Ireland to meet the great seed deficiency there. And for 1919 Ireland will require more seed of the Ontario fibre flax.

Excellent though last year's effort was, greater effort is needed in 1918. Already flax-growers are planning an 8,000 acre production, at least. Each of the thirty-three mills is in the market for all the straw and seed that can be secured, and good prices are assured the grower. This latter encouraging feature is made the more sure as a sufficient tonnage of ocean bottoms will be available to transport a greatly increased crop to English and Irish mills.

The arrangements made in the past have, for the most part, provided for the leasing of flax land by the mills at a rental of from \$10 to \$15 an acre. The grower ploughed the land, prepared the seed-bed and hauled the crop to the mill—except where the crop was carried on the railroad. The mill operator supplied the seed, often did the seeding, and always harvested the crop. The flax was pulled by hand and the workers were housed in the fields in tents. Their transportation was paid by the mill company, and they received \$15 an acre for pulling. It took a first-class puller three days to finish an acre. As the workers prepared their own meals, the growers were in no way inconvenienced by having them on their farms.

While this system is still followed almost entirely, farmers may very profitably grow flax, doing all the work and selling the crop outright to the mills. An acre of good flax will produce some nine bushels of seed and two tons of straw. The seed sells now for from \$7 to \$9 a bushel, while the price of straw will be dependent upon quality. It cannot be too strongly emphasized that a small acreage of flax of the highest quality is more valuable both in terms of dollars and aeroplane wings than a large area of inferior flax. Quality rather than quantity must be the slogan. In case labor conditions prevent the pulling of flax the crop may be harvested with a binder, the seed sold at a remunerative price, and the straw at about \$15 a ton.—From Dominion Circular No. 77 and Organization of Resources Circular No. 7.

### White Flour Forced on Buyers.

EDITOR "THE FARMER'S ADVOCATE":

There is a matter which has been a wonder to me for some time past and would like to have your opinion on it. In every paper we pick up these days there is the cry to use other articles of food to save the white flour, so much needed by our boys at the front, yet in the County of Dundas a buyer cannot order a car of feed without taking one-fifth of it in white flour. Farmers going to our stations for feed are coaxed, yes almost compelled, to take home a bag of white flour and I know one farmer who took 10 bags rejected by the other farmers who didn't need it and said he would use it for pig feed. And yet we are told to make graham flour, cornmeal, etc., take the place of the white as much as we possibly can on our tables. This is true at two stations at least in Dundas, and probably in plenty of other counties, too, and can be plainly seen by anyone who goes there. Furthermore we buy bread at many of the neighboring bakeries and can almost never get a loaf of brown bread, although we would be glad to do so. I should like to know why white flour is so common that it can be used as pig feed in this county and yet we are continually reading "substitute the white flour."

Dundas Co., Ont.

Note.—There can be no doubt as to the necessity of conserving wheat, yet the complaint voiced in the foregoing letter is only too common. Why it is that the authorities have not shown a stronger hand in this matter we cannot understand.—EDITOR.

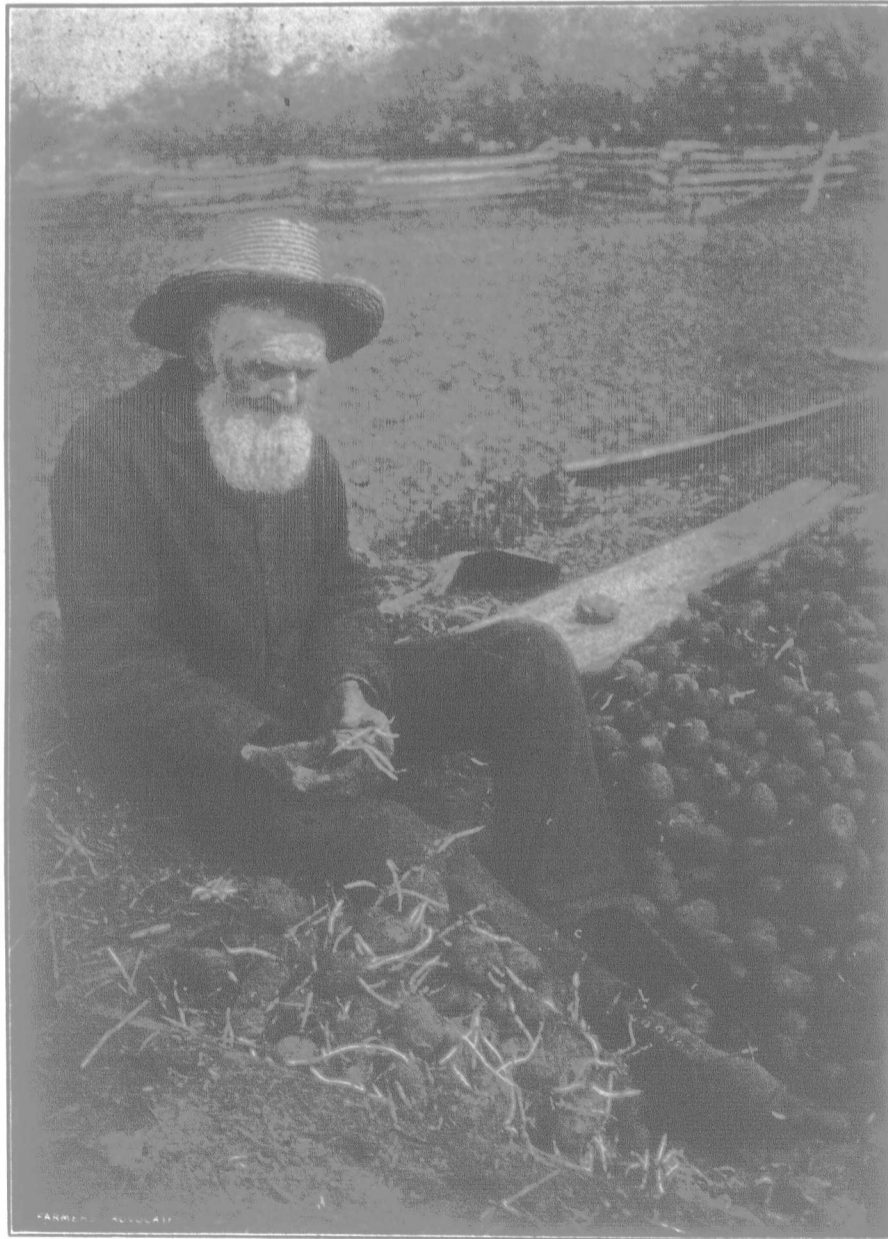
### The Barberry and Wheat Rust.

BY PROF. J. E. HOWITT, O.A.C., GUELPH.

At the present time when "wheat, more wheat" is the cry that reaches us from the firing line, and when the success of the Allies and the very freedom of the world depends upon sufficient food supplies to maintain our armies in the field, no possible means of insuring the maximum yield of wheat per acre should be overlooked. Therefore, the attention of all concerned in wheat growing is again called to the relationship of the barberry to the stem rust of wheat.

It is not necessary to go into the complicated life-history of the fungus which causes stem rust of wheat and other grains. Scientists have known for many years that one phase of its life cycle is passed on the barberry, and all who have made a study of the matter agree that the amount and severity of stem rust is very much increased by the presence of the barberry in the neighborhood of grain fields.

In several States and in Ontario, legislation has been passed regarding the destruction of this shrub. So far as this Province is concerned the "Act" respecting the barberry shrub appears to have been a dead letter up to the present time. This "Act" should be enforced. The barberry in Ontario should be destroyed. There is strong evidence to show that barberry bushes are centres of infection which in wet seasons may give rise to severe epidemics of stem rust. This is especially likely to be the case this year when so much more spring wheat than usual is being grown.



Signs of Spring.

In Denmark it is recorded that there used to be severe epidemics of stem rust of wheat every three or four years. Ten years ago a law was passed which resulted in the extermination of the barberry. Since then epidemics have not occurred, and stem rust has ceased to be a factor in causing loss.

While scientists do not expect to see rust entirely disappear if the barberry is destroyed, the general consensus of opinion seems to be that if it were completely exterminated the chances of severe epidemics of stem rust occurring would be greatly reduced.

Let all concerned realize that the barberry does increase the amount and severity of stem rust of wheat, and a sentiment will be created for the enforcement of the present "Act" respecting the barberry shrub which, if properly enforced, should do much to aid in ridding the Province of this menace to wheat. There should also be individual action. Farmers should search out and destroy any barberry bushes that may be growing on their farms.

The common barberry is the culprit. The average man does not know this shrub when he sees it. However, a little study should enable anyone to recognize it. It is a spiny bush, from six to nine feet high, with

yellow wood, arching branches and grey twigs. The leaves are bright green, smooth, somewhat oval, from one to three inches long, the margins with bristly teeth. The flowers are small, yellow, and borne in long, drooping clusters. The berries are oblong, red and sour. Unfortunately, the barberry has been much planted in some sections of Ontario for ornamental purposes and has become wild in many localities.

If barberries are required for ornamental shrubs, the low-growing, small-leaved Japanese Barberry (*Berberis Thunbergii*, D.C.) may be planted, as this species does not harbor the rust.

### Ontario Crop Outlook.

The following information regarding agricultural conditions in this Province is contained in a bulletin prepared by the Ontario Department of Agriculture, based upon information furnished by a large staff of correspondents under date of April 12th:

**Wintering Crops.**—Although most farmers who grow winter wheat had intended to increase their acreages last fall, the late harvest and the scarcity of help kept the area sown to about that of the preceding year. Considerable of the crop had hardly enough top to enter the winter satisfactorily, although otherwise the young plants appeared to be vigorous. After the snow cleared off, the nights continued very cold, and the crop suffered from the alternate freezing and thawing of the unprotected fields. The present appearance of the young wheat is not encouraging, most of the fields being

more or less brown and patchy, and all of them standing in need of good spring rains, as the latter part of March and the early days of April were cold and clear with practically no rain, while frequent winds helped to make the ground exceedingly dry for the season. A few good warm showers may yet help the crop to pick up, but the general opinion is that a good deal of drilling in of spring grains will be necessary, and also some plowing up of portions of the fields, in fact some reseeded has been done already. In those counties in Eastern Ontario where fall wheat is raised it has done better relatively than in the Western Counties where the crop is more largely grown.

Winter rye has also suffered injury by the trying spring weather, but not to so great an extent as the wheat.

Clover, however, has come through better than either wheat or rye. While some heaving has been reported, and while looking sick in places, the general appearance of the fields is encouraging, considering the rather unfavorable spring for young crops wintering over. As correspondents reported, the crop was needing rain in order to receive a good spring start.

**Orchards.**—Unusually low temperatures during the winter injured some of the buds on tender varieties of peach trees, and froze back a portion of the young wood on some grape vines, but the total amount of damage is not serious. There are complaints of girdling of young fruit trees by field mice and rabbits. The general condition of fruit trees, however, is favorable.

**Live Stock.**—Horses are plentiful, and drivers and undersized general-purpose animals are selling cheaply, but heavy working horses are more in demand, and are commanding good prices.

Cattle are in good general condition, although not so many beef animals are being fed, owing to the high price of grain and millfeeds. Many dairy cows are falling off in milk from the same cause, and owners are eager for early grain.

The swine industry is at high mark. More brood sows are kept than ever before. What is known as "The Hog Campaign" has been pushed widely and vigorously for several months past, and farmers generally are raising all the young pigs they can feed, considering the discouragingly high prices of all classes of feed and the comparative failure of the corn crop. A Wellington County correspondent states: "I have raised already 200 sucking pigs, and could sell 400 more if I had them at \$7 each." There will likely be a steady increase in the number of hogs from now on, although

animals reach relatively scarce.

Sheep are of the Province already, and neglected class.

**Fodder.**—Sufficiency of it being so straw, much on the other husking and was frosted, cold weather the field and

### Utili

Whether summer ever and give an door recreation farmer and h until after th in order that most. Howe He can do so folk have gr if they abuse later suffer. in the prime cause they w or other. It girl, man or must be rem working ther at the expens

Experienc clerk cannot their desks lo month. Whi majority fall Consequently been regulate is spent at th tion and rest ciency. The of the soil rec study and p doing in his l If he labors is not in a po feasible for t average office would fall far field is comp the day's lab saying, "All v is quite true.

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When the or mud make it washed. T body the mor damage it ca varnish soon dead appear hosing-off pro water because There is only running water will force the it. Of course before it has hard. Having up grease sp made from cl warm water a and provide i should put on The cheaper amount of all stant as the all When the so

animals ready for the bacon market are at present relatively scarce.

Sheep are increasing in popularity in various sections of the Province. There has been a good lamb drop already, and the prospects for developing this long neglected class of farm animals are brightening.

**Fodder Supplies.**—There has been more than a sufficiency of hay, but there is a danger of too much of it being sold. There has also been an abundance of straw, much of which is now being fed. The corn crop, on the other hand, was the poorest for years, both for husking and silage. Much of what went into the silo was frosted, making inferior feed, and owing to the early cold weather considerable standing corn was caught in the field and had to remain out all winter. The cereals

are so dear that grain is being very sparingly fed. However, there is a good supply of field roots on hand. The bulk of the reports indicate that most farmers have the necessary supplies on hand to make fairly well-balanced rations, but that careful feeding must be the order of the day until pastures are ready.

**Increased Production.**—A Brant correspondent describes the general farm attitude when he says: "Most farmers would like to increase their acreage for field production if they could depend upon procuring sufficient labor." However, despite the probable lack of help, an endeavor is being made by many farmers to extend the area of spring crops. A considerable number are about to try spring wheat for the first time, or increase their former acreage. More barley will also be sown. With the unusually dry weather so far prevailing, farmers

have been able to get upon the land early, and already a considerable area of spring grains has been put in in the southwestern counties. Complaints are being made as to scarcity of good, well-tested seed corn.

**Labor and Wages.**—The dearth of experienced farm workers continues, and much of the help this season will have to be more or less untrained. A number of organizations, official and voluntary, are now at work to help to supply the need as fully as possible. Correspondents declare that farmers will have to exchange work more than ever and use more horses and larger implements. Wages for married men run from \$400 to \$500 a year, with free house, garden and cow pasture. By the month good men get from \$35 to \$50, with board, and in York County as high as \$60 is being paid for high-class men.

## Canada's Young Farmers and Future Leaders.

### Utilizing Summer Evenings.

Whether the clock is advanced an hour or not the summer evenings are long during May, June and July and give an opportunity for a certain amount of outdoor recreation. There are those who think that the farmer and his family should work from before sunrise until after the sun disappears behind the western hills, in order that production might be increased to the utmost. However, there is a limit to a man's strength. He can do so much, and then nature calls a halt. Some folk have great endurance, but it is usually found that if they abuse their health and strength they sooner or later suffer. There are men and women who should be in the prime of life to-day who are physical wrecks because they worked beyond their strength at some time or other. It is but natural for an ambitious boy or girl, man or woman to work hard to get ahead, but it must be remembered that what they secure by overworking themselves avails little if the gain is secured at the expense of health.

Experience has shown that the office manager and clerk cannot keep up their efficiency if they labor over their desks long hours day after day and month after month. While some are able to stand the strain, the majority fall a prey to insomnia, general debility, etc. Consequently, the working hours of the office man have been regulated so that but a small portion of the day is spent at the office, and plenty of time is left for recreation and rest. This system tends to the greatest efficiency. The same is applicable to the farm. The tiller of the soil requires rest and recreation and time to read, study and plan his work. He should know what is doing in his line on other farms and in other countries. If he labors with his hands from sunrise to sunset, he is not in a position to plan as he should. It is scarcely feasible for the farmer to work as short a day as the average office man. If he did we fear that production would fall far short. Even after the day's work in the field is completed the chores must be done, so that the day's labors are lengthened out. However, the old saying, "All work and no play makes Jack a dull boy", is quite true. The tired body and mind cannot do their

best work. On some farms the chores are counted in the day's work, and while the hour for rising is rather early, the teams leave the field at night in time for the chores to be finished in good time. This leaves a fairly long evening for recreation or rest. The plan has worked well in many cases; the work is kept up, and the hired help and young people of the farm are more contented than if they were called upon to work ten hours in the field, besides doing the chores morning and evening.

There are many ways of spending the evenings. Those who are fortunate enough to have a car may visit friends or attend a show, or go on a pleasure jaunt. Some are football or baseball enthusiasts, and get a good deal of sport out of these games. In many communities there are enough young men to organize a ball team. A group game is excellent training. It trains a person to co-operate with his associates for the good of the group. It is hard for some to make a play, that, while tending to win the game does not bring them much credit, but the true sport does it, and this trait grows and makes him less selfish as a man than if he grew up working entirely for the glorification of himself all the time. A few friendly games may be played during the summer with neighboring teams. This adds to a person's acquaintances, and a little competition tends to increase a boy's loyalty to his home community.

A tennis club might be organized for the benefit of the ladies and the boys not interested in other sports. Some might prefer spending the evenings reading, others find rest and pleasure working in the flower garden, while we know of those who spend many evenings giving the horses and other stock special attention. To some this would be work, to others it is recreation, as according to some, "A change is as good as a rest." Playing ball or currying cattle might be harder work than was being done during the day, but it is a change. A person does not always have to sit with folded arms in order to rest.

Plan to utilize the time to the best advantage, but bear in mind that continual work is not necessarily an indication of thriftiness. While hard work helps a man

get ahead, he must work to good advantage, and this requires planning. There is an easy and a hard way of doing many jobs, and there are those who go at their work in the hardest possible way as a result of not using their heads; consequently, they labor long hours in order to keep up with their work, whereas a couple of hours less work, a half-hour planning, and an hour and a-half of recreation would have put the work as far ahead.

There must be someone to organize the ball team or start other forms of amusement. These things won't start themselves; there must be a leader, and many communities are suffering because someone does not start the ball rolling. Don't waste the summer evenings of 1918, but remember that reading, playing ball, tennis, etc., is not waste time.

### Cost of Raising Pigs.

EDITOR "THE FARMER'S ADVOCATE":

We keep accurate account of every pound of meal that is fed to our hogs and are able to give the exact returns for each litter. We have recently disposed of one load of 6 hogs and during their lifetime they consumed 4,280 pounds of meal, which at \$2.50 per cwt. would come to \$107.00; 200 pounds of shorts were fed which brings the total for feed to \$111.50. I have not charged anything for mangels or skim-milk as it was almost impossible to estimate exactly the amount fed. The meal was oat and wheat mixed; the wheat being the screenings from the marketable product. On March 25; we killed one hog for our own use, which weighed 167 pounds, and when dressed was worth \$32.60. On April 17, the five hogs weighed 225 pounds each and we received \$215.45 for them. Thus the receipts for the six hogs were a little over \$135 above the cost of feed. Allowing a fair consideration for mangels, milk and the young pigs at the time they were weaned, we consider that we received good wages for the time spent looking after the pigs.

Halton Co., Ont.

YOUNG FARMER.

## Automobiles, Farm Machinery and Farm Motors.

### The Auto Body.

When we went to school the teacher told us that all Gaul was divided into three parts. An automobile is divided into two parts—the body and the chassis. Each body is nothing more nor less than a passenger carrying arrangement. It consists of four fenders, one over each wheel, two running boards connecting the fenders and two skirts, each one of which extends from the top of a running board to the lower part of the main body in which the seats are located. It can also be said that the engine-cover belongs to the body proper. The body is bolted to the frame and can be entirely removed without, in any way, interfering with the power plant. There is no machinery about the body and so all the care it requires comes under the head of cleanliness. It is well, however, to occasionally look to the bolts which hold the body to the frame and make certain that they are not only tight but secure.

When the body becomes covered with dust or dirt or mud make the earliest possible arrangements to have it washed. The longer foreign matter remains upon the body the more difficult it is to remove and the more damage it can accomplish. Dirt that cakes upon the varnish soon kills all the lustre and promotes a dull, dead appearance. The first step in washing a car is the hosing-off process with cold water. Do not use warm water because if you do you will injure the varnish. There is only one way to remove dirt and that is by running water. Should you attempt to rub it off you will force the grit into the finish and seriously scratch it. Of course, the easiest time to take off the mud is before it has had an opportunity to become dry and hard. Having released all the dirt you can now clean up grease spots or streaks by using a soapy solution made from clear water and castile soap. Just a little warm water added will give better action on the soap and provide it with quicker cleansing properties. You should put on this solution very easily with a soft sponge. The cheaper grades of soap which contain a certain amount of alkali should never be thought of for an instant as the alkali has a disastrous effect upon the varnish. When the soaping process is over wash the car again

with clean cold water until every particle of soap has been removed, then rub the body to a fine polish with a chamois skin that is not only clean but soft.

If your leather upholstery is very dirty it is always good policy to remove the top in order that you may more easily clean out the pleats or tufts right up to the very edge of the body. Go over the seats and cushions with a damp cloth but do not exert a great deal of pressure upon the cloth. The motion should be light and continuous rather than strong and jerky. Particles of dirt can be pressed so hard that they will scratch the leather. When the upholstery is perfectly dry again, rub it down with a cloth that has been moistened with sweet oil. The oil has a tendency to make the leather pliable and prevents any splitting or cracking. Nothing detracts more from the appearance of a passenger car than dirty upholstery. On the other hand clean seats and cushions always look inviting to those who are asked to take a ride.

Your top will not require a great deal of attention other than which commonsense would suggest. Wash off the ising-glass window at the back with a damp cloth at frequent intervals and use a whisk-broom to remove dust and dirt from the mohair after each long trip. We think it is advisable to drive with the top up although there is no doubt that this uses up a little more gasoline. If you favor riding with the top down be careful to see that it is folded away carefully in order that it may not become pinched or worn between any of the bow spacers. It is an excellent policy to pull the envelope over it when it is down. Otherwise the recesses in the top will necessarily gather a tremendous amount of dust. Accumulations of dirt have a tendency to harden and it will not be long until the vibration of the motor will shake these hard collection of grit until they wear small holes in the top material.

When the envelope for your top is not in use fold it up very carefully and put it away in one of the top pockets or under the seat or in your garage in order that its clean appearance may be preserved as far as possible. Your car will always look more attractive if the envelope is tidy.

AUTO.

### Batteries and Magneto.

EDITOR "THE FARMER'S ADVOCATE":

On page 634 of April 11th issue is a letter by W. F. Hodson commenting on an answer to a query which stated as follows: It is not necessary to have both batteries and magneto on an engine, as the latter have been so improved in recent years that the engine will start as readily off magneto as off battery. Mr. Hodson thinks this is not borne out in practice unless the supply of oil and gasoline is watched carefully and neither too much nor too little allowed. I am inclined to think this conclusion was reached from experience with magnetos not of the latest design. The "impulse starter" now used on high tension magnetos does the trick. Even though the engine is turned over very leisurely by hand the impulse starter causes the magneto to give just as good a spark as when running at several hundred revolutions per minute. This is what I had in mind in the answer referred to, and I cannot see why an improper amount of either gasoline or oil should retard ignition with this magneto any more than with the battery.

W. H. D.

### Electric Lighting Plant on the Farm.

The small electric lighting plant that every country man can have and can operate is a mighty agent for breaking the shackles of his isolation. Electric lights, electric vacuum cleaners, electric driven washing machines, irons, cream separators, churns, sewing machines, fans and a multitude of other electric household helps are available to the farm home which can afford an electric lighting plant. Since the popular sizes of home lighting plants are designed to furnish 1,000 watts at 32 volts from the 50 light plant; or 2,000 watts, at 32 volts from the 100-light plant, the prospective purchaser, who has reached a decision as to the approximate number of electrical appliances he will want to operate, will not find it difficult to closely

determine the capacity of the plant he expects to buy for both lighting and power purposes:

Flat iron consumes 600 watts, which is approximately equal to 30 lights.

Electric toaster consumes 525 watts, which is equal to approximately 23 lights.

Washing machine motor, one-sixth horse power, consumes 200 watts, which is equal approximately to 10 lamps.

Water pump motor, one-sixth horse-power will consume as above.

Water pump motor one-half horse-power consumes approximately 600 watts, which is equal to 30 lights.

Vacuum cleaner consumes 160 watts, which is equal to 8 lights. Cream separator motor one-sixth horse power consumes 200 watts or the equivalent of 10 lights. This size of motor will also drive a churn.

An 8-inch electric fan will require 40 watts, or the equivalent of 2 lights.

The makers of some plants are inclined to discourage the use of electric irons as they draw off so much current. However, several of these who sent in information are using them with apparent success, at least there is no information to the contrary.

**Storage Batteries**—The term is misleading as the electricity is not stored as the name might imply. The action is chemical and the current is given off by chemical action. A storage battery consists of one or more cells. Each cell consists essentially of positive and negative plates, immersed in an electrolyte, the electrolyte consisting of a mixture of distilled water and sulphuric acid. Water is lighter than the acid and therefore, a hydrometer will sink deeper in water than in acid. The more acid in the water the less depth the hydrometer would sink. This depth that the hydrometer would sink is shown on a graduated scale, and is designated specific gravity. As the discharge continues the electrolyte becomes weaker, due to the fact that the acid goes into the plates, producing the electric current, and at the same time producing the compound of acid and lead called "lead sulphate."

A hydrometer is necessary to determine the specific gravity of the electrolyte, or in other words, to see how much the battery is charged. So be sure to have a hydrometer to test the cells. When fully charged, a reading of 1,300 will be observed, and when fully discharged the reading will be only 1,150. It should never be allowed to run down entirely.

By specific gravity we mean the relative weight of any substance compared with water as a basis. Pure water, therefore, is considered as having a specific gravity of 1, usually written 1,000. An equal volume of concentrated sulphuric acid weighs 1,835. The same things are true of the storage battery on an automobile. Great care must be taken in cold weather not to let the battery get discharged too low, as it will freeze more readily than it will when fully charged. Distilled water must be used or trouble will be sure to follow. It seems hard to believe, but the expert battery man of a large automobile concern told the writer that some batteries actually came into the shop filled with anti-freezing solution and another had coal oil. It is high time that people who own such equipment would take the advice of the manufacturers regarding the care of it, and realize that anything that is wet will not do for a storage battery.

## THE DAIRY.

It pays to buy a good bull. A scrub is dear at any price.

At the Kansas Holstein Breeders' spring sale, 82 head averaged \$326.76.

H. H. Curtis, of Pulman, Wash., recently disposed of 53 Jerseys, including 7 small calves, for an average of \$347.26.

Sixty-seven Jerseys recently sold by auction at Fort Worth, for a total of \$12,430. The top price was \$625; this figure being paid for the bull, Brilliant Scholar.

Don't allow vermin to torment the calves or young stock. Four parts cement to one part hellebore sifted into the hair will destroy the lice. Vermin keep stock, a calf in particular, unthrifty.

Major Dupont B. Lyon, of Sherman, Texas, recently disposed of his herd of 68 Jerseys by auction at an average of \$178.88. Anna's Lad was the highest priced animal in the sale, bringing \$415.

Don't be in a hurry to get the cows on grass. It is much better to feed a week longer in the stable and give the grass a chance to get a start. If it is cropped off closely early in the spring there is likely to be short pasture during the entire season.

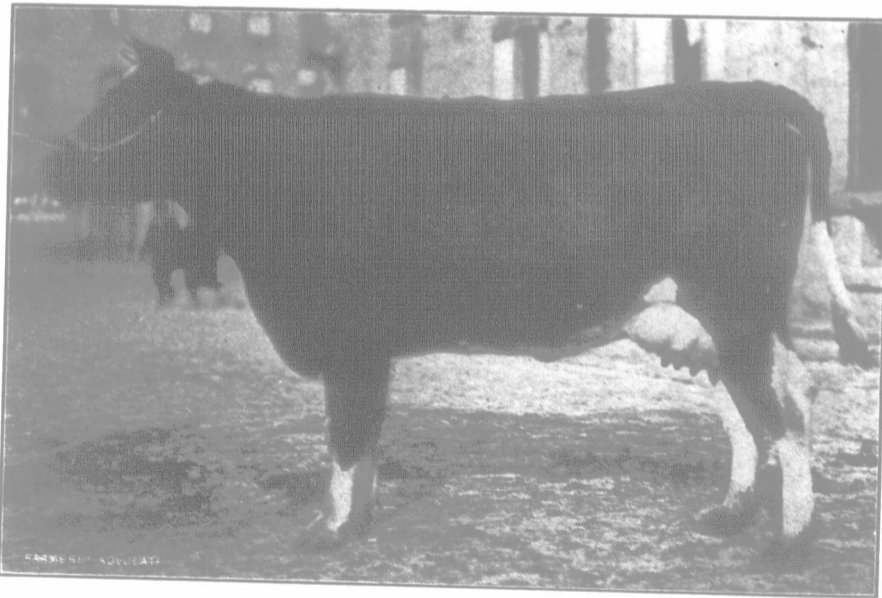
Ringworm frequently infests young stock. It is unsightly and is contagious. If not looked after it spreads rapidly, while the face and head are the favorite parts attacked, it may be found on any part of the body. The patient should be isolated to prevent contagion to healthy stock. Moisten the scales with sweet oil to remove them and then apply tincture of iodine twice daily until cured.

Care should be taken to keep the stable well ventilated. This is possibly more difficult in the spring than during the most severe part of winter. One day it is quite warm and the next day a cold Nor'-wester may be blowing. The cold draft through the stable may be detrimental

to the milk flow and may also cause the calves to take cold. If stables are too warm there is a tendency for the cattle to perspire and go off their feed.

### A Banker Assisting in a Cow Campaign.

A "Family Cow" campaign has been started in Raleigh, North Carolina, by the State dairy agents and bank officials. The banker of the town not only said he was in favor of any movement to help put more dairy cows on the farms of the locality, but went farther and offered to advance seventy-five per cent. of the purchase price of any cows to those who wanted to own one, as he believed that dairy cows were a sound investment for both banker and farmer. The campaign had rather a novel opening. The banker had a stall fixed up on the main floor of the main banking room in which a Jersey cow and her calf were kept for a day, and were viewed by 3,590 visitors who not only viewed the cow but had the privilege of hearing prominent men discuss dairy problems. It was pointed out by the speakers that one in every six farm families in the United States is cow-less, and that there was no reason why some at least of these families could not feed and care for at least one cow. A good average cow would produce enough milk and butter to pay for her feed and leave a substantial profit. As an educational feature the exhibit made an impression that will not soon be forgotten. The cow exhibit in a bank building brought people from all walks in life to see what was the idea of making a cow-stable out of a marble and bronze banking house. It was pointed out that the dairy cow, "foster mother of man," is likewise the salvation of the one-crop system of farming. While it may not be possible for every bank manager to put on a cow exhibit in his bank building, many of the bank managers could do more than they are doing to assist the farmer in the purchase of stock. The more live stock that is kept on the farms the better it is for the country, as well as for the individual. Some of our Canadian bank managers might follow the step taken by the Raleigh banker in offering to advance a certain percentage of



Duchess of Norfolk.

Winner of the three-year-old class in the dairy test at Guelph in 1917 for A. E. Hulet, Norwich, Ont.

the purchase price to those wanting to secure a good cow. A little more co-operation between the banker and the farmer would be an advantage to both. Agriculture is recognized as the basic industry and fundamental to the life and prosperity of the country, but yet many a tiller of the soil finds difficulty in getting the banker to consider live stock or grain as sufficient security when a loan is desired to further the farm operations. Would that there were more bankers of similar disposition to the one from Raleigh.

### Worth Consideration.

EDITOR "THE FARMER'S ADVOCATE":

Perhaps some of your cows gave twenty-five pounds of milk yesterday, and some gave twenty-two; the difference of three pounds in the day, a pound and a half in the milking might easily be overlooked. In fact the smaller quantity might appear the larger on account of more foam on top, and might easily pass as the larger mess if not weighed.

But a pound and a half at a milking may amount in a lactation period to a thousand pounds and that is worth consideration.

By testing the cows no man could be a thousand pounds astray in his judgment between two cows, for he would have the weight given by each cow jotted down at the time. Some men weigh three days per month, many prefer to weigh daily, it is better; the two different printed forms are available for free distribution, write and get them, stating which you prefer, the daily or three-day form.

A thousand pounds of milk, worth say twenty dollars may affect your decision in selling or keeping a cow. The good herd that you have in your mind's eye can be built up by giving each producer due credit. Don't sell a good cow not knowing her real value and so sacrifice twenty dollars worth of milk for the sake of a one dollar sale.

a

C. F. W.

### Alberta Butter in Ontario.

Ontario people are prone to think of the Western Provinces as being devoted almost entirely to grain growing. However, mixed farming and stock raising are being practiced throughout the West. Alberta in particular is fast becoming noted as a dairying country. It is only a few years ago that Alberta furnished a market for Ontario butter, but so rapid has been the growth of the industry in that Province that butter from Alberta is now competing with Ontario butter on the world's markets. That is not all, Alberta butter is being sold in the midst of one of Ontario's best dairy centres and at a lower price than best Ontario creamery butter. Does this mean that Ontario dairymen are unable to meet the home demand for this particular product, or can Alberta dairymen produce cream at less expense than the Ontario farmer? Whichever may be the case, the fact remains that Alberta butter is for sale by Western Ontario produce men.

The grain of the Alberta butter seen in a Western Ontario store was excellent and the flavor would score high. The product was made from pasturized cream and was first grade. It did not contain quite as much moisture nor as much salt as is found in the average Ontario butter. Dry, fresh butter, is favored by many consumers, although fairly salty butter is preferred by others. The texture was firm and fine and while the color was not high it was uniform. A system of grading of cream and butter is followed in Alberta which has been responsible for the uniformity in quality of the product turned out, and has aided in putting the creamery industry on a firm basis. The number of cows kept has increased rapidly during the past few years as it has been found that the dairy cow utilized the product of the field to good advantage. In Ontario the cow has proven her worth but her product has not been given the care and consideration that it deserved. Lack of uniformity in quality of dairy and creamery butter has not given Ontario butter as secure a place on the market as they might have had were a grading system adopted years ago. However, the step has been taken and there is every reason to expect that ere long the product of Ontario's many creameries will be uniform in color,

texture, flavor and salting. This will materially aid both the home and export trade as once a grade with merit has become established, customers look for that grade or brand. Grading of cream and butter has helped Alberta dairymen and it will greatly benefit the dairymen of Ontario. When an article is purchased on its merit, an effort is made to have it as high-class as possible. When creamery owners pay for cream according to quality, they will get better cream from the farm, and when butter is sold on grade the creamerymen will bend every effort to have as much as possible of their product grade high. Alberta butter has won its way into the markets of the world by its quality, and quality has been secured by care in handling cream from the time it is produced at the dairy until it is made into the golden

bricks, and even then care is taken that the packages are neat and clean, and that the butter is properly packed in these packages. Alberta butter on sale in Ontario cities is no reflection on the quality of Ontario butter, but rather shows a falling off in the supply.

### The Milking Machine.

EDITOR "THE FARMER'S ADVOCATE":

The cows at the Nova Scotia Agricultural College Farm have been milked with a machine since January 1916, about two and a half years. In that time a number of new records for milk production have been made, and the average production of the herd has been materially increased. Very little trouble has been experienced in getting the cows accustomed to the action of the machine. Occasionally an old cow objects and will not "give down" her milk. This has only occurred in one case in our herd of some twenty cows in the two years. The heifers take to the machine very kindly and we have practically no trouble whatever in using it on all the cows operating the one noted above.

Operation of the machine calls for about the same amount of care as is necessary to run an ordinary stationary gasoline engine. We have used a two horse-power electric motor to operate three single units and found it satisfactory. Any man who is a good hand-milker possessed of ordinary intelligence, and interested in the cows, will handle the machine in a way to get good results. A bright man who has not been accustomed to milking by hand will soon learn to do good work with the machine.

In the two and a half years we have been using the mechanical milker we have never known any harm or injury to result to the cows from its use.

Cleaning the machine is not a difficult operation but must be properly done every day. It requires some time and thoroughness, and cannot be slighted without disastrous results. The rubber tubes must be cleaned

in warm water since they can be placed after left there until solution tends to tubes and cups is a law against the use of tubes are thorough it through then From report Ottawa, it app machines on the Truro, N. S.

### Plan For

A few years brought forth greater portion two of corn for at all was grown particular crop nated the idea serve it and give the winter months benefactors to with at the time have existed a has been a case new silos erected are errecting in fa

Dairymen w silo, and it is no silos on one da acre of corn w than can be pro other crop. By in a form that time. Corn is t cheapest feeds corn silage to herds would hav account of the s

The seed co many stockmen. States have furn in the past, bu last summer and would germinat First nipped the unfavorable wea much moisture v For a time it lo kind for silage p arrangements ha certain varieties States. It may accustomed to pl produced even if will be of the M would certainly without corn for moth Southern S ticularly heavy acre than of s If the season is make good silag coarse stalks, a feeding in the fall ever, this does If sown fairly th produced than i of silage may not early-maturing d produced per ac quality.

Corn is not th sections of the D the growing of co has been tried a results both as crop is grown ext not a success. F parts of the Dom O. P. V. mixture l at the Nova Scot this contains a lit does corn silage, table:

#### Constituents

Dry matter  
Protein  
Carbohydrates  
Fat  
Ash

There is scarce a crop of O. P. V. The land should one of the first cro around the last of



in warm water containing some washing powder, and since they cannot be sterilized with heat they should be placed after cleaning in an antiseptic solution and left there until milking time. The solution we use is one ounce of formalin in three gallons of water. This solution tends to preserve the rubber and keeps the tubes and cups sweet and clean. In some places there is a law against the use of formalin, and in that case the use of calcium chloride is recommended. The tubes are thoroughly rinsed with clean water by sucking it through them just before beginning to milk.

From reports of the Central Experimental Farm, Ottawa, it appears that there are several satisfactory machines on the market.  
Truro, N. S. JOHN M. TRUEMAN.

**Plan For a Full Silo Next Fall.**

A few years ago scarcity of seed corn would have brought forth little comment from farmers over the greater portion of Ontario. Some planted an acre or two of corn for feed in the fall, but on many farms none at all was grown, and an entire field devoted to this particular crop was rarely seen. The men who originated the idea of canning the corn crop, so as to preserve it and give succulent feed of high quality during the winter months when the stock is housed, were greater benefactors to agriculturists than they were credited with at the time. In some localities there appears to have existed a prejudice against silage as a feed. It has been a case of "Show me," and the number of new silos erected each year prove that the silo and silage are gaining in favor on their merits.

Dairymen were the first to realize the value of the silo, and it is not uncommon to-day to see two or three silos on one dairy farm. In a favorable season an acre of corn will furnish a larger amount of fodder than can be produced on an acre sown to almost any other crop. By means of a silo the crop can be stored in a form that is ready to serve to the stock at any time. Corn is the universal silo crop, and is one of the cheapest feeds grown on the farm. Were it not for corn silage to serve as the foundation of a ration, many herds would have to be greatly reduced in numbers on account of the scarcity of feed.

The seed corn situation this spring has worried many stockmen. Southern Ontario and the Northern States have furnished the bulk of seed corn for Ontario in the past, but this year climatic conditions during last summer and fall resulted in very little corn that would germinate a high percentage being husked. First nipped the crop before it was cut, and then, the unfavorable weather for drying left the corn with too much moisture when the severe winter weather set in. For a time it looked as though no seed corn of any kind for silage purposes would be available. However, arrangements have been made whereby a supply of certain varieties will be brought in from the Southern States. It may not be of the variety which we are accustomed to plant, but a large bulk of fodder will be produced even if it does not mature. The bulk of it will be of the Mammoth Southern Sweet type, and we would certainly advise using this rather than doing without corn for a year. Many have grown the Mammoth Southern Sweet, and have found that it is a particularly heavy yielder. More can be grown to the acre than of some of the early-maturing varieties. If the season is favorable it will mature sufficiently to make good silage. The Mammoth corn grows very coarse stalks, and consequently is not so suitable for feeding in the fall as some of the other varieties. However, this does not matter so much when it is ensiled. If sown fairly thickly in rows a little finer stalks are produced than if sown thinly in hills. The quality of silage may not be quite as good as from some of the early-maturing dents, but the extra amount of feed produced per acre partially makes up for the lack in quality.

Corn is not the only crop that can be ensiled. In sections of the Dominion, not particularly suitable for the growing of corn, a mixture of oats, peas and vetches has been tried as a substitute for corn with very fair results both as to yield and feeding qualities. This crop is grown extensively in Nova Scotia, where corn is not a success. However, it will also do well in other parts of the Dominion. As high as eleven tons of this O. P. V. mixture have been grown under field conditions at the Nova Scotia Agricultural College. Silage from this contains a little higher percentage dry matter than does corn silage, as will be shown by the following table:

Constituents	O. P. V. silage, per cent.	Corn silage per cent.
Dry matter	28.15	20
Protein	2.31	2.37
Carbohydrates	23.42	15.33
Fat	.83	.88
Ash	1.59	1.42

There is scarcely as much work entailed in producing a crop of O. P. V. silage as in producing a crop of corn. The land should be in first-class condition, and it is one of the first crops to be planted in the spring. Sown around the last of April or the first of May, it will be

ready to harvest early in August or at the time when the oats are coming into the dough stage. If the oats get too ripe, the fodder will not pack well in the silo, and there is more or less danger of waste by mould. The seeding for this mixture is in the proportion of about 2 1/2 bushels of oats, 3/4 of a bushel of Golden Vine peas and 1/2 bushel of annual vetch per acre. It may be cut with the mower or binder. This mixture is also grown on the Demonstration Farm at Monteith, New Ontario. In 1916, three acres of this crop two-thirds filled a silo 11 feet in diameter and 16 feet high. The appearance of this silage was similar to ordinary silage, only it was much finer and the cattle appeared to be very fond of it. This shows that it is a silage crop that does well under varying conditions.

Sweet clover, red clover, and alfalfa are other crops which might be ensiled with more or less satisfactory results. The clovers are cut at the regular time and put in the silo while still fresh. This is essential in order that the material will pack firmly and exclude the air. Some who ensiled the sweet clover that they could not harvest for hay last year, owing to the wet weather, reported that the stock cleaned up this form of silage and maintained their ordinary milk flow during the summer drouth. We doubt the advisability of ensiling the clovers if they can be cured for hay, but with unfavorable weather conditions for hay-making the silo furnishes a means of saving the crop.

Second-growth clover and alfalfa are frequently ready to harvest at a time when the weather is catchy. Some have ensiled this crop along with the corn, putting in a load of the clover to every two or three loads of corn. We have seen some of the silage resulting from this mixture, and it looked very good indeed, and was relished by the stock. The corn seemed to aid in preserving the clover in a better condition than if it were ensiled alone.

While the seed corn for silage purposes of varieties and quality that we have been used to planting may not be available this spring, the Mammoth corn will prove a very good substitute, and under favorable conditions will, no doubt, produce a greater bulk of fodder than would be secured from some of the varieties which mature under Ontario conditions. Do not let the silo go empty next fall just because you could not secure the variety of corn you are accustomed to. Secure the kind of seed that is available. The dairyman who has been used to having a supply of silage to commence the winter's feeding operations scarcely appreciates the full value of a silo full of feed until he is forced, through no fault of his own, to do without this important succulent fodder. Plant the usual acreage to corn if seed of any variety that will grow can be purchased. It is one of the most economical crops grown.

**The Price of Cheese to be 23 Cents Per Pound.**

EDITOR "THE FARMER'S ADVOCATE":

The Dairy Produce Commission, which is constituted of members representing the British Ministry of Food, the Dominion Department of Agriculture, the Canada Food Board, the Producers and the Trade, held a session at Montreal to-day. These present were: Arthur J. Mills, representing the British Ministry of Food; J. A. Ruddick, representing the Dominion Department of Agriculture; Dr. Jas. W. Robertson, representing the Canada Food Board; Messrs. Jas. Donaldson, A. Gerin and James Alexander, representing the Producers and the Trade.

Mr. Mills stated that the British Ministry of Food had authorized the Dairy Produce Commission to act for them in connection with the exportable surplus of Canadian Cheese, Condensed Milk and Butter of the make of the season of 1918. The price authorized for cheese is 23 cents per lb. for No. 1 grade, f.o.b. steamer at Montreal; 22 1/2 cents per lb. for No. 2 grade, and 22 cents for No. 3 grade.

After fully considering the whole situation, the Commission unanimously approved of the proposal.

A committee was appointed to work out the question of a relative price for condensed milk. The object in view is to secure such a parity of prices that no unfair competition will arise between the manufacturers of condensed milk and the manufacturers of cheese to secure the patronage of dairy farmers. It is expected that the price of condensed milk will be determined and announced in the near future. The price for butter will be arranged as soon as there is a surplus available for export. It also will be on a basis of parity with the prices for cheese and condensed milk.

The chief advantage to the cheese industry of Canada from this arrangement is the assurance of a regular market at a fair and reasonable price for the whole output, regular shipments even under the present extreme shortage of tonnage, and the financing of a trade of about 40 millions of dollars.

The only alternative method of disposing of the cheese of Canada would be to leave it open for the British Ministry of Food to purchase such quantities as they would require from time to time, and that without any assurance that they would purchase the whole quantity available for export. At the present time, the Allied buyers are being offered United States cheese of this season's make at 22 cents f.o.b. New York.

Now that prices have been arranged, it is hoped that financial arrangements will shortly be completed to enable the Commission to accept delivery of new season's cheese.

J. A. RUDDICK, Dairy Commissioner.

**POULTRY.**

**Open Front Henhouse.**

Several years ago a description was given of the Weldwood henhouse. I gave the paper to one of my friends who has failed to return it. I purpose building a henhouse this spring. At present we have no proper place for our fowl and we realize that in order to have success with poultry it is necessary to give them the proper accommodation. I would be pleased to have the description of this house published again. J. S. M.

Ans.—The open-front house designed and recommended by Prof. W. R. Graham, of the Ontario Agricultural College, has given remarkably good results. The pen 20 by 20 feet accommodates 100 hens, and although the front is entirely open the birds do not suffer from the cold. It is constructed so that the air does not circulate to cause a draft and yet there is fresh air, light and dryness in the pen the year around. These three things are essential to the health of the birds and therefore to high egg production. The original open-front house was 20 by 20 feet on the ground, 4 feet 6 inches high at the back and 3 feet high in the front. The ridge is 7 feet high, with a door in the east end and a door 5 feet 4 inches by 4 feet 2 1/2 inches in the west end. The south side is covered only with chicken wire, and the roosts are placed at the back of the pen. The henhouse at Weldwood has a slightly different roof. The north part is raised at the ridge a sufficient height to allow for a sash containing lights which are 12 inches deep. This alteration gives extra light in the pen and permits of the sun shining on the roosts and dropping-board. The sash is on hinges so that it can be opened during the heat of summer and this gives added ventilation to the pen. Four feet is also added to the pen for the purpose of having somewhere to store feed and also a place for sitting hens. This is partitioned off from the main pen by a substantial wall. Nests are installed in this wall and can be drawn into the feed room. This is a convenience in that a brooding hen can be left on her original nest and yet not be disturbed by the other fowl. However, we do not entirely favor the open nest, as we believe there would be less trouble from hens eating their eggs were the nests darkened somewhat. Being able to slide the nests into the main pen in the morning when the hens are fed and drawing them into the feed room at night prevents the hens roosting on the nests, which tends to keep them cleaner and more sanitary than if they were stationary. The roosts arranged at the back of the pen are made in the form of a frame which is hinged to the uprights in the wall so that they may be raised to facilitate cleaning the pen. A considerable amount of material is required when erecting a house of this size, but second-hand lumber would be just as good as the new. We have found the prepared roofing very satisfactory. The floor is of cement, but on high and dry ground an earthen floor would be all right. In this style of pen the birds never suffer from the frost even in the most severe weather. While the temperature of the pen is low, the atmosphere is dry. This is possibly one reason why the combs and wattles of the birds have not been frozen. When a direct wind it blowing from the south, cotton might be hung over the front opening to advantage. However, in even the most exposed location very little snow will blow into the pen.

**HORTICULTURE.**

**Arsenate of Lime as an Insecticide.**

During the last few years the Entomological Branch of the Dominion Department of Agriculture has been devoting increased attention to the study of insecticides, with special reference to the possibility of securing cheaper materials. One of the first results of this study consisted in a demonstration of the value of arsenate of lime, or calcium arsenate, as an insecticide.

A pamphlet has been recently issued by the Entomological Branch explaining in detail the nature and value of this material, but in quoting from it we desire to make it plain that we do not recommend its use in districts or provinces where the experimentalists in those districts have not found it safe enough to be generally recommended. For instance, Prof. Lawson Caesar, in Ontario, is not yet prepared to advise the use of arsenate of lime without limitation, so it is evident that climatic or natural conditions may so differ in the various provinces that arsenate of lime should be thoroughly tested before being adopted as the standard insecticide. However, we quote liberally from the pamphlet issued by the Entomological Branch, in order that fruit growers may become acquainted with the nature of arsenate of lime, and be prepared to use it under certain conditions which they know will guarantee good results. In the following paragraphs may be found detailed information concerning arsenate of lime, as explained by pamphlet in question.

**Where Arsenate of Lime is Used.**

At the present time arsenate of lime, which should be clearly distinguished from arsenite of lime, is only recommended as a spray for apple, potato and pear. It is not regarded as a safe insecticide for trees having tender foliage, such as plum, cherry or peach, nor do we recommend the use of arsenate of lime alone, but only in conjunction with lime, Bordeaux mixture or sulphide sprays, as described later. During the years 1915-16-17, it has been used in Nova Scotia both commercially and experimentally in a variety of ways; although the results from its use have not been uniformly satisfactory, this could not be expected on account

of the lack of knowledge concerning the material. Nevertheless, the satisfaction following its use has been such that orders for arsenate of lime in Nova Scotia in 1918 have exceeded those of all previous years combined; in fact, the orders for arsenate of lime in the Annapolis Valley exceed those for all other arsenical insecticides combined.

In discussing this poison, it must be understood that, unless otherwise stated, we refer to the commercial dry material containing 40 per cent. arsenic oxide in the form of tri-calcium arsenate and less than 1 per cent. soluble arsenic, and so powdered that one pound of the dry material occupies eighty cubic inches. Although originally intended for use with Bordeaux mixture it was soon found, after the material had been introduced, to be the only poison that could be used safely with sulphide sprays, that is without being responsible for unsatisfactory results such as injury to foliage or the formation of undesirable chemical combinations.

#### The Action of Arsenate of Lime on Foliage When Used Alone.

Many growers and investigators have used arsenate of lime alone, usually with disastrous results. The properties of this material are such that, when it is used alone, it causes a yellowing and often burning of the foliage. The yellowing is generally caused by the formation of soluble arsenical compounds, and burning results from either an excessive use of the insecticide or certain weather conditions which abnormally hasten the breaking up of the material and the liberation of soluble arsenical compounds. Injury from the use of arsenate of lime alone is usually slight at first, increasing with each successive day for a week or more. The use of arsenate of lime alone on foliage is not recommended, although it has been used in some cases successfully on potatoes.

Used in conjunction with lime no damage such as burning of the foliage need be apprehended.

#### The Use of Arsenate of Lime With Lime.

It has been found that where ten parts of either water-slaked or hydrated lime is used to one part of arsenate of lime, the material can be applied to apple and potato foliage without injury.

#### Arsenate of Lime Compared With Arsenate of Lead When Used With Lime-sulphur.

The following comparisons of arsenate of lime and arsenate of lead with lime-sulphur may be drawn from three years' experience with arsenate of lime in Nova Scotia: Arsenate of lime with lime-sulphur has invariably given slightly better results in the control of fungous diseases than arsenate of lead with lime-sulphur. This is very possibly due to the fact that upwards of 35 per cent. of the sulphur may be precipitated in the latter composition. Arsenate of lime with lime-sulphur has, in all experiments in Nova Scotia, caused less leaf-burning or singeing than the arsenate of lead with lime-sulphur spray. This is on account of the larger quantity of soluble arsenic in the latter combination.

Arsenate of lime with lime-sulphur has caused noticeable yellowing of the leaves more often than the arsenate of lead with lime-sulphur combination. The underlying causes of the yellowing of the leaves would appear to vary, and they are now being investigated. It may be noted, however, that only here and there an isolated grower reported yellowing from the third spray (that applied immediately after the blossoms), while possibly 5 per cent. of those who used lime-sulphur with arsenate of lime for the fourth spray (the spray applied two weeks after the blossoms) reported yellowing.

The type of yellowing that is due to arsenical injury can be easily eliminated by adding either five pounds of water-slaked or hydrated lime to each 40 gallons of the lime-sulphur with arsenate of lime combination when used for the sprays after the blossoms. So far as our observations go, the addition of lime to the third spray (the spray immediately after the blossoms) is only necessary in orchards where the trees are subject to yellowing on account of the variety of apple or the treatment of the orchard. Lime-sulphur is not advocated by us for the spray two weeks after the blossoms, but where it is used as a fungicide in that spray and arsenate of lime is added for a poison, it would seem advisable to add five pounds of water-slaked or hydrated lime to prevent the liberation of soluble arsenic and the yellowing of the leaves.

The trees sprayed with the arsenate of lime with lime-sulphur combination have in all the experiments carried on by us for three years given more apples than those sprayed with the lime-sulphur and arsenate of lead combination.

In poisoning value arsenic in the form of arsenate of lime (with lime-sulphur) is fully equivalent to an equal quantity of arsenic in the form of arsenate of lead.

The arsenate of lime with lime-sulphur combination is much more easily and thoroughly agitated than the arsenate of lead with lime-sulphur combination on account of its physical properties and freedom from lead sulphide or "sludge."

Arsenate of lime in its convenient powdered form may be more easily and accurately weighed and added to the spray, and it may also be stored more safely than paste arsenate of lead.

Arsenic in the form of arsenate of lime is less than 60 per cent. of the price of arsenate of lead in the paste form, according to the prices in Nova Scotia for 1918.

#### The Use of Arsenate of Lime With Sulphide Sprays.

Arsenate of lime is the only poison on the market that can be used with sulphide sprays, such as lime-sulphur, barium tetra-sulphide and sodium sulphides, such as "Soluble Sulphur" and "Sulfocide," without

such chemical change taking place between the sulphide and the poison as would result in injury to foliage. When acid (hydrogen) or standard lead arsenate is added to lime-sulphur a certain amount of double decomposition occurs resulting in the formation of lead sulphide and crude arsenate of lime, five per cent. of which is soluble arsenic. This reaction may precipitate as much as 35 per cent. of the sulphur from the solution as lead sulphide, the black "sludge" with which the orchardist is familiar. Arsenate of lime, on the other hand, does not cause any perceptible decomposition or change in the sulphide composition, and the standard brands contain much less than one per cent. of soluble arsenic. The presence of lime-sulphur in the spray prevents the formation of soluble arsenic compounds from arsenate of lime.

With sodium sulphide solutions, such as "Soluble Sulphur" and "Sulfocide," arsenate of lime is the only commercial poison that can be used without damage to foliage resulting from the formation of soluble arsenical compounds.

On account of the apparent increase in the toxic value of arsenicals that results from the presence of sodium salts, it has been found desirable to decrease the amount of arsenate of lime used with sulphide sprays to the proportion of one-half pound of arsenate of lime to forty gallons. It has been found that the sodium sulphide solutions do not adequately protect the arsenate of lime against air, and that in order to eliminate yellowing where the sodium sulphide with arsenate of lime combination is used for the four sprays, 10 pounds of hydrated or water-slaked lime must be added to each 40 gallons, although it may be pointed out that injury has been practically eliminated by using five pounds of lime to each 40 gallons in an orchard that was not well cared for.

#### The Use of Arsenate of Lime With Bordeaux Mixture.

Arsenate of lime has given the best of satisfaction and no leaf injury when used as a spray for the apple in conjunction with Bordeaux mixture made according to the various formulae. It would appear that, on account of its adhesive qualities, arsenate of lead assists the fungicidal action of Bordeaux mixture more than arsenate of lime. On the other hand, the difference in cost and greater convenience are both in favor of arsenate of lime.

#### Formulae for Use of Arsenate of Lime.

As a potato spray:—

Arsenate of lime: 1½ pounds.  
Bordeaux mixture: 40 gallons.

As an apple spray: The following proportions are practically equivalent on account of the effect of the fungicides on the action of the poisons:—

With Bordeaux mixture: 1 pound of arsenate of lime to 40 gallons.

With lime-sulphur: ¾ pound of arsenate of lime to 40 gallons, adding 5 pounds of hydrated or water-slaked lime to the two sprays applied after the blossoms.

With "Soluble Sulphur" and "Sulfocide": ¾ pound of arsenate of lime to 40 gallons, adding 10 pounds of hydrated or water-slaked lime to each spray.

#### Cost of Arsenate of Lime Compared With Other Poisons.

When the cost of arsenic is taken into consideration, arsenate of soda is the only arsenical insecticide that approaches in any degree arsenate of lime in cost as a potato poison. Paris green and arsenate of lead are, at the present time, costing about two-thirds more than arsenate of lime, while arsenite of zinc is costing about one-third more.

## FARM BULLETIN.

### New Orders Re Exemption and Leave of Absence.

Since the article on page 796 of this issue, concerning the powers of the Leave-of-Absence Boards, went to press new orders have been issued which cancel those appearing on page 796. Under the new regulations, men in any class under the Act are subject to call, and any exemption therefore granted to any man shall cease from and after noon of the day upon which he is ordered so to report, and no claim for exemption shall be entertained or considered after the issue to him of such order, provided, however, that the Minister may grant leave of absence without pay to any man by reason of the death, disablement or service of other members of the same family while on active service.

In regard to the leave of absence to draftees, several clauses of the new order are important. We quote from these as follows:

1. Leave-of-Absence Boards will be immediately abolished in all districts.

2. No claim for a leave of absence, without pay, made on behalf of a defaulter under the Military Service Act will be considered.

3. (a) A claim for leave of absence, without pay, made on behalf of a man who reports for duty as ordered by the Registrar, on the ground of death, disablement, or service of other members of the same family while on active service in any theatre of actual war (not includ-

ing the High Seas, Great Britain or Ireland) will, if it appears that the man concerned, whether he is in Category "A" or not, is the only remaining son of military age, be immediately forwarded to the Officer Commanding the District for transmission to Militia Headquarters.

(b) In such cases a man may be granted provisional leave of absence, without pay, on the authority of the Officer Commanding the District, pending receipt of instructions from Militia Headquarters. If the application is made before the man is issued his uniform and equipment, no such issue will be made to him.

4. If a man is in Category "A," no claim for leave of absence, without pay, or for extension of such leave previously granted will be considered, unless it is based on the ground mentioned in paragraph 3.

Leave of absence will be considered for men in categories lower than "A," regardless of exemptions granted or claims made for same, and the grounds upon which application is made will determine under what Orders the claims will be considered.

Any member of the Canadian Expeditionary Force in Canada, in a category lower than "A," who can be temporarily spared from military duties may be granted leave of absence, without pay, on the authority of the Officer Commanding the District, on production of a certificate from the Agricultural Representative for the district appointed by the Department of Agriculture, at Ottawa, to the effect that the man concerned is an efficient farm laborer, whose services are urgently required on the land. The first leave granted will be until the 15th day of July, and this may be again extended to a further three months if the Agricultural Representative issues a certificate to the effect that the man concerned has been engaged in agricultural work during his first leave of absence, and that his services are still urgently needed.

Leave already granted under C. E. F. order No. 355 may be extended until the 15th day of July, on the production of a certificate from the Agricultural Representative, provided the man is not in Category "A." This leave may be again extended for a further three months.

### The Limitations of the Press.

An Order-in-Council, dated Tuesday, April 16, imposes certain restrictions on the Press of Canada which the reading public should know and understand. Freedom of speech and liberty of the Press have long been symbols of Canadian democracy, but the recently enacted Regulations restrain editorial comment to a rather startling extent. The various publications of this Dominion have, as a whole, performed a remarkable service in disseminating useful information concerning the war and placing the facts before the people in such a way that Canada realized her duty and threw herself whole-heartedly and determinedly into the conflict. Now, in order to stifle a few recalcitrants, that should have been prosecuted long ago, the following orders have been issued, which savor strongly of despotism and which will necessarily ban even constructive criticism, the best tonic for representative Government:

#### Order and Regulation.

1. It shall be an offence:

(a) To print, publish or publicly express any adverse or unfavorable statement, report or opinion concerning the causes of the present war or the motives or purposes for which Canada or the United Kingdom of Great Britain and Ireland or any of the allied nations entered upon or prosecutes the same, which may tend to arouse hostile feeling, create unrest or unsettle or inflame public opinion;

(b) To print, publish or publicly express any adverse or unfavorable statement, report or opinion concerning the action of Canada, the United Kingdom of Great Britain and Ireland, or any allied nation in prosecuting the war;

(c) To print or give public expression or circulation to any false statement or report respecting the work or activities of any department, branch or officer of the Public Service or the service or activities of Canada's Military or Naval Forces, which may tend to inflame public opinion and thereby hamper the Government of Canada or prejudicially affect its Military or Naval Forces in the prosecution of the war;

(d) To print, publish or publicly express any statement, report or opinion which may tend to weaken or in any way detract from the united effort of the people of Canada in the prosecution of the war;

(e) To print, publish or publicly express any report of, or to purport to describe or to refer to the proceedings at any secret session of the House of Commons or Senate held in pursuance of a resolution passed by the said House or Senate, except such report thereof as may be officially communicated through the Director of Public Information.

(f) Without lawful authority to publish the contents of any confidential document belonging to, or any confidential information obtained from any Government Department or any person in the service of His Majesty.

2. Any person found guilty of an offence hereunder shall upon summary conviction be liable to a fine not exceeding five thousand dollars (\$5,000.00), or to imprisonment for not more than five years, or to both fine and imprisonment.

Toronto (Union)  
Montreal (Pt.)  
Montreal (East)  
Winnipeg  
Calgary  
Edmonton

Toronto (Union)  
Montreal (Pt.)  
Montreal (East)  
Winnipeg  
Calgary  
Edmonton

NOTE.—The Toronto  
†Each.  
\*Off car w

### Market

Toronto (U

Cattle receipts forty-nine hundred was not as good run of the previous number of head and the offering butcher cattle never, were the local yards, the throughout the were operating, were bought for and Hamilton are were shipped to of these loads and three were. While feeding calves at high prices has have been paid should allow the butcher cattle a notwithstanding the winter opened on Monday, and quotations per hundred of the previous week thirty hundred head nearly all gone today, prices were good cattle being market, on which very keen, and cents was noted, at the drover's closed with a steady day. Of the head, of which the good, sold at \$14 a lot consisting of \$14. Some excellent steers weighing twelve hundred Wednesday, were hundred and sixty Ontario, sold at a head of about equal or more loads at sales, totalling several made from \$12.75 and heifers weighing to one thousand pounds slightly under sold at \$14, nine straight load at \$14.50 within these \$12 to \$12.75, were weighed up per hundred. We are now selling hundred higher than weeks ago, this ad cows and bulls, in vances have been due, to some extent price of hides. Choice cow sold at \$11.50; several number of sales went to \$11. Cows of n from \$8.50 to \$9.50 sold as high as \$11 the range for choice to \$11.25. Stock move to the count the previous week ing everything of



per hundred, which was about \$1.00 per hundred more than the prices paid for the same grade of calves during the previous week.

Few sheep and lambs were on sale. Prices were unchanged since the previous week.

Hog prices remain around \$21 per hundred, off cars, and while there are some predictions of an easier market, this does not seem to be borne out by the light receipts of hogs at the present time.

PT. ST. CHARLES.—Of the disposition from the Yards for the week ending April 18th, Canadian packing houses and local butchers purchased 3,083 calves, 46 canners and cutters, 61 bulls, 619 butcher cattle, 1,274 hogs and 28 sheep and lambs. Canadian shipments were made up of 38 milch cows and 24 butcher cattle. There were no shipments made to United States points during the week.

The total receipts from January 1st to April 18th, inclusive, were 9,759 cattle, 13,725 calves, 19,975 hogs and 5,093 sheep, compared to 11,125 cattle, 16,395 calves, 20,474 hogs and 4,698 sheep, received during the corresponding period of 1917.

EAST END.—Of the disposition from the Yards for the week ending April 18th, Canadian packing houses and local butchers purchased 1,560 calves, 447 butcher cattle, 778 hogs and 25 sheep and lambs. Shipments to United States consisted of 703 calves.

The total receipts from January 1st to April 18th, inclusive, were 8,922 cattle, 12,260 calves, 11,653 hogs and 4,848 sheep; compared to 12,134 cattle, 13,846 calves, 15,733 hogs and 6,020 sheep, received during the corresponding period of 1917.

Buffalo.

Cattle.—With receipts rather liberal last week, trade on all classes of steers was a full half dollar to seventy-five cents a hundred above the preceding week, making the Buffalo market the highest within its history, shipping steers selling up to \$17 to \$17.25, with Canadian steers ranging up to \$15.75 to \$16, highest prices ever paid on the Buffalo market. Best heavy fat cows and heifers ruled a full quarter to half higher, best heifers selling up to \$14.50, with best fat cows around \$13.50. Medium and commoner grades of butchering cattle were lower but choice handy steers and heifers were a quarter higher, best ranging up to \$16, with yearlings bringing that price. Canner and cutter stuff ruled about steady. Stockers and feeders were higher, bulls sold a full half dollar higher, while trade on milk cows and springers ruled about steady. Offerings for the week totalled 5,900 head, as against 3,650 for the preceding week, and as against 4,975 head for the corresponding week a year ago.

Shipping Steers.—Natives, choice to prime, \$16.50 to \$17.25; fair to good, \$15.75 to \$16.25; plain and medium, \$14 to \$15; coarse and common, \$13 to \$13.50. Shipping Steers.—Canadians, best, \$15.50 to \$16; fair to good, \$14.50 to \$15.25; common and plain, \$13 to \$13.50. Butchering Steers.—Choice heavy, \$16 to \$16.50; fair to good, \$15.25 to \$15.75; best handy, \$15 to \$16; fair to good, \$14 to \$14.75; light and common, \$12 to \$13; yearlings, choice to prime, \$15.25 to \$16; fair to good, \$13.50 to \$14.75.

Stockers and Feeders.—Best feeders, \$10.50 to \$11; common to fair, \$9 to \$9.75; best stockers, \$9.50 to \$10; fair to good, \$8.75 to \$9.25; common, \$7.50 to \$8.

Hogs.—Prices, as a result of liberal receipts, were quite a bit lower last week. Monday, when the decline figured anywhere from a dime to twenty-five cents, heavy hogs sold from \$18.25 to \$18.50, bulk of the light hogs moved at \$18.65, few \$18.75, and lights and pigs, which were on top, brought \$18.65 and \$18.75. Tuesday the top dropped to \$18.50, bulk sold at \$18.40, with pigs \$18.15 and \$18.25. Wednesday nothing brought above \$18.20, and heavies ranged on down to \$17.90, and Thursday's market was strong to a dime higher than Wednesday. Friday's trade also ruled a little stronger. Yorkers and lights sold up to \$18.25 and \$18.35, bulk of the packers' knuts moved at \$18.25, with heavies ranging on down to \$18, and pigs ranged from \$18 to \$18.25. Roughs, \$16 to \$16.25, and stags \$13.50 down. Receipts for the past week were 27,100 head, as compared with 21,261 head for the week before, and 18,200 head for the same week a year ago.

Sheep and Lambs.—Prices held to a high level again last week. Only a few wool lambs were here, and they sold from

GRAND TRUNK RAILWAY SYSTEM

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An ideal spot for your Summer Vacation midst wild and delightful scenery.

Excellent hotel service at the "Highland Inn"

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When writing please mention "Advocate"

Do Your Banking by R. F. D.

Make the mail your messenger; and save yourself the long rides to town.

Deposits may be made—butter and cheese cheques cashed—money withdrawn—just as easily and safely by mail as in person.

Write the manager to tell you all about this convenient plan of Banking By Mail—or call in and have it explained, the next time you are town.



14

THE MERCHANTS BANK OF CANADA

Head Office: Montreal, Established 1864. With its 102 Branches in Ontario, 32 Branches in Quebec, 19 Branches in Manitoba, 21 Branches in Saskatchewan, 53 Branches in Alberta, and 8 Branches in British Columbia serves Rural Canada most effectively. WRITE OR CALL AT NEAREST BRANCH.

\$22 to \$22.25, with one bunch at \$22.50. The week started with best shorn lambs selling at \$19, few \$19.15; Tuesday's and Wednesday's top was \$19; Thursday the quality was not very good and none sold above \$18.75, and Friday the bulk landed at \$19. Cull lambs without fleeces went from \$16.50 down, skips going as low as \$11. Sheep were steady all week. Shorn yearlings brought up to \$17.25, wether sheep were quoted from \$15 to \$15.50 and ewes from \$14.50 down. The past week's receipts totaled 12,700 head, as against 13,260 head for the week previous, and 13,300 head for the same week a year ago.

Calves.—Receipts last week were the largest of the season, grand total being approximately 6,800 head. Offerings were against 5,710 head for the week before, and 4,900 head for the same week a year ago. Monday top veals opened at \$15.50, and late sales were made mostly at \$15. Tuesday and Wednesday the bulk landed at \$14.50; Thursday the majority landed at \$15, and Friday's range was the same as Monday, being from \$15 to \$15.50. Cull grades ranged from \$13 down, a couple of decks of very common, light Canadian calves selling Friday as low as \$10.

Toronto Produce.

Live stock receipts at the Union Stock Yards, West Toronto, on Monday, April 29, consisted of 183 cars, 3,736 cattle, 1,196 calves, 1,307 hogs and 49 sheep and lambs. The market was strong. All classes of butcher cattle were steady at last week's closing prices. The top for straight loads \$14.75. Sheep and lambs strong. Good calves strong; others weak and one dollar lower. Hogs \$20.25, fed and watered.

Breadstuffs.

Wheat.—Ontario (basis in store Montreal) No. 2 winter, per car lot, \$2.22. Manitoba wheat (in store, Fort William, including 2 1/2% tax) No. 1 northern, \$2.23 1/2; No. 2 northern, \$2.20 1/2; No. 3 northern, \$2.17 1/2; No. 4 wheat, \$2.10 1/2. Ont.—Manitoba (in store, Fort William) No. 2 C. W., 91 1/2c; No. 3 C. W., 88 1/2c; extra No. 1 feed, 88c; No. 1 feed, 85 1/2c. Ont.—Ontario, No. 2 white, 91c, to 92c; No. 3 white, 90c, to 91c, according to freights outside.

Peas (according to freights outside)—No. 2, \$3.60 to \$3.70. Barley (according to freights outside)—malting, \$1.52 to \$1.53. Buckwheat (according to freights outside)—\$1.84 to \$1.86. Rye (according to freights outside)—No. 2, \$2.65. American corn (track, Toronto)—No. 3 yellow, kiln dried, \$1.90, nominal; No. 4 yellow, kiln dried, \$1.85, nominal. Flour.—Ontario (Montreal prompt shipment, new bags). War quality, \$10.80, Montreal; \$10.80, Toronto. Manitoba flour, (Toronto, new bags) war quality, \$11.10.

Hay and Millfeed.

Hay.—No. 1, per ton, car lots, \$17 to \$18, mixed; \$14 to \$16. Straw.—Car lots, per ton, \$8.50 to \$9. Bran.—Per ton, \$35.40; shorts, per ton, \$40.40.

Hides and Wool.

Prices delivered, Toronto: City Hides.—City butcher hides, green, flat, 10 1/2c; calf skins, green, flat, 20c; veal kip, 18c; horse hides, city take off, \$6 to \$7; sheep, \$3.50 to \$5.50. Country Markets.—Beef hides, flat, cured, 11c, to 12c; green, 10c, to 11c; deacon or bob calf, \$1.75 to \$2.50; horse hides, country take off, No. 1, \$6 to \$7; No. 2, \$5 to \$6; No. 1 sheep skins, \$2.50 to \$5. Horse hair, farmers' stock, \$25. Tallow.—City rendered, solids, in barrels, 16c, to 17c; country solid, in barrels, No. 1, 15c, to 16c; cakes, No. 1, 18c, to 19c. Wool.—Unwashed fleece wool, as to quality, fine, 60c, to 65c; washed wool, fine, 80c, to 85c.

Country Produce.

Butter.—Butter of all classes kept practically stationary in price, wholesale, selling as follows: Creamery, fresh-made pound squares, 51c, to 53c, per lb.; creamery solids, 49c, to 50c, per lb.; dairy, 38c, to 45c, per lb. Oleomargarine, 32c, to 33c, per lb. Eggs.—New laid eggs kept stationary in price, selling as follows, wholesale: new-laid No. 1, 39c, to 40c, per dozen; subsets at 42c, to 43c, per dozen. Cheese.—Old, 30c, per lb.; new, 24c, per lb.; new twins, 21 1/2c, per lb. Poultry.—Receipts were exceptionally light, and prices firm during the past

week. Chickens, milk-fed, 30c, per lb.; chickens, ordinary fed, 27c, per lb.; fowl, 3 1/2 lbs. and under, 25c, per lb.; fowl 3 1/2 lbs. to 5 lbs., 30c, per lb.; fowl, 5 lbs. and over, 32c, per lb.; ducklings, 30c, per lb.; turkeys, young, 30c, per lb.; turkeys, old, 25c, per lb. (These are the live-weight prices now being paid to the producer.)

Potatoes.—Owing to seeding operations preventing them coming in potatoes had a firming tendency; Ontarios selling at \$1.60 and \$1.65 per bag, and N. B. Delawares at \$1.75 per bag. Cobbler and Green Mountain seed potatoes selling at \$2.25 per bag.

Montreal.

Dressed Hogs.—The market readily absorbs at firm prices all the dressed hogs available on this market, and prices continue firm. Abattoir, fresh-killed stock, sold at 29 cents to 29 1/2 cents per lb.

Eggs.—It was reported that the market for eggs had gone below 40c. per dozen, but no confirmation of this was found. Instead, it would seem that the price was firm at around 41c. to 42c. per doz., for straight-gathered stock and that selects brought about 2c. above these prices. It looks as though packing would go on at around this range, and, in this case, lower figures are unlikely.

Butter.—The time of the season has now arrived when lower prices for creamery are likely to develop. Since a week ago, the price of creamery has undoubtedly fallen a couple of cents. The make is now increasing, and quotations were 49 1/2 cents to 50 cents per lb. for finest, while fine was about one cent under these prices. Dairy butter ranged from 42 cents to 45 cents per lb.

Cheese.—The announcement is made by the Dairy Produce Commission that the price of 23c. per lb. has been agreed upon for No. 1 grade, f. o. b. steamer, Montreal, being 1 1/4c. higher than 1917.

Grain.—The price of oats declined somewhat during the week, and No. 3 Canadian Western and extra No. 1 feed were quoted at \$1.02, ex-track, Montreal, No. 1 feed being \$1.00 1/2; No. 2 feed, 98c., and Ontario No. 3 white \$1. American corn is \$1.70 to \$2 per bushel.

Flour.—The percentage in Manitoba flour having been increased, the price was correspondingly reduced, and was \$10.95 per bbl., in bags, f. o. b. cars, Montreal, and 10c. more delivered to bakers. Ontario winter wheat was steady at \$11.00 to \$11.50 per bbl., in bags, ex-store. Rye flour was firm at \$16.50 per bbl., and corn flour is \$13.00.

Millfeed.—Bran was \$35.40, and shorts \$40.40; pure grain mouille, \$75 per ton, including bags.

Hay.—This is almost the only steady market, No. 2 baled hay was \$17 per ton, No. 3 being \$15.50, and low grades, \$8 to \$10 per ton.

Hay Seed.—The market held steady, being 9c. to 14c. per lb. for timothy; 35c. to 38c. for red clover, and 23c. to 26c. for alsike, f. o. b., Montreal.

Hides.—The market has advanced practically all round. Calfskins were 45c. and 48c. per lb. Spring lambs were 50c. and sheepskins \$4.50 to \$4.75 each, horsehides, \$5 to \$7 each. Steers were 21c. per lb., cows, 16c., and bulls 15c., flat, and hides 17c., 18c., and 19c. per lb., Montreal inspection. Tallow was 3 1/4c. for scrap fat; 8c. for abattoir fat, and 15c. to 16 1/2c. for rendered.

Chicago.

Cattle.—Beeves, \$10.10 to \$17.35; stockers and feeders, \$8.25 to \$12.15; cows and heifers, \$7.75 to \$13.80; calves, \$7.50 to \$13.50.

Hogs.—Light, \$17.15 to \$17.75; mixed, \$16.85 to \$17.70; heavy, \$16 to \$17.40; rough, \$16 to \$16.50; pigs, \$13.25 to \$17.35.

Sheep.—Native, \$13 to \$17.15; lambs native, \$16 to \$21.

Cheese Markets.

St. Hyacinthe, Que., 20 3/4c.; Belleville, 22 1/4c.; Montreal, finest westerns, 23c.; finest easterns, 22 1/2c.; New York, special, 24 1/2c. to 25 1/2c.; fresh, 22 1/2c. to 23c.; average run, 23 1/2c. to 24 1/2c.; Watertown, N.Y., 20 3/4c. to 21 1/4c.

Sale Dates.

May 21.—The Watt-Garhouse Short-horn Sale, at Guelph, Ont. June 11.—Dr. A. A. Farwell, Oshawa, Ont.; Holsteins.



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Sisters swift an Seem to trea Like flowers st Heads turn t

Beauty, blood Blending in Eternity's to-n In this half-

Sounds of whis Labored, ind Then, like a yo The dear fan \*The Glory Lane Co.

The Y. M. Canad

BY ON many a waste by in a crim known in some l owing to the fa up in the wake

Another health life in the track in Europe to-da Red Triangle, Y. M. C. A.

Wherever the Triangle follow insignia of com troops keeps changing colum instance, the "Y" with his coffee s consolidated, se

lates to the war Red Triangle is camps and base of Y. M. C. A. trenches, some from the Germ secretaries are fire. Ten days a their Somme off had thirty-seven battlefield. The

the definite resp the walking wou of men came in the "Y" secre hot drinks. A Medical Officer, t of saving hundre

The work of th is not confined to Its Secretaries a be found in Fran potamia and P where the allied they are also ver the non-combatan

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The men in the upon to face the r w relate, are no tremendous serv work releases th that otherwise v conveying timber parts to England dangers are not are strangers in



**In Hospital.\***

BY CONINGSBY DAWSON.

Hushed and happy whiteness,  
Miles on miles of cots,  
The glad, contented brightness  
Where sunlight falls in spots.

Sisters swift and saintly  
Seem to tread on grass;  
Like flowers stirring faintly,  
Heads turn to watch them pass.

Beauty, blood and sorrow,  
Blending in a trance—  
Eternity's to-morrow  
In this half-way house of France.

Sounds of whispered talking,  
Labored, indrawn breath;  
Then, like a young girl walking  
The dear familiar Death.  
\*“The Glory of the Trenches”, John Lane Co.

**The Y. M. C. A. and the Canadian Forestry Corps.**

BY JOHN L. LOVE.

ON many a track of forest land laid waste by fire is to be found growing in a crimson flower. This plant is known in some localities as the “fire weed” owing to the fact that it is said to spring up in the wake of a huge conflagration.

Another healthy growth has sprung to life in the track of the awful conflagration in Europe to-day, and it is known as the Red Triangle, the crimson sign of the Y. M. C. A.

Wherever the Khaki goes, the Red Triangle follows. In some cases this insignia of comfort and cheer for the troops keeps almost abreast of the changing columns. At Vimy Ridge, for instance, the “Y” man was on the job with his coffee stall before the place was consolidated, serving biscuits and chocolates to the weary men. The work of the Red Triangle is not confined to training camps and bases, and there are dozens of Y. M. C. A. dugouts in the forward trenches, some of them only 100 yards from the German line, and where the secretaries are under continuous shell fire. Ten days after the Canadians began their Somme offensive, the Red Triangle had thirty-seven centres operating on the battlefield. The Y. M. C. A. was given the definite responsibility of caring for the walking wounded, and as the streams of men came in they were cared for by the “Y” secretaries, and given free hot drinks. According to one senior Medical Officer, this service was the means of saving hundreds of lives.

The work of the Y. M. C. A., however, is not confined to the war-stricken areas. Its Secretaries and their dugouts are to be found in France and Flanders, Mesopotamia and Palestine, in every field where the allied armies are fighting; but they are also very much in evidence with the non-combatant forces.

From end to end of Great Britain are the Camps of the Canadian Forestry Corps. These are nearly fifty in number, and in most of them the Y. M. C. A. has a centre. Each leader is a trained and qualified man, and there are ordained ministers among them. The staff is supervised by Captain Glanville at the Y. M. C. A. Headquarters, who spends most of his time going from camp to camp in the interest of the Foresters.

The men in the camps, while not called upon to face the rigors and risks of actual warfare, are none the less rendering a tremendous service to the Empire. Their work releases thousands of tons of shipping that otherwise would be employed in conveying timber from Canada and other parts to England; and if their physical dangers are not extraordinary, still they are strangers in a strange land. The

camp are for the most part isolated, and after a long absence the bug of loneliness and homesickness bites no less sharply in one foreign strand than in another.

“Till the boys come home”, the Y. M. C. A. takes home to the boys. At the sign of the Red Triangle the lonesome lumberjack, pining for ‘his ain country’, can find American and Canadian Magazines. He can purchase, for a nominal rate variations of camp diet, such as hot and cold drinks, sandwiches, pastries and cakes. Any profits are paid over to a Company Fund, which devotes them in the main to defraying expenses connected with the Y. M. C. A. work.

Concert parties from the nearest towns make frequent visits to the camps, and the social and entertainment features include cinema shows and dances.

Checkers, chess, dominoes and letter-writing fill many an evening's leisure, and for the more studiously inclined there are classes where men may learn knowledge that will make them more efficient in days to come, when the sword is sheathed and the battle flag is furled.

Over two hundred men in different units are taking specially selected courses related to forestry work. For this a small fee is charged, and the balance is divided between the Forestry Corps Headquarters and the Y. M. C. A. Classes in English and arithmetic are also conducted by teachers from local schools where camps are in sufficiently close proximity to town or village.

Amongst the most enjoyable and best

attended functions at the Hut are the Parade Service on Sunday morning, and the song service in the evening. The latter is a quite informal gathering, and as the men choose their own hymns the singing is most hearty.

In what light the men of the Canadian Forestry Corps view the work of the Red Triangle is seen in the large numbers that through the building every night, making full use of the privileges provided.

The Officers' estimate was expressed by Brigadier General McDougall, Director General of Timber operations, London. Writing to Lieut.-Col. Gerald W. Birks, the General says:—

“This work of yours which is educational, inspiring and entertaining, has, I feel sure, helped us in our production, because it has bred in the men a healthier outlook on life in general, and thereby been the means, indirectly maybe, of stimulating them to greater efforts.”

Touching the lives of these men so intimately on their spiritual, mental and physical sides, the work of the Canadian Y. M. C. A. has earned the ever-increasing gratitude and unstinted support of all who would see, not only honor and glory come to the flag wherever this modern Armageddon is being waged; but who also hold that no service, no sacrifice, is too great to render the men who by their supremely unselfish labors are giving Canada a “place in the sun”, and a foremost seat in the councils of the great civilized nations of the world.

The people of Great Britain have shown

a lively interest in the Canadian Forestry Corps, and although the men of this unit are noncombatant, their big contribution to the war is recognized and valued most highly. The accompanying illustration shows one of the 30 Canadian Forestry Camps in the Old Country, in most of which the Y. M. C. A. has its “hut” In the picture the “Y” building is seen at the head of the street.

**Some Vegetables Worth Knowing.**

MOST people get into the habit of growing the same vegetables every year—beets, carrots, parsnips, onions, lettuce and cucumbers being the staples. But there are several other vegetables that are well worth adding to the list, not only because they are toothsome and valuable foods, but because they add interest to the garden. Of these a few of the best are given below:

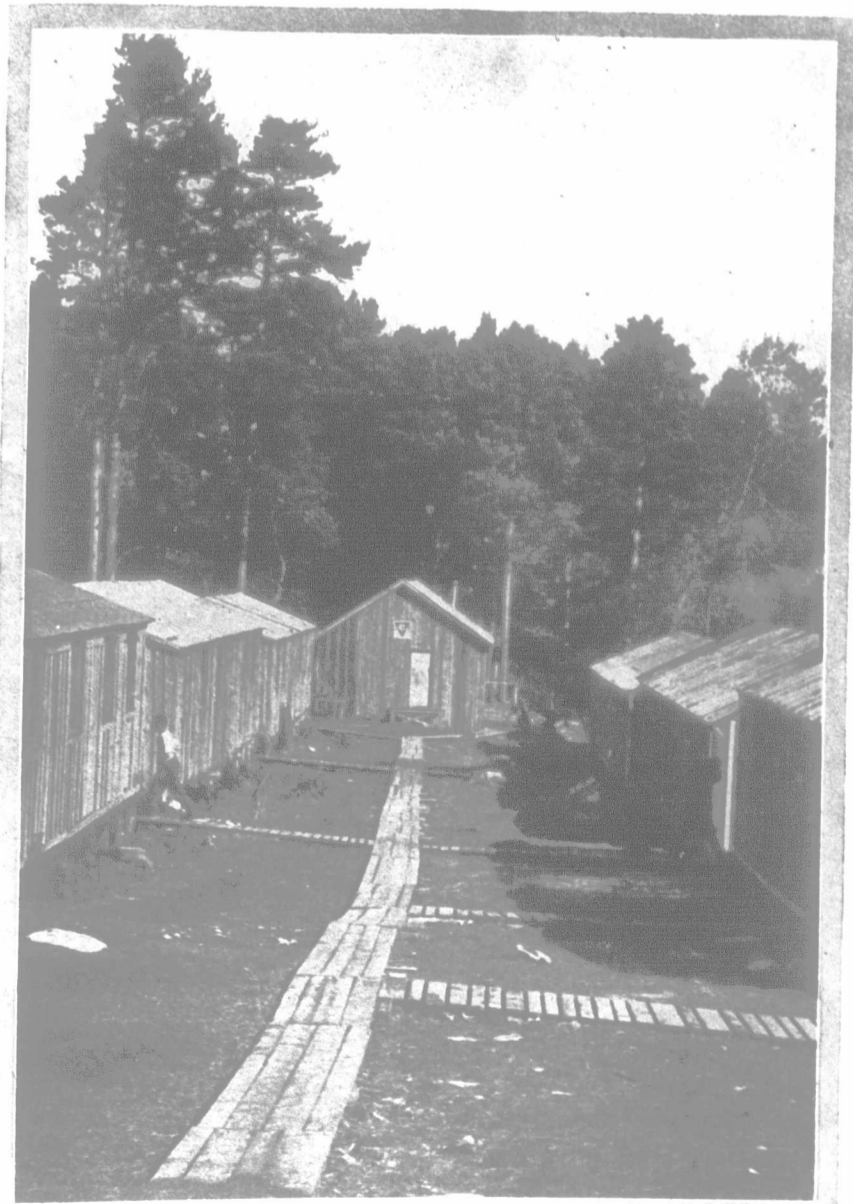
**Artichokes.**—Most people look on Jerusalem artichokes as a pest even going so far as to try to get rid of them. True, if allowed to grow past the second year they may become a pest, because of the many sprouts they send up, but this may be avoided by digging up the tubers either in fall or spring and storing them in sand in the cellar until needed. In food value they are of equal value to the potato, and most people find them very palatable if cooked properly. Moreover, the plants are not troubled by insect pests, and the leaves and stalks may be fed to stock. If let grow “wild” the tubers of the artichoke become very small and knotty, but when put in suitable soil and cultivated as other garden crops they grow to a large size. Artichokes will grow on poor land, but prefer a sandy soil, well-drained, to which enough humus has been added to make it rich. Plant the tubers now, and, after a few early cultivations leave the plants to themselves except to take off the flower buds if extra large tubers are desired.

**Scarlet Runner Beans.**—In Canada “scarlet runners” are grown almost solely as an ornamental vine, but in England they are quite popular as a vegetable, as they are equally good when cooked young, as “green beans”, or when ripened. The garden fence may be covered with them, and so made to yield a crop, a consideration when the garden-space is limited. In fall the roots may be taken up and stored in sand in a frost-proof cellar, care being taken that they are not eaten, as they are poisonous.

**Brussels Sprouts.**—Brussels sprouts taste, when cooked, something like cabbage, but more delicate. The advantage of growing them is that they are among the hardiest of the cabbage family, being better after a touch of frost, so may be left growing in the garden until winter sets in. The sprouts grow about a long central stalk surmounted by a tuft of leaves which should be broken off when the sprouts appear. When removing the sprouts for cooking a knife should be used, and as much of the heel left as possible for the starting of another sprout.

Sow very thinly in a seed-bed, about half an inch deep, and transplant when ready, giving same cultivation as cabbage. When transplanting fertilize with liquid manure, and weekly for 3 or 4 weeks. When hard freezing is due store with soil about the roots in the cellar, keeping the roots moist.

**Chard.**—This plant, also known as Swiss Chard, Spinach Beet, Asparagus Beet, etc., is grown for its leaves, of which the leaf portions are cooked as greens and the thick stalks and midribs as asparagus. It gives a great deal of satisfaction for the labor, as when cut new leaves grow up rapidly. It is very hardy and will stand sharp frosts. Cultivate like beets, applying



Home of Canadian Forestry Corps, Northern Scotland; Y. M. C. A. Hut in the Background.

liquid manure from time to time during the season. The plants should be thinned from time to time (and used) until finally they stand 12 to 18 inches apart. As winter approaches they may be lifted with earth about the roots and stored until used.

**Garden Cress.**—A peppery flavored plant that is liked with bread and butter. It grows very quickly, but as it soon runs to seed successive sowings should be made. Cultivate like lettuce.

**Kale.**—A very hardy plant of the cabbage order, which is not good until touched by frost, so may be left in the garden after winter has set in. Cultivate like cabbage, feeding at intervals with liquid manure. Breakdown flower-stalks as soon as they appear. A strong, moist, rich soil is best.

**Oyster Plant or Salsify.**—Grown for the roots which may be cooked in various ways. The plant is hardy and easily grown. Grow like parsnips. May be kept in the cellar in sand and some of the roots may be left in the ground until spring. Grow in deep, cool, rich soil, not recently manured.

**Winter Radishes.**—Sow thinly in May or June and thin 3 to 6 inches. Cultivate like parsnips. Dress heavily with wood-ashes after sowing to prevent pests. Store in sand for winter using. All radishes do best in light, warm, fairly rich soil, and should be cultivated on the surface of the soil often enough to keep up a dust mulch. Before eating winter radishes soak them for an hour in cold water.

**Summer Squash.**—Excellent for pies, sauce, or when cooked as a vegetable. Should grow quickly in quick, warm, moist soil. Much manure is not advisable, as it makes the plants run to vines.

**Vegetable Marrow.**—Good baked or boiled and served as a vegetable. Cultivate as for squash or pumpkin.

**Spinach** need not be sown on farms as its place can be taken by many weeds and woods plants, as well as beet tops. Young dandelion plants, pigweed, lambs' quarters, pusley and young brown dock leaves may all be cooked as greens, covering a considerable season, while milkweed sprouts may be cooked like

asparagus. All of these are best when well seasoned with butter, pepper and salt and served very hot on toast as a supper dish.

## Hope's Quiet Hour.

### The Lord is There.

The name of the city from that day shall be, the LORD is there.—Ezek. 48:35. "Thou art a port protected

From storms that round thee rise; A garden intersected With streams of Paradise."

The prophet Ezekiel had a vision of a wonderful city—a city which was a temple—and, after eight chapters of careful and minute description of this temple-city, he sums up its glory in its name: "The name of the city from that day shall be, The LORD is there."

If we compare Ezekiel's vision of the city with that of St. John we see that its glory is still the same—the Presence of God. The New Jerusalem has no need of a temple, because it is all a temple. It is God's meeting-place with His people. The Lord is there, and He is Himself the Temple.

We look forward to the satisfying fulfillment of this Vision of Peace; but, even here and now—in the midst of war—God offers Himself as a sanctuary to all who will accept His invitation.—Ezek. 11:16.

The German who, before the war, said proudly: "We don't need God, we have guns!" has many followers in many countries. Young people, especially, who feel as if their strength would overcome all obstacles, are apt to talk as if religion were only for the feeble and the old. Perhaps they may turn to God some day, at present they think they can get along quite well without Him.

But when they realise their helplessness—as they may any day be forced to do—where but in God can joy and peace be found?

Canon Scott, who has written very

beautiful poetry when with our troops at the front, wrote a hymn more than twenty years ago which shows his point of view clearly. He was living in Drummondville, Que., when a letter reached him from a friend in England explaining that the writer was suffering from a malignant disease and had only a few months to live. Canon Scott could not sleep that night, and in the darkness the hymn came to him—the hymn beginning, "Cast thy care on Jesus." In this hymn we are reminded that our Lord is also our Brother, who has power to enter into our troubles as no one else can do, for "the way of sorrows is the path He trod". His sympathy is ready at all times, for small worries and for great anxiety and fierce temptation. In the blackest darkness we may—if we will—"clasp His living hand." Even death—that dreaded journey into the unknown—will be "but a short step further, nearer to His side." We can go forward confidently, for beyond the misty barrier He will reveal Himself more clearly. To depart is not to be torn away from all that is familiar. It is to be "with Christ", to see the King in His beauty and the land of far distances.

A soldier, who was blinded by an explosion, wrote to the mother of a comrade about those who were killed by the same explosion: "One moment they were going on with their work; then the whole world seemed to explode, then nothing, and then they went on again, but freed from the strain and the weariness and all the hampering circumstances of humanity. Nothing terrible about this. I'm sure they're not less alive, but much more alive, going on with finer and more fascinating work, with greater scope for development, clearer understanding, and less to bewilder and hamper them. Things must be better in the next stage, and—freed from all the clumsiness of matter—we must have finer powers to work with, and keener enjoyment. If—found something to enjoy in every minute here, we needn't doubt that he is doing so there."

Those words of cheerful confidence were written by a young man who has suddenly been called to live his earthly life

in the dark. In the gloom and darkness he is clasping the living hand of a trusted Friend. Can those who look down in pitying contempt on the followers of Christ supply him with a better light to cheer and guide him on his way? He can go forward unflinchingly because the Lord is there. If he could not see the Light of the world the future would be gloomy and cheerless. Your turn may come any day—your turn to walk in the dark, with earthly lights extinguished—see to it that before the darkness falls you have found Him who says: "I am the bright and morning Star". Stars shine in the night and He is able to change night into day, for He is not only the Morning Star, but also the Sun of Righteousness.

The whole Bible is God's message of good cheer to His children—His reassuring promise: "Surely I will be with thee". From the message to Abraham, recorded in the first Book of the Bible: "Fear not, for I am with thee", the same message is repeated by many voices, until we reach the great promise which seals the Love-Letter of the Bridegroom to His Bride: "Surely I come quickly."

The name of the city is "The Lord is there". He was with His people in the furnace of affliction long ago in Egypt. He walked in the midst of the flaming fire with the three young men in Babylon. When two criminals were executed, he—their God—was in the midst, suffering and dying with them, and even carrying their load of guilt.

When the little company of the disciples gathered together with closed doors, for fear of their enemies, their Master was in their midst. At first He was invisibly present, but really there all the time. So He is really in the midst whenever two or more disciples meet together in His name to-day. St. John saw Him in the midst of His Church, and heard Him praising, rebuking or encouraging various members of the seven churches in Asia. So He is still in the midst of the church, warning us of the danger of lukewarmness and boastfulness, assuring us of His unchanging love which will not allow us to sink down in slothful comfort. Instead of being terrified by the sorrows of this present time let us look up and lift up our heads. Listen to His cheering word: "As many as I love, I rebuke and chasten; be zealous therefore, and repent. Behold, I stand at the door, and knock." That was the rousing yet hopeful message sent long ago to a careless, easygoing, wealthy congregation. There was danger in their comfortable, arm-chair Christianity, and Christ would not allow them to be lulled into a deathly sleep. He offered His own satisfying fellowship to any man in that lukewarm church who heard His voice and opened the door of his heart.

He is here. His voice is as the voice of a great trumpet, ringing through and through the world. It is a poor triumph for His loved Bride to be able to say: "I am rich, and increased with goods, and have need of nothing!" if His eyes, which are searching as a flame of fire, can pierce through the earthly riches and splendor, and can find no glory of love beneath the glitter of gold lace.

Dare we unveil the secrets of our hearts and say to our Royal Friend: "Lord, Thou knowest all things; Thou knowest that I love Thee?" Do we really love Him more than all earthly friends? Do we feel that His love is the pearl of great price, so that we are really rich if He is abiding in us, though in outward appearance we may seem to be poor? What is the name of our ideal city? Is it our ambition to be rich or famous, to have an easy and pleasant time, or are we athirst for God? Gates of pearl, streets of gold, foundations of precious stones—will these things be enough for us?

We are infinite in our longings, and only the infinite God can give us peace. "Jerusalem" means "Vision of Peace", and He is our Peace. Listen to His great promise:

"I will set my sanctuary in the midst of them for evermore. My tabernacle also shall be with them; yea, I will be their God, and they shall be My people."

"Is the Cross heavy? Doth thy sorrow tire? When the Refiner's gold is in the fire, He is near."

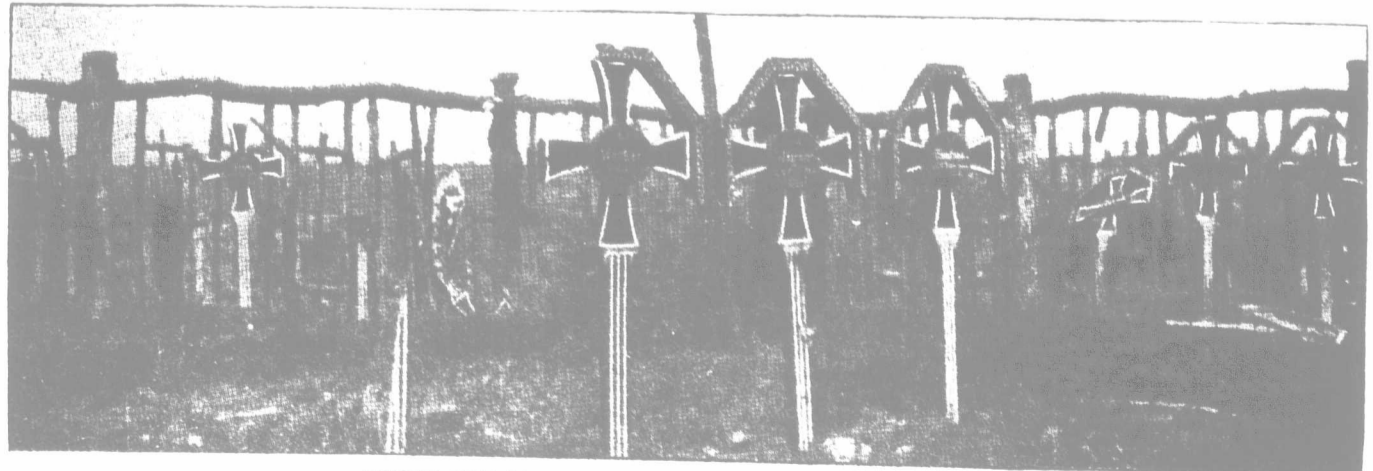
DORA FARNCOMB.

### For the Needy.

A Port Elgin reader sent \$3.00 for the Quiet Hour Purse. One dollar went out



THE SAFEST FAMILY IN GERMANY—THE KAISER AND HIS SIX SONS.



THESE DIE THAT THEY MAY RULE—IS IT WORTH IT?

The *New-Yorker Volkszeitung* remarks pointedly: "The appointment of the Kaiser's fourth little son to be Prefect at Potsdam came at just the right time. Potsdam is certainly safer than any observation-post fifty miles behind the fighting front, where, after all, enemy fliers might make their appearance. Safety first!—for the sons of the Kaiser. Let the 'common people' die for the Fatherland."

For this plate credit is given to Literary Digest. "The German High Command is out for victory and domination at all costs, save that of their own skins and blood. But not even the full and brutal victory which they are failing to gain would give any increase of comfort or any forgetfulness of agony to those German soldiers who were sent into that carnage."—Philip Gibbs.

at once to help was passed on for a sick w still waiting Thank you!

## The L

(Rules for co Departments: (2) paper only. (3) with communication the real name v enclosing a lett place it in stamp (4) Allow one answers to quest

## DEAR Ing

stop, to thin spring we ha think that no I, when trying out to you each year, in the war, there we about, cozy ho and flower gar it was a pleasu the new wall then come bac Now everythin not have the things, and it take up space When so much seas, and so n food supply of short of wick time and mon personal, and s and love pret to do is pre That is, gen But I have in which one pretty things a conscience, sin spent is to fir Y. M. C. A. c hot coffee, tea boys" when go above all, com muddy and on drink as a stir march back to A few week "Coffee—In a in our pages, a "Trinket Fur may carry a t perhaps, in yo in some plac better for raisi In this city was instituted collection of a might be sold be converted i To-day the sal began, and the purpose proved spot. Jewelry been donated brooches, brac lockets, silverw on, making a fi For the rev was especially i words of admir old "dog-collar lets, in two o came and am of the time of One could ima some of these given up, but su face the greater for instance, ga that had belong been treasur connected with i go in a better ca other odd old time "tin-type" what was the sto why the pictu Possibly it was which the space was the most be too, richly chas silver face dec gold, and an ins Then there w newer things, s houses already v ing possibilities holds. "We hac jeweler," said on "and everything is marked "plate know exactly w It was quite " stood there, one s

at once to help a sick man. Another dollar was passed on to-day, to provide comforts for a sick woman. The third dollar is still waiting for its special mission. Thank you!

### 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.]

DEAR Ingle Nook Folk,—Do you ever stop, in the midst of your work, to think of the strangeness of the spring we have come to? Sometimes I think that no one realizes that more than I, when trying to prepare reading to send out to you each week. At this time of the year, in the good old days before the war, there were so many things to talk about, cozy home-like things about houses and flower gardens and new clothes. Then it was a pleasure to run down town to see the new wall-papers and curtain stuffs, then come back and tell you all about it. Now everything is changed. You would not have the heart to read about such things, and it would scarcely be right to take up space in telling you about them. When so much money is needed for overseas, and so much work to keep up the food supply of the world, it would be little short of wickedness to spend too much time and money on things that are purely personal, and so, as we are all only human and love pretty things, the best thing to do is to keep away from temptation.

That is, generally speaking.

But I have just now come from a spot in which one might indulge one's love for pretty things a bit, with an entirely clear conscience, since practically every dollar spent is to find its way directly to the Y. M. C. A. camps overseas, to dispense hot coffee, tea, cocoa and soup to "the boys" when going in to the trenches, and, above all, coming out from them, weary, muddy and only too glad for a good hot drink as a stimulant to shorten the long march back to camp.

A few weeks ago an article entitled "Coffee—In a Jam Tin," was published in our pages, which told all about how a "Trinket Fund" is raised, and how you may carry a trinket campaign through, perhaps, in your own locality, although in some places some other scheme may be better for raising money.

In this city a very vigorous campaign was instituted some weeks ago for the collection of all sorts of trinkets that might be sold again, or melted down to be converted in that way into money. To-day the sale of the saleable articles began, and the little shop rented for the purpose proved to be a most interesting spot. Jewelry and silver of all kinds had been donated—old or superfluous brooches, bracelets, watches, spoons, lockets, silverware for the table, and so on, making a fine collection.

For the reveler in antiques the place was especially interesting, and one heard words of admiration expressed for quaint old "dog-collars" of silver, old bracelets, in two or three kinds of gold, and cameo and amethyst brooches that told of the time of our grandmothers.

One could imagine the pang with which some of these old keepsakes had been given up, but surely the greater the sacrifice the greater the virtue. One woman, for instance, gave a splendid gold watch that had belonged to her father, and had been treasured because of the associations connected with it. "I don't think it could go in a better cause," she said. Another odd old brooch enclosed an old-time "tin-type" of a man. One wondered what was the story connected with it, and why the picture was not taken out. Possibly it was left to show the use to which the space could be put. There was the most beautiful old French watch, too, richly chased on the back, with a silver face decorated with flowers in gold, and an inscription in French inside.

Then there were tables and tables of newer things, superfluous, perhaps, in houses already well-stocked, but providing possibilities for less abundant households. "We had everything valued by a jeweler," said one of the women in charge, "and everything that is not solid metal is marked 'plated.' We want people to know exactly what they are getting."

It was quite "safe" to buy, but as one stood there, one saw not only the pleasure

of owning some of these things at home, but also the long line of footsore, muddy and perhaps wounded boys, crowding into the Y. M. C. A. huts and enjoying the refreshing cups of hot drinks which they might not have were it not for these "Trinket Campaigns" all over the country.

AMONG all the war correspondents at the front there is not one who surpasses, in power of graphic description, Philip Gibbs, author of "The Soul of the War" and "The Battle of the Somme." As I write the great battle near Ypres is still going on, and to-day appears in the Globe Mr. Gibbs' account of an evening of battle of which, on April 16th, he was an eye-witness.

Many of you had not the privilege of reading that wonderful description, and so I want to quote it for you. It will bear re-reading, too, for it is like a picture, beautiful, yet terrible, that can be looked at again and again, and it is only by letting such pictures sink into our souls that we can really understand the war, even a little, and realize our own responsibility in regard to it.

Now read this, and let your "inward eye" mirror it as you go.

Mr. Gibbs is telling of the battle near Meteren, that small village, between Bailleul and Ypres, at which so many brave British soldiers—aye, and Germans, too—fought their last fight.

"It was a wet, wild evening," he says, "with a few pale gleams of the sun through the storm-clouds and the smoke of the guns, and for miles all this panorama of battle was boiling and seething with bursting shells and curling wreaths of smoke from the batteries in action."

"I was in the midst of wide, concentric

rings of field-guns and heavy guns firing rapidly. When the darkness came each battery was revealed by its flashes, and all the fields around were filled with red winkings and sharp stabs of flame. Single guns spoke with enormous overpowering voices, shaking the ground on which I stood with an earthquake tremor, and after the long travelling howl of each shell I could see it burst on the high ground near Bailleul. There was no real darkness of night, for every second the sky was crossed by rushes of light, and burning beacons in many places, and gun flashes etched out the lines of trees and cottages."

Then he tells of our flying men.

"Almost till the darkness came these birds of ours were on the wing, birds with brave hearts in them, flying over the frightful fields. Our airmen were flying low, searching through the mists for the movements of enemy troops in order to call to the guns to shell and scatter them."

"Through the dusk and the darkness there were many men moving in groups. Mud-colored men, who had been sleeping, marched towards the fires. One party as it went broke into song: 'Good-bye, Good-bye.'"

Think of the tremendous daring of these "birds with brave hearts," mere lads of from eighteen to twenty-four "flying low" amid storm and fire and smoke and sharp, fierce missiles! Think also of the weary mud-colored men, the infantry who are the backbone of the army, men often called to stem frightful tides of on-coming hosts, as were the Worcesters and Highland Light Infantry in this long battle of which Gibbs writes,

fighting four days and nights without stopping, at Neuve Eglise. And yet, when the need arises, such things are being done everywhere along our lines.

The Canadians were not called upon in numbers at Neuve Eglise and Bailleul and Meteren, but even as I write this someone comes in to say that they are now "into it." For long, weary days they have been watching grimly at Vimy Ridge and Lens and Hill 70. Before this reaches its readers they, too, will be acquitting themselves as they always do, with the doggedness and dash that have put them among the best soldiers in the world. . . . And they, too, will be coming out from the trenches, weary, "mud-colored" men. For their sakes the work here which we women can do, whatever it be, will be cheerfully carried through, whether it be in our gardens, or sewing and knitting in the house, or helping with Trinket Campaigns and Red Cross concerts, or any other devices that can be formed to raise money for the soldiers.

Don't you think so?

JUNIA.


#### Medical Colleges—Raisin Pie.

Dear Junia.—We have taken the "Advocate" for a great many years, and have always found it a very interesting paper. Will you kindly tell me if there are any medical colleges for girls in Ontario? If not, where could I study medicine? I will close with a recipe for a raisin pie which we find delicious.

One and one-half cups seeded raisins, 2 large cups milk, 1/2 cup brown sugar, yolks of 3 eggs and white of 1, pinch of salt. Bake in one crust. When done add meringue of other 2 whites of eggs,



Map of Battle Ground on the West Front.



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3 tablespoons granulated sugar, pinch of salt, a little vanilla. Return to oven and brown slightly.

Bruce Co. JENNIE LIND.  
There is no Medical School especially for women in Ontario, but girls are admitted to the men's colleges in Toronto, and are to be soon in London. Write to the registrar of Trinity Medical College, Toronto, and Western Medical College, London.

Re Y. W. C. A's.  
For E. B., Norfolk Co., Ont.—To ascertain whether there is a Young Women's Christian Association in any town, address your letter to the "Superintendent." If there is none the letter will be returned.

### Cooking Potatoes.

"When potatoes are old The water should be cold."  
That was a slogan dinned into our ears at cooking school, and then we were told that the converse was true, that when potatoes were new they should be put in very hot water. It was told us, also, that the old-fashioned way of boiling potatoes in "plenty of water", and draining it off afterwards, is the most wasteful way they can be cooked, because they contain certain salts that are very valuable to the body, and that are thrown away in the water. Under the skin, too, is a layer of fine starch, which is lost in drained-off water or by taking off too thick a paring.

It is evident, then, that the very best way to cook a potato, to conserve the food value, is to bake it. By having a small tin oven, which can now be bought to cover one burner of the oil-stove; this can be done without great expenditure of fuel. The next best way is to scallop the potatoes, first taking off a very thin paring, then slicing thin in milk and baking in the oven. Potato puree also conserves the food value, and is a nice supper dish. To make it, pare the potatoes thinly, then boil in a very little water until soft and mash fine in the water. Season with butter, pepper and salt, and serve very hot with bread and butter, biscuits or hot toast. When beef is being roasted, peeled potatoes may be placed about the roast and baked until brown.

When potatoes are to be boiled in the ordinary way see that the paring is as thin as possible, and cook in the very least quantity of water that will boil them. When fire is on for any length of time they may be steamed, but the water used thus must be kept boiling constantly. Still better it is, to cook them in their jackets, first cutting a small paring right around the tuber lengthwise. When half done throw in half a cup of cold water, as this tends to make the potatoes lighter. Some potatoes are so mealy that the outside is likely to boil off while the inside is hard. To prevent this, when the potatoes are half done add just enough water to cool the outside a little, leaving the inside hot. A little salt should always be added to water in which pared potatoes are boiled, but when they are scalloped the salt should not be added until they are done, as if put in too soon it may curdle the milk.

The gravy served with potatoes is, of course, half the dish, and should be brown, smooth and delicious. If there is not enough meat gravy on hand, one that is very appetizing may be made as follows: Put some fat or dripping in a pan and fry in it some slices of onion and any other vegetable you choose, such as tomato or celery. When fresh tomatoes are not on hand, some canned tomatoes may be added after the onion is cooked. Add a cupful of the water strained off potatoes or any other vegetable, add pepper and salt to taste, and thicken with browned flour. If a more meaty flavor is desired add a few teaspoonfuls of bovril or oxa.

The water drained off potatoes or any other vegetable, by the way, should be saved and used in making soup. This saves the salts and other mineral elements of the body instead of pouring them down the sink. All that is needed to make delicious soup of any of them is to add milk, or water and meat extract, then thicken slightly and serve with biscuits or croutons of buttered bread toasted in the oven. A few more vegetables may be chopped and cooked in the soup, when water is used, if liked.

### Camouflaged Left-overs.

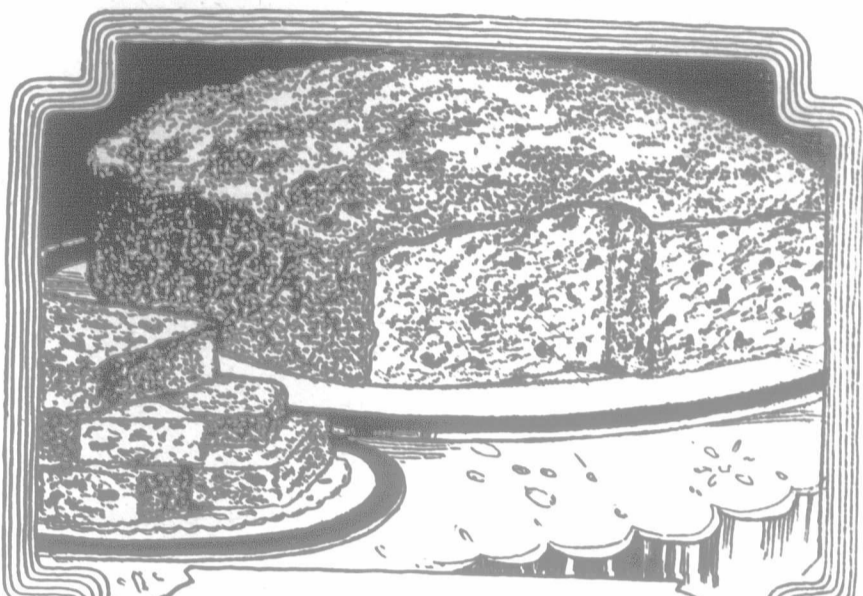
Tomato Jelly Salad.—Take left-overs of canned tomato or tomato soup, heat

THE FARMER'S SEEDS 1866

Guaranteed O.A.C. O.A.C. O.A.C. American Emme Kentu Marqu grov

GEORGE





## Conserve Food

Economy in baking is one of the biggest ways in which Canadian housewives can help to conserve food. Thousands of thoughtful women have found Egg-O Baking Powder a big help in economizing.

### EGG-O BAKING POWDER

is so sure and so perfect—it ensures real baking economy. It means better baking at a smaller cost. Use only a level teaspoon of Egg-O to each level, measuring-cupful of well-sifted flour. These proportions will give you the best baking results.

Try Egg-O yourself, next bake day. Surprise the family with delicious Egg-O War Cake, eggless, butterless and milkless. It is easy to make.

1 lb. raisins, 1 teaspoon allspice, 1 teaspoon cinnamon, 2 tablespoons lard, 3 cups brown sugar, 3 cups water. Boil together 5 minutes. When cold, mix with 4 level cups of flour, 4 level teaspoons of Egg-O Baking Powder, 1 level teaspoon of salt; sift and beat together. Bake slowly for 1 hour in a shallow pan. Better kept a day or two before eating.

Buy Egg-O in the pound tin or larger sizes—it is much cheaper. Your grocer's name and 10 cents will bring a 4 oz. (net) tin of Egg-O and the book of Reliable Recipes.



The Egg-O Baking Powder Co., Ltd., Hamilton, Ont.

it, and add plain powdered gelatine according to directions on the box. Stir well until thoroughly dissolved in the hot liquid, but do not let boil, then pour a little into the bottom of wet cups, and set in a cold place to stiffen. Turn out on lettuce or cress, put a spoonful of salad dressing on top, and serve with cold meat or fish.

Left-over peas, beans, potatoes, spinach, carrots, onions or celery.—Cook in a very little water and rub through a colander, water and all. To the pulp add rich, sweet milk. Reheat and serve very hot for supper, seasoning at the last minute. On top of each plateful put a spoonful of whipped cream or of little dice of bread rolled in melted butter and crisped in the oven. Paprika and white pepper are nicer than black pepper for seasoning milk soups. Also some prefer celery salt to common salt.

Vegetable Soufflé.—Make a thick cream sauce by adding 2 cups milk or more to a heaping tablespoonful of butter and as much of flour, cooked together. Stir all the time while cooking, and add the milk very gradually to make the sauce smooth. To this add any cooked vegetable, which has been chopped as fine as possible, also the beaten yolks of 2 eggs. Finally fold in carefully the whites of the eggs, beaten very stiff, and bake in a hot oven until brown. "Folding" is done by turning in the whites, then turning the mixture over and over very gently until the whole is blended.

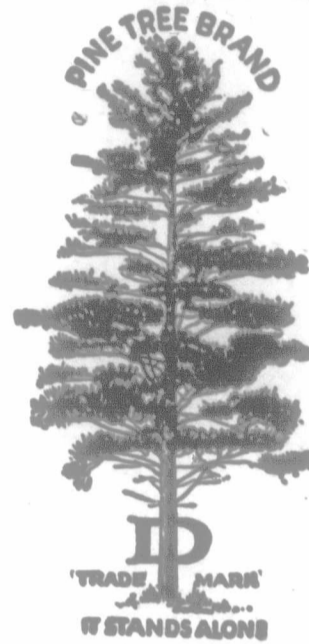
Meat Soufflé.—Finely chopped chicken, lean beef or tongue (preferably put through a food-chopper) or flaked fish may be used instead of the vegetables in the recipe given above. If there are two or three meat left-overs, e. g., beef and ham, they may be chopped together and used.

The Last of the Bone.—Take any bones to which shreds of meat are still clinging after the meat has been sliced off, cover with a little water, and simmer until the meat can be scraped off easily and the marrow taken out of the bone. Scrape the shreds into the water, season, and add pieces of potato, carrot and turnip, or any combination one likes. If needed add a little more hot water, then see that the whole is seasoned just enough, and thicken very slightly with a little flour blended in cold water. When at boiling point put in some small dumplings, cover closely, draw back on the stove, and keep simmering constantly until done, three-quarters of an hour. Serve on a very hot platter, with the dumplings around the outside and the stew in the centre. The dish is made nicer by dabbing the dumplings with butter and sprinkling with finely chopped parsley. Serve for dinner.

Dumplings.—Two small cups flour, ¼ lb. suet, finely chopped, 1 teaspoon baking-powder, pepper and salt, ½ teaspoon powdered herbs if on hand, ½ small onion chopped fine, 3 sprigs of parsley chopped fine. Sift flour, baking-powder, pepper and salt together, then add other ingredients. Make into a stiff dough with cold water, stirring it in carefully with a knife. Divide into 12 balls, roll each lightly in flour and drop into the stew. The secret in having them light is to keep the stew *simmering* (not boiling) constantly. Dumplings make a very nice pudding when cooked with any kind of stewed fruit, or even in slightly salted water, but when making them for that purpose the pepper and herbs must be left out. Also a little shortening may be used instead of the suet. If cooked in the salted water serve with syrup or butter and jam. Dumplings should always be eaten while very hot, and just as soon as cooked, if possible, as they are spoiled if they cook too long, or if they are kept waiting until cooled. If they must wait a time before being served, put them in a covered dish over water, that will keep them hot without cooking them.

Left-Over Porridge.—Reheat the porridge enough to soften it, then remove and add a cupful of milk for each cupful of porridge, also an egg to each cupful or two. Beat all together. Put a spoonful of butter in a frying pan, turn the mixture in, stir until creamy and serve very hot, with pepper and salt, or with a little syrup poured over, as preferred.

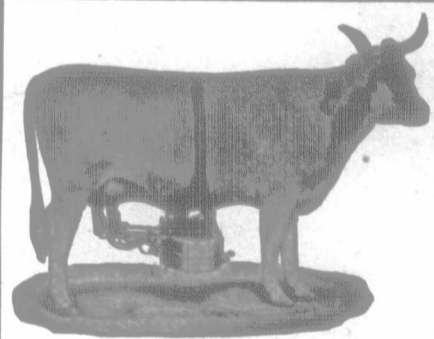
Fried Cornmeal (a very good meat substitute, so far as food values are concerned).—Make like porridge, but add a cup of chopped peanuts or any other kind of nuts, and 2 beaten eggs; the eggs may be beaten in after the cooking is completed. Beat until smooth, then turn into moulds. When cold, slice and fry. May serve hot with gravy for meat, or with syrup or jam for a supper dish.



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has these advantages over other machines. Transparent celluloid milking tubes instead of rubber ones which harbor germs and are difficult to clean. Pail and teat-cups are suspended from the back of the animal. The udder has no weight to carry. The pail cannot be knocked over and the teat-cups cannot fall on the stable floor and suck up straw or filth. The Omega milks fast and milks clean.

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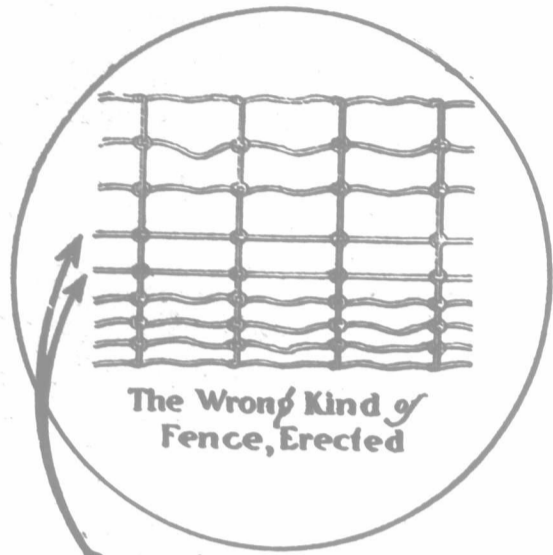
1866 **RUSH YOUR ORDER!** 1918

Owing to the shortage of seeds of all kinds, especially corn, we advise you to rush your order before you are too late. All orders received will be filled with the utmost care and attention from best selected stock. When buying from us you save all middlemen's profits. Send your order to-day—SURE.

**We pay railway freight to all parts of Ontario and Quebec on orders of \$25 or more.**

<p><b>CORN</b> Seed corn now on hand. It is excellent quality, fine and dry as flint.</p> <p><b>Early Prince Charles</b> (Would do as a substitute for Wisconsin No. 7.)</p> <p><b>Early Improved Leaming</b> Per bus.</p> <p><b>Guaranteed 90% Germination \$5.00</b> <b>Guaranteed 75% Germination 4.60</b></p> <p>O.A.C. 21 Barley..... 2.40 O.A.C. Barley (Registered)..... 2.85 O.A.C. 72 Oats..... 1.45 American Banner..... 1.45 Emmer..... 2.10 Amber Sugar Cane..... 11c. lb.</p> <p>Kentucky Blue Grass, 21c. per lb. Marquis Spring Wheat (Ontario grown)..... \$ 3.00</p> <p>Bags for Clover and Timothy, 45c. extra. Bags for Grain free.</p>	<p><b>CLOVER AND TIMOTHY</b> Government Standard</p> <p>No. 1 Red Clover..... \$23.00 No. 1 Alsike..... 16.50 No. 2 Alsike, No. 1 for purity..... 15.50 Alfalfa, Ontario Variegated No. 2, almost No. 1 for purity..... 25.00 Sweet Clover, White Blossom..... 16.00 No. 1 Timothy, extra No. 1 for purity..... 6.25 No. 2 Timothy, extra No. 1 for purity..... 5.75 No. 2 Timothy, No. 1 for purity..... 5.25</p> <p><b>POTATOES</b></p> <p>Irish Cobblers..... \$ 3.00 Early Eureka..... 3.00 Delaware..... 3.00 Green Mountain..... 3.00 Empire State..... 3.00 Davies Warrior..... 3.00</p>
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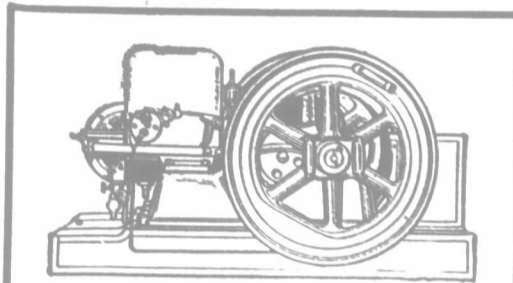
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is the one that never tires. The sturdy little Page is always on the job. It is always ready for work when you are.

It will do more work than a hired man, and it costs about as much to buy as one of his monthly cheques. Its running expenses only amount to about 2c. per hour for fuel.

A Page will hoist hay to the mow, turn the churn, run the cream separator, the mechanical milker, and pump water for the stock, and as many other odd jobs around the farm as you can dig up.

There are two types of Page Engines—one burning gasoline, the other kerosene (or gas-oil); and 5 sizes, ranging from 1 1/2 h.p. to 7 h.p.

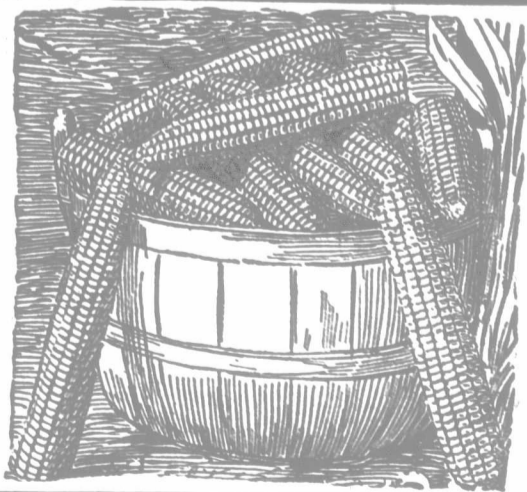
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**BRUCE'S HIGH GRADE SEED CORN**

Our samples of Seed Corn will be good and of high germination; send in your order now and we will ship about the 30th of April—We doubt if we can get any Flints or extra early Dents. We offer, subject to being unsold, prices here, cash with order:

CORN	Bushel	CLOVER SEEDS, Bushel 60 lbs	
Improved Leaming, Bruce's	\$ 5 00	Alsike, Regal, No. 1 G. S.	\$17 00
Reid's Dent	5 00	do Choice No. 2 G. S.	15 75
Eureka White	5 01	do Prime, No. 3 G. S.	14 50
Leaming	4 35	Alsike & Timothy No. 3 G. S.	9 50
Selected Giant Red Cob	4 25	Lucerne Ex Choice, No. 2 G. S.	15 00
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GRASS SEEDS Bushel, 48 lbs.		Red, Regal, No. 1 G. S.	24 00
Timothy Regal, No. 1 G. S.	\$ 6 50	do Choice No. 2 G. S.	23 50
do Ex. Choice No. 2 G. S.	6 00	do Prime, No. 3 G. S.	21 00
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do and Alsike, No. 3 G. S.	5 50		

**JOHN A. BRUCE & CO., Limited**  
HAMILTON SEED MERCHANTS ESTABLISHED 1850 ONTARIO

**Banana Marmalade.**

Bananas are rich in food properties, and are especially good when cooked. When the jam jars are empty this recipe, from "American Cookery," may be appreciated.

Take 1 cup water, 2 lemons, 6 large bananas, half as much sugar as cooked fruit pulp, or less sugar if a thinner marmalade is preferred. Peel the bananas and drop at once, sliced, into the water, which should be boiling. Add the juice

of the lemons and cook until very thick, stirring to prevent burning. Measure the pulp now and add the sugar, then cook down until clear and amber in color. The recipe should yield 1 1/2 pints marmalade.

**The Scrap Bag.**  
Peanuts as Food.

Peanuts are a valuable food. They may be used in salads, in cake and mixed with fruit in gelatine jelly.

**Spots on Floor.**

If you want to stain a floor which is spotted be sure to remove all spots before applying the stain. They will usually succumb to turpentine and fine sandpaper. Scrub well, then apply stain and wax as usual.

**Pressing Waists.**

A good way to press new waists or those that have become muddled is to sprinkle the ironing sheet well. The

steam which arises from it will be sufficient to take out the creases.

**Use Plenty of Water.**

The majority of people do not drink nearly enough water, which acts as a solvent to carry off the surplus of uric acid, chlorides, etc., from the system, and also aids digestion and helps to prevent constipation. Rheumatism and pyorrhea in the teeth are said to be due to too much uric acid in the system.

**House Dresses.**

The neatest and most serviceable house working dresses for the summer are made of percale or gingham, made to button together at the waist so there can be no slipping. As the waist always soils and wears out sooner than the skirt, it is advisable to have two waists for each skirt, wearing them alternately so that in case they fade they will all look alike. An apron of thin oilcloth should be used to prevent soiling.

**Banish Carpets.**

"The weekly sweeping, and still more the half-yearly house-cleaning, illustrate, as when a carpet is beaten, the infinite number of particles which, unseen, are constantly accumulating in houses. It is further only necessary to leave a room closed in which a carpet is present to detect strong odors and the effects of moisture in the decomposition of the organic materials present in it, through the action of microbes which cause decomposition. We thus realize how one of the first steps we must take to keep a house clean is to allow nothing to be on the floor which will retain particles of organic matter, and the microbes which settle upon it, which cannot be readily and frequently removed and cleaned in the fresh air. Thus polished, hardwood floors with rugs fulfil best both sanitary and aesthetic household conditions; while, in many instances, nothing serves the purpose so well as linoleum, which can be cleaned with a moist cloth, or, still better, frequently rubbed with a weighted felt block, which has been treated with paraffine dissolved in turpentine, or with some other wax preparation."—Conservation of Life.

**Wheat Substitutes.**

There is no difficulty in finding wheat substitutes,—unless the will is lacking. And how could that possibly be when all Western Europe—our soldiers and the people of our Allies—are needing wheat bread? Our sacrifice in doing without it is so little; theirs, in the great fight and in the devastated country, is so immeasurably great!

Oatmeal makes splendid cake to be eaten hot with butter, as well as scones and porridge; cornmeal is excellent for porridge, muffins, pancakes and Johnny cake; buckwheat pancakes and syrup are a dish fit for a king; barley meal makes a palatable and nutritious brown bread, little different from the bread made of graham flour or entire wheat; rye bread also is liked by some people; boiled rice, boiled pearl barley and tapioca make delicious and nutritious desserts; potatoes and vegetables of all kinds may be made important factors in conservation. "Where there's a will there's a way."

**House-cleaning Made Easier.**

WHEN every woman owns an electric vacuum cleaner, and has electricity to run it, house-cleaning will be almost a nightmare of the past; for use of such a cleaner every two weeks will keep the dust out of rugs, upholstery, and even off the walls and curtains, so effectively that the house is kept always clean, and house-cleaning becomes resolved into a little extra washing-up of woodwork, and clearing-up of closets and the attic.

It is no vague dream that, some day, practically every woman in the more thickly-settled portions of Canada may be able to avail herself of such conveniences. Electricity was coming—full force—before the war, and the war can't last forever. Things have been checked, but they will go on again.

In the meantime, in many homes, the semi-annual house-cleaning must go on as usual, although the now prevalent use of rugs over painted floors, dustless mops, and sash-length curtains, has driven away most of the horrors of the

old-time tacked draperies.

Every year, devices for light own fault if w them. Here a known to you-

Help

HERE is a

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cents' worth s

Boil all togeth

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also splendid.

For white pai

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Asbestoslate Shingles offer so many advantages over all other kinds of roofing materials for farm buildings, that the small additional first cost is not an expense, but a real investment.

Wood shingles, stained, may look well for a time, and cost less in the first place, but they spread fire—they warp, curl, twist and split under the weather—they need frequent staining and repairs.

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Ready Roofings are not seriously considered for really good buildings.

Asbestoslate is the ideal roofing for all kinds of farm buildings. It is absolutely fireproof and weatherproof—coolest in Summer, warmest in Winter. It does not warp, curl, twist or split. It never needs paint or repairs. It is made of Portland Cement and Asbestos Fibre. Always looks well, and will last forever.

Send to-day for free, illustrated booklet, and advise kind of building you are interested in.

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# DEATH TO POTATO BUGS!

The present world shortage makes it of vital importance that not one particle of food shall be wasted.

Potatoes are one of the necessities that are being wasted in tremendous quantities every year by the ravages of the Potato Bug. There is no possible excuse for this. You can easily keep your potatoes free from bugs by the use of

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ACCO CHEMICAL CO.  
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old-time tacked-down carpets and trailing draperies.

Every year, too, there seem to be new devices for lightening work, and it is our own fault if we don't avail ourselves of them. Here are a few that may not be known to you:

### Helps in Cleaning.

HERE is a formula for cleaning large rugs which has been found very valuable: Take 3 gallons water, 2 bars white soap, 5 cents' worth borax, 5 cents' worth saltpetre, ½ pint ammonia. Boil all together until dissolved except the ammonia, which should be added after the mixture is taken from the stove. The jelly resulting may be used hot or cold. Apply it to the rug with a scrubbing brush, dipping the brush at once into hot water and scrubbing well until a good lather is produced; then take the edge of a shingle or some such bit of wood, and scrape off the soap. Do a little at a time, wiping each spot hard, first with a damp cloth, then with a dry one. Dry the rug in an airy place, but not in sunshine, as that will fade the carpet.

This jelly is also good for cleaning mattresses and pillows.

If the rugs are not much soiled they may be brightened by rubbing over, after beating, with warm water to which a little ammonia has been added.

Splendid cleaners for wall paper may now be bought at any good hardware store, but if it cannot be got easily a dough made of flour and water, with a little gasoline added, will do the work very well.

When cleaning woodwork avoid soap, which removes the gloss. Instead use warm water to which a little coal-oil has been added. Windows may be very easily cleaned with Bon Ami, or with warm water and coal-oil. Use plenty of dry cloths to polish. Denatured alcohol is also splendid.

For white paint a paste of whiting and

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### CANADIAN NORTHERN RAILWAY

water is a good cleanser. Let stand until dry, then brush off.

For sweeping down the walls of rooms nothing is better than a cover of old velvet tied over the broom. It removes the dust without scratching the paper. Gilt picture frames may be brightened by washing them with water in which onions have been boiled, with a little sulphur added to make a yellow color, while brass curtain rings will look clean again if boiled in water to which vinegar has been added. Nickel on stoves will respond to a mixture of whiting and coal-oil, while the zinc underneath, or on the top of the kitchen working table, may be cleaned by scouring with wood ashes and coal-oil, left on for an hour before scrubbing.

To clean window shades rub with magnesia, roll up and let stand a day or two, then brush off. If very much soiled and faded, cover with two coats of thin paint.

## Serial Story.

### An Alabaster Box.

BY MARY E. WILKINS FREEMAN AND FLORENCE MORSE KINGSLEY.  
By arrangement with McClelland, Goodchild & Stewart, Publishers, Toronto, Ont.  
Chapter XXV.

Jim had no definite plan as he tramped down the road in the falling darkness. He felt uncertain and miserable as he speculated with regard to Lydia. She could not guess at half the unkind things people must be saying; but she would ask for the bread of sympathy and they would give her a stone. He wished he might carry her away, shielding her and comforting her against the storm. He knew he would willingly give his life to make her happier. Of course she did not care for him. How could she? Who

was he—Jim Dodge—to aspire to a girl like Lydia?

The wind had risen again and was driving dark masses of cloud across the sky; in the west a sullen red flared up from behind the hills, touching the lower edges of the vaporous mountains with purple. In a small, clear space above the red hung the silver sickle of the new moon, and near it shone a single star. Lydia was like that star, he told himself—as wonderful, as remote.

There were lights in the windows of Bolton House. Jim stopped and gazed at the yellow squares, something big and powerful rising within him. Then, yielding to a sudden impulse, he approached and looked in. In a great armchair before the blazing hearth sat or rather crouched, Andrew Bolton. He was wearing a smoking-jacket of crimson velvet and a pipe hung from his nerveless fingers. Only the man's eyes appeared alive; they were fixed upon Lydia at the piano. She was playing some light tuneful melody, with a superabundance of trills and runs. Jim did not know Lydia played; and the knowledge of this trivial accomplishment seemed to put her still further beyond his reach. He did not know, either, that she had acquired her somewhat indifferent skill after long years of dull practice, and for the single purpose of diverting the man, who sat watching her with bright, furtive eyes. Presently she arose from the piano and crossed the room to his side. She bent over him and kissed him on his bald forehead, her white hands clinging to his shoulders. Jim saw man shake off those hands with a rough gesture; saw the grieved look on her face; saw the man follow her slight figure with his eyes, as he stooped under pretext of mending the fire. But he could not hear the words which passed between them.

"You pretend to love me," Bolton was



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### Fairbanks-Morse Pneumatic Water Systems

give you running water anywhere on the farm—in the house, the barn, the milk house or in the field—and help to increase production. They are made in several sizes—one to suit your needs. Whether you want the hand pump outfit for residence use or one of the larger power plants, a Fairbanks Pneumatic Water System guarantees the best. Write today. Tell us your needs and we will give you full details of what running water will do on your farm.

**The Canadian Fairbanks-Morse Co., Limited**  
 St. John Quebec Montreal Ottawa Toronto  
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saying. "Why don't you do what I want you to?"

"If you'd like to go away from Brookville, father, I will go with you. You need me!"

"That's where you're dead wrong, my girl: I don't need you. What I do need is freedom! You stifle me with your fussy attentions. Give me some money; I'll go away and not bother you again."

Whereat Lydia had cried out—a little hurt cry, which reached the ears of the watcher outside.

"Don't leave me, father! I have no one but you in all the world—no one."

"And you've never even told me how much money you have," the man went on in a whining voice. "There's daughterly affection for you! By rights it all ought to be mine. I've suffered enough, God knows, to deserve a little comfort now."

"All that I have is yours, father. I want nothing for myself."

"Then hand it over—the control of it, I mean. I'll make you a handsome allowance; and I'll give you this place, too. I don't want to rot here. . . Marry that good-looking parson and settle down, if you like. I don't want to settle down: been settled in one cursed place long enough, by gad! I should think you could see that."

"But you wanted to come home to Brookville, father. Don't you remember you said—"

"That was when I was back there in that hell-hole, and didn't know what I wanted. How could I? I only wanted to get out and way! If you weren't so damned selfish, you'd let me go. I hate a selfish woman!"

Then it was that Jim Dodge, pressing closer to the long window, heard her say quite distinctly:

"Very well, father; we will go. Only I must go with you. . . You are not strong enough to go alone. We will go anywhere you like."

Andrew Bolton got nimbly out of his chair and stood glowering at her across its back. Then he burst into a prolonged fit of laughter mixed with coughing.

"Oh, so you'll go with father, will you?" he spluttered. "You insist—eh?"

And, still coughing and laughing mirthlessly, he went out of the room.

Left to herself, the girl sat down quietly enough before the fire. Her serene face told no story of inward sorrow to the watchful eyes of the man who loved her. Over long she had concealed her feelings, even from herself. She seemed lost in reverie, at once sad and profound. Had she foreseen this dire disappointment of all her hopes, he wondered.

He stole away at last, half ashamed of spying upon her lonely vigil, yet withal curiously heartened. Wesley Elliot was right: Lydia Orr needed a friend. He resolved that he would be that friend.

In the room overhead the light had leapt to full brilliancy. An uncertain hand pulled the shade down crookedly. As the young man turned for a last look at the house he perceived a shadow hurriedly passing and re-passing the lighted window. Then all at once the shadow, curiously huddled, stooped and was gone. There was something sinister in the sudden disappearance of that active shadow. Jim Dodge watched the vacant window for a long minute; then with a muttered exclamation walked on toward the village.

To be continued.

First Dairy Farmer—"What sort of a season has Henry had?"

Second Dairy Farmer—"Busy as all get out—hasn't even had time to visit a county fair or a farmer's school. He's got a job writin' testimonial letters for a new cattle feed."

### WANT AND FOR SALE.

**COMFORTABLE 2-STORY BRICK HOUSE** to rent, vacant May 1st, 8 rooms and bath (hot and cold water), electricity and gas; good residential street, centrally located, most convenient distance for Public and High Schools. \$30.00 per month. Apply H. Box 581, London, Ontario.

**FOR SALE—A QUARTER SECTION (160 acres)** of unimproved prairie land in Saskatchewan, situated quite close to the main line of C.P.R., between Qu'Appelle Station and McLean, being part Sec. S.E.—18-17-15. This property is free of incumbrance. What am I offered? Address: G. W. Marshall, 54 St. Clair Ave. W., Toronto.

**MORE HOGS WANTED—COME TO WINNIPEG** and raise hogs from refuse of restaurants, hotels, hospitals, clubs, and make a fortune—Packing houses gladly take all you can raise at splendid prices—Have 70 acres suburbs of Winnipeg, population 212,000, splendid road to city, close to car line. Land all round cut up into residence lots—this land will be needed, you can make a fortune in land alone. In the meantime, go into hog-raising. About 45 acres nice open land, balance finely treed—Price \$10,500—\$5,000 can remain at 5 year mortgage. Address, owner, G. J. 305 Polson Ave., Winnipeg, Man. Agents invited.

**WANTED—GOOD COMPETENT GENERAL** for private home. Wages \$22.00 per month at start. Dr. J. J. Williams, Woodstock, Ont.

**WANTED—MAN AND WIFE, MAN AS foreman** of pure-bred stock farm, Shorthorn cattle. Competent farmer and good manager. Wife to keep house and do work of farmer's wife. Both able and willing to work. Apply at once. Frank Cockshutt, 42 Colborne Street, Brantford, Ontario.

### FOR SALE

Two hackney mares, one four years old, and registered; the other a grade, good driver and saddle horse. For particulars, address: W. H. KER, ST. GEORGE, ONT.

## CREAM

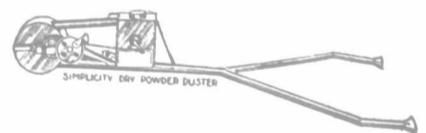
We are in the market for Churning Cream. Twenty-five years' experience should count. You'll find it in our service.

### ASK FOR PRICES

The figures of yesterday may be too low for to-morrow. Ship to—

### The Toronto Creamery

Church St., (It Pays) Toronto



### The little Gun that Kills Potato Bugs

With Poison Dust it will do 2 rows at a time as fast as a man can walk. Write for Agency contract. Sells on sight. Manfg. by

**Illsley & Harvey Co., Ltd.**  
 Port Williams, Nova Scotia

## Cream Wanted

For good service and better prices, ship your cream to us. We guarantee the test, and pay 52 cents a pound butter-fat. We remit daily and pay express charges.

### The Mutual Dairy & Creamery Co.

743-745 King St. W. TORONTO

## Heney Crown Brand Harness

Farmers and teamsters all over the Dominion of Canada, know the name Heney Crown Brand Harness. This brand has always stood for Reliability, Endurance and Quality. The makers of Heney Harness back their goods with a guarantee that means satisfaction and continued patronage from all customers. We specialize in

**Farm Harness, Team Harness, Extra Heavy Work Harness, Buggy Harness, Delivery Harness**

Ask your nearest dealer to show you a set of Heney Harness and note the perfect workmanship and quality of every piece. Remember—the Heney Guarantee means a perfect set of harness and perfect satisfaction to the buyer.

Sold by dealers all over the Dominion for fifty years.

**HENEY CARRIAGE AND HARNESS CO., LTD.**

Under Management of  
**CARRIAGE FACTORIES, LIMITED - TORONTO**  
 Western Office, 156 Princess St., Winnipeg

### Here at Present—TEN IMPORTED BULLS

Sired by Beau Gaston, grandson of old Beau Brummel. These are all herd headers and good enough to head any herd. Write or phone. L. O. CLIFFORD, OSHAWA, ONTARIO

Winter Fair Buildings, Guelph, Ont.  
 Tuesday, May 21st, 1918

ANNOUNCING  
 THE GREAT

Sixty Lots! Eighty Head!!

Twenty cows with calves at foot

## Watt-Gardhouse Annual Sale of Shorthorns



Upon the 1918 crop from Canada and the United States depends the fate of the democratic peoples of the world.

If that crop is sufficient the Allies can be fed.

If that crop is not sufficient the Allies may have to accept a German peace.

### Ontario's Wheat Crop Does Not Support Ontario's People

It may astonish you to learn that, in 1917, Ontario did not grow enough wheat for its own needs. Consequently, every Ontario farmer whose land is suitable has been urged to sow five acres more spring wheat this year, so that Ontario's demand for wheat shall not be met at the expense of that portion of the Western crop that should more rightfully be shipped overseas.

For this same reason every householder who has a garden or a piece of vacant land is being urged to grow vegetables, because the more vegetables that are grown and eaten in Ontario, the less wheat and meat there will be consumed; and, that being so, the Ontario wheat crop should then be sufficient to feed our own people, and leave more Western Wheat and other foods available for export.

### Why Substitutes for Wheat Cannot be Sent

Some foods, such as potatoes, occupy too much space in proportion to their

nourishment. But people often ask: Why not send corn instead of wheat? The chief reason, at present, is because for two months after the first of April corn will not keep during shipment abroad, for that is the germinating season. Wheat, on the contrary, is a durable grain.

And, though some do not realize it, the Allies have been using much corn in their bread—as high as 30 per cent.—a far larger admixture than we have adopted.

### In Appreciation of the Farmer's Part

We are not unmindful of the magnificent results of your work last year. We recognize the difficulties you have to contend with, but we know that your heart is in the Cause.

This year, we are glad to say, the labour shortage is not as great as it was last year, and if you need help, communicate with your County Agricultural Representative, or the Public Employment Bureau, in Toronto, Hamilton, London or Ottawa, and help will be forthcoming.

**Lack of Food—threatens the Battle Line**

**POULTRY AND EGGS.**

**ANCONAS, SINGLE-COMB, STRONG,** vigorous, yearling hens, genuine egg machines, mated to Sheppard strain cockerels. Eggs, \$1.25 per fifteen, \$6.00 per hundred. W. E. Williams, Clondeboye, Ont.

**AFRICAN GESE, INDIAN RUNNER AND** Muscovy ducks, Barred Rocks, Rhode Island Reds, Black Spanish, Guinea, Campines, Hamburgs, Wyandottes. Eggs only. Mating list free. Fox Terrier puppies. John Annesser, Tilbury, Ont.

**ANNESSER'S INDIAN RUNNERS, LAY MORE** eggs, eat less, and are more profitable than chickens. John Annesser, Tilbury, Ont.

**BRED-TO-LAY WHITE WYANDOTTES.** Eggs during hatching season, \$2.40 per 15. Hugh A. Carmichael, R. R. No. 1, Erin, Ontario.

**BEULAH FARM WHITE WYANDOTTES—** The only strain in Canada that can beat the famous English Leghorns; the strain that has helped keep White Wyandottes at the top of the American egg laying contests. Eggs, two and three dollars per setting. N. Y. McLeod, Box A, Stoney Creek, Ont.

**BUFF ORPINGTON, ANDALUSIAN EGGS,** \$2.50 per 15; exhibition stock; excellent layers. E. E. McCombs, Fenwick, Ont.

**BABY CHICKS, WHITE LEGHORNS FROM** trapezoidal females, real winter layers, money makers, investigation worth your while. Bradley Linscott, Brantford.

**BRED-TO-LAY SINGLE COMB WHITE LEG-** HORN eggs for hatching, fifteen for \$1.50, forty-five, \$3.75; one hundred \$7.00; carefully packed, safe delivery guaranteed, broken eggs replaced. Addison H. Baird, R.R. 1, New Hamburg, Ont.

**BARRED AND WHITE ROCKS. GOOD IN** type, color, size and laying qualities. Three small select exhibition matings. Eggs, \$3. M. A. Gee, Selkirk, Ontario.

**BARRED ROCK EGGS. WE HAVE BRED** for large size and egg production and we think we have succeeded. John Annesser, Tilbury, Ont.

**BRED-TO-LAY BARRED ROCK EGGS, O.A.C.** strain, \$1.25 per fifteen. Fowls are healthy and have free range. Russell Ballantyne, St. Paul's Stn., Ontario.

**BLACK MINORCA EGGS—BOTH COMBS,** two dollars for fifteen; good layers. Write: Fred. Reekie, Camperdown, Ont.

**CHANNY FARM BLACK LEGHORNS.** Winners at all principal shows, including Silver Cup, London Winter Show. Eggs, Coop No. 1, \$3.00; No. 2, \$1.50, per fifteen. Ed. de Gez, Kerwood, Ont.

**CANADIAN RINGLET BARRED ROCKS;** trapezoidal; heavy winter laying strain. Eggs, \$2.50 setting—guaranteed. F. Coldham, Box 12, Kingston, Ont.

**EGGS AND CHICKS FROM THE BEST** laying strains of white and brown Leghorns. Chicks, twelve dollars per hundred; eggs, five dollars per hundred. M. Shantz, Ayr, Ont.

**EGGS, \$2.00 FOR 15. S.-C. BLACK MINORCA,** S.-C. Ancona, Mammoth Dark Cornish. Hugh McKay, 33 Curry Ave., Windsor P. O., Ontario

**EGGS FOR HATCHING FROM SPECIAL** Barred Rock pen, trapezoidal by myself. Wonderful producers. \$1.50 per setting. B. W. Linscott, Brantford.

**FAWN INDIAN RUNNER DUCK EGGS,** great layers, 10c. each. Hastings Bros., Guelph, R. R. No. 7.

**FOR SALE—MUSCOVY DUCKS, \$5 A PAIR,** Eggs for hatching \$2 a setting. J. A. Tancock, 96 King St., London.

**HATCHING EGGS—BABY CHICKS—UTIL-** ITY laying strains. Eggs, \$1.50 per setting. Barred Rocks, Rhode Island Reds, White Leghorns, White Wyandottes, Golden Polish. Write for price list. Satisfaction guaranteed. Tay Poultry Farm, Perth, Ont.

**LAYALOT LEGHORNS, S.-C. W., TRAP-** nested. Last year's best bullets mated to a pure Barron cock from a 256-282 pen. Eggs \$2.50 the setting. J. A. Butler, M. D., Newcastle, Ont.

**NOTICE—BEAUTIFUL LARGE BRED-TO-** lay White Rocks, White Wyandottes and S. C. White Leghorns. Eggs, \$1.25 per fifteen. Jack Buttery, Strathroy, Ont.

**O. A. C. BARRED ROCK EGGS \$1.25 PER** doz. post paid. R. L. Easton, Princeton, Ont.

**PLYMOUTH ROCK EGGS—O. A. C. LAYING** strain; \$1.50 per setting. Mrs. Berry, 52 Queen's St., Guelph, Ont.

**"REGAL" WHITE WYANDOTTE EGGS FOR** hatching, from Guelph, Ottawa and Newmarket winners. \$1 to \$5 setting. J. McCaffrey, Box 600A, Newmarket, Ont.

**SILVER GREY DORKINGS; CHOICE STOCK** at \$2 a setting. W. Shore, Ilderton, Ont.

**S.-C. ANCONA EGGS FOR HATCHING—** one-fifty a setting. E. W. Bennett, Niagara Falls, Ont.

**TWENTY-FIVE YEARS A BREEDER OF** Barred Rocks that are barred and bred right, and from first-class laying hens. Eggs \$2 for 15, \$3.50 for 30, \$5 for 50, \$9 per 100. Order direct from this advt. Satisfaction guaranteed. Walter Bennett, R.R. 1, Cottam, Ont.

**WINNERS—SILVER CUPS, GOLD MEDAL—** Eggs, Single-comb White Leghorns, \$1.50 and \$3 setting; Barred Rocks, \$1.50. Nine chicks guaranteed. H. Berscht, Caledonia, Ont.

**WHITE WYANDOTTES; IMPORTED,** bred-to-lay. Cocks dams' records over two hundred eggs per year. Barred Rocks, bred-to-lay, excellent layers. Prices—eggs, chicks on application. A. W. Hamilton, Parkhill, Ontario.

**WHITE AND SILVER LACED WYANDOTTES** prize winners, now laying, for sale; yearlings and pullets. Also Black Siberian Hares and Rufus Red Belgians; pedigreed stock. Stamp for particulars. Dr. Evans, Wyoming, Ont.

**Choice Eggs** for hatching from free range flocks—S.-C. White Leghorns (Barron's 282-egg strain), Bred-to-lay S.-C. Brown Leghorns (O. A. C. and Guild strains), Barred Rocks—\$2 per 15, \$10 per 100. Fawn I. R. Duck eggs, \$3 per 10; Mammoth Bronze Turkey eggs, \$5 per 9 (show stock). Also choice Yorkshire Hogs, all ages. T. A. KING, Milton, Ont.

**Rose-Comb Rhode Island Reds** and Barred Rock eggs for hatching, \$1.50 per 15. Rose-Comb Rhode Island Red cockerels \$3 each. Alex. McKinney, R.R. No. 1, Erin, Ontario

**The Dollar Chain**

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

Contributions from April 12 to April 26: M. J. K., \$10.00; "Bill", Shedden, Ont., 50 cents; A Friend, Glanworth, Ont., \$5.00; A. Friend, London, Ont., \$10.00; "Toronto", \$2.00; M. C. F., \$1.00; J. E. McIntyre, R. R. 5, St. Thomas, Ont., \$5.00; "Scotia", London, Ont., \$10.00.

Previously acknowledged.....\$5,437.30

Total to April 26.....\$5,480.80

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

**Current Events**

On April 23 a number of British destroyers and Monitors, led by the Cruiser Vindictive made a raid against French destroyers also assisted, but the raid was undertaken under command of Vice-Admiral Keyes. Part of the plan was to take out five obsolete cruisers filled with cement, and sink them to block the way of the submarines coming out from these bases. This was carried out at Ostend. Meanwhile, under cover of smoke, marines were landed on the Mole that protects Zeebrugge harbor, and fighting continued for an hour, after which the sailors re-embarked on the Vindictive. About 20 yards of inner works of The Mole were blown up by the explosion of a sunken vessel.

On April 23 Germany sent an ultimatum to Holland demanding the right of transit through Holland of civilian and war material, both by canal and railway, and next day the German Minister to the Netherlands left The Hague for Berlin, while the Dutch Minister at Berlin left for The Hague. At time of going to press Holland is emphatically resisting the German demands, but no further step has been taken in the matter.

At time of going to press the battles of the Lys and Amiens are again in full progress. In the Northern, or Lys area, the Germans, on April 25th, after 6 hours struggle, succeeded in capturing Kemmel Hill from the French, who held to the last man after the hill was completely surrounded. The battle has now developed from Dranoutre, which is in possession of the enemy, to the Ypres-Comines Canal, the immediate objective of the Germans being to gain the high lands, Mont Noir, Mont Rouge and Mont Scherpenberg. On April 26th a fierce struggle took place on both sides of the Canal, near Voormezele, which, at the time of going to press, is in the hands of the British. A little farther south the village of Loere, which has changed hands twice during the last few days remains in the hands of the French. A further evacuation of the Ypres salient on the part of the Allies has taken place, and before this reaches its readers Gen. Foch may have ordered withdrawal from Ypres, which is a mass of ruins and of no military value. Midway between the two great battle areas the Canadians have been making a series of sharp raids near Lens, using artillery and thousands of gas shells, while at the southern end the Battle of Amiens rages anew. Here the Germans, on April 24th, resumed a great offensive against French, British and American troops all the way from the Somme to the Avre, regaining Hangard. They also took the important position marked by the village of Vellers-Bretonneux, on the direct road to Amiens, but on April 26th it was wrested from them again by British and Australian troops. In this engagement the enemy, for the first time, used tanks. In Russia things are again moving, but as uncertainly as ever. In Petrograd a counter-revolution is reported to have broken out, and it is rumored that Grand Duke Alexis, the young son of the deposed Czar, has been proclaimed Emperor, with Grand Duke Michael, brother of the Czar, as real leader. A few days previously British and French troops were landed on the Kola Peninsula, on the shore of the Arctic Ocean, to assist the Bolsheviks in guarding the supplies landed at Mourmansk and Archangel from the Finnish White Guard. In the East the Turks have gained an important victory over the Transcaucasians by capturing the city of Kars.

**EDWARDSBURG**

**GLUTEN FEED**

**23%**

**PROTEIN**

**GUARANTEED**

*is the ideal feed for milk production.*

**THE mere fact that it costs a little more than Bran, does not mean that it is more expensive. On the contrary, it is cheaper than Bran—it is about the cheapest feed you can give the cows—because it increases the milk yield so much.**

We have a little book that tells about Edwardsburg Gluten Feed—what it does and how it makes money for you—write for a copy, free. O 68

—FATTEN HOGS ON EDWARDSBURG OIL CAKE.

**THE CANADA STARCH CO., LIMITED** **TORONTO**

WORKS AT CARDINAL, BRANTFORD, FORT WILLIAM



THE  
**Frost and Wood Mower**

*It takes off the heaviest, thickest crop you want to tackle. It's built so it's not laid up for repairs just the day the hay is ready.*

Many a hay crop has been lost because just at the cutting stage the mower failed to do its work. Farmers who use the Frost & Wood Mower never have any mower-troubles—they'll gladly tell you so. This mower is built with actual knowledge of Canadian field conditions extending over 80 years. Every sound feature of Mower construction we have learnt is embodied in our latest mowers.

An important feature is the continuous cut of the knives. As long as the Mower is moving and in gear, the knives are cutting. You can raise the cutter bar (easily, without wrenching or straining) to clear an obstruction, and drop it again, cutting full speed, saving time and getting more crop.

**FROST & WOOD**  
**LIGHT DRAFT**

It is our fixed policy to work for light draft as well as rugged strength. We use highest grade materials of proven strength and perfect fitting, dust proof roller bearings at friction points, saving all possible horse power for the work at the knife edges. The Frost & Wood is a Mower you will always be glad you bought. Built in 6 ft., 5 ft., 4 ft. 6 in. cut for 2 horses, and 4 ft. and 3 ft. 6 in. cut for 1 horse.

**We have a special, nicely illustrated folder describing all our haymaking machinery which we strongly recommend you to ask our nearest agent for, or write our nearest Branch—to-day.**

The Frost & Wood Sold in **Cockshutt Plow Co.**  
**Co., Limited** Western Ontario and **Limited**  
Montreal, Smiths Falls, St. John Western Canada by **Brantford, Ont.**

**Barron's English Leghorns**

Large, vigorous, pedigreed birds, great winter layers, best blood lines in America. Hatching eggs, \$2.00 per 15. Bouncing, lusty chicks, for May, 20c. each. June, 15c. Modern incubation methods. Order from this ad. or send for mating list.

**GILLET FARM** **AYLMER, ONTARIO**

**DOUGLAS**

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"Have at night so bad was in them, applician L a few son, It

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**IRON AGE**

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Means \$5 to \$50

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**THE BATER**

41 Symington

**DITCHER**

**DIGS**

**GRADE**

**EASILY**

**QUICKLY**

**CHEAPLY**

PAID INSTANTLY

IN ONE DAY

**DOES THE**

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THE PRESTON

97 DOVER

**SAW**

**PRICE OF SAW**

20' ..... \$4.7

22' ..... 6.1

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You can orde

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**A. F.**

267 KING STREET

**Seed**

O. A. C. No. 21 B

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Also highest gra

Ask for our pr

Onions, Potatoes,

seeds of all kinds.

If in need of feed

Linsseed Oil Cake

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Corn Meal, Re-Cle

Write or phone

**CRAMPS**

Dovercourt Road

**ABERDEEN**

We are offering 2 cow

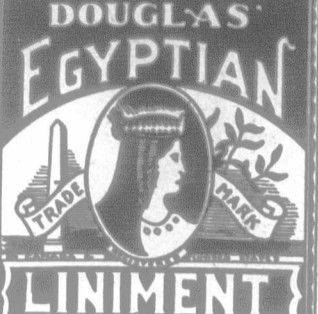
calves by side; also 5

months. These must

help scarce. J. R. S

Phone 5043, R.R. No

**DOUGLAS EGYPTIAN LINIMENT**



"Have had cows calve at night, with their bags so badly caked that it was impossible to milk them, but one or two applications of Egyptian Liniment cured in a few hours. W. Robinson, Ituna, Sask."

DOUGLAS & COMPANY MFRS. MONTREAL ONTARIO

**IRON AGE**

Farm, Garden and Orchard Tools

Answer the farmers' big questions. How can I grow crops with less expense? How can I save in planting potatoes? How make high priced seed go farthest? The **IRON AGE Potato Planter** solves the labor problem and makes the best use of high priced seed. Means \$6 to \$50 extra profit per acre. Every seed piece in its place and only one. Saves 1 to 2 bushels seed per acre. Uniform depth; even spacing. We make a full line of potato machinery. Send for booklet today.

No Misses  
No Doubles

**THE BATEMAN-WILKINSON CO., Ltd.**  
41 Symington Avenue, Toronto, Canada.



**THE MARTIN DITCHER AND GRADER**

DIGS YOUR DITCHES GRADES YOUR ROADS

EASILY QUICKLY CHEAPLY


REVERSIBLE ADJUSTABLE

PAYS ITSELF IN ONE DAY

**DOES THE WORK OF 50 MEN**

SEND FOR FREE BOOKLET

**THE PRESTON CAR & COACH CO. LIMITED**  
97 DOVER ST. PRESTON CANADA



**SAW-BLADES**

PRICE OF SAW BLADES F.O.B. FACTORY

20"	\$4.70	26"	\$6.90
22"	5.15	28"	8.25
24"	6.90	30"	9.25

You can order direct from this list, saving both time and money. Simply mention diameter of blade with size of hole wanted, and remit with your order. I ship promptly.

My Catalogue, "The Heart of the Farm," illustrating Lundy Oil Engines, Saw Frames, Grain Grinders, Etc., sent on request.

**A. R. LUNDY,**  
257 KING STREET WEST, TORONTO

**Seed Grains**

O. A. C. No. 21 Barley, Bunker King Oats, O. A. C. No. 72 Oats, Silver Hull Buckwheat, Centennial Peas.

Also highest grades of Clovers & Timothy.

Ask for our prices on Mangels, Turnips, Onions, Potatoes, Beets, Corn and garden seeds of all kinds.

If in need of feeds, write us. We can supply Linsed Oil Cake Meal, Corn Oil Cake Meal, Gluten Feed (23% Protein), Bran, Shorts, Corn Meal, Re-Cleaned Standard Screenings.

Write or phone for prices.

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

**ABERDEEN-ANGUS CATTLE**

We are offering 2 cows four and five years old, with calves by side; also 5 bulls from twelve to nineteen months. These must be sold as grass is killed and help scarce. Jas. Smart, G. T. R. and C. P. R., Phone 5043, R.R. No. 1, Beeton, Ontario

**Gossip.**

**Holstein Females Selling Privately.**

In the advertising columns of this issue Thos. L. Leslie of Alluvialdale Farm, Norval, Ont., is offering a dozen or more Holstein females at attractive prices, to make room. The Alluvialdale herd is not only one of the largest, but is also one of the oldest herds in York County, and has for years been run only on a straight, commercial basis with every one of the thirty-odd milking females holding official or private records worthy of treating separately if space permitted. There were, in fact, at the time of our visit several young cows then under test and among them was one 25-lb. three-year-old. These records like all others in the herd were being made under very ordinary conditions as at no time has Mr. Leslie ever specially prepared any cows for official testing. The uniformity of all records in the herd proves this, and breeders purchasing any of these females may feel that every individual is capable of increasing its present record from year to year. It is also worthy of note there are no three-quartered cows in the herd which should make them all the more attractive and safe to select from. These cows are all bred to the senior service sire at the farm, Sir Gelsche Walker, which is a son of King Segis Walker and Urmagelsche Segis 27.12 lbs. He is a grandson of King Segis on the side of both sire and dam and his seven nearest dams average 29.33 lbs. of butter and 520 lbs. of milk in 7 days with a 4.6% average test. All the 1917 and 1918 calves are sired by this bull and include twenty heifers and six young bulls. The bulls range from small calves up to serviceable ages and are worthy of inquiry.

**Holstein Bulls at Roycroft.**

There are, no doubt, many Ontario Holstein breeders who are to-day looking for a new sire to place at the head of their herds for the coming breeding season. In drawing attention to the various offerings advertised elsewhere in this issue we would suggest that prospective purchasers take special notice of those offered by Roycroft Farm of Newmarket, Ontario. In the offering there are five bulls mentioned specially and all five are of serviceable age. Two are by the senior sire at Roycroft and are therefore brothers to the world's record junior two-year-old heifer, Het Loo Pietertje, 30.28 lbs. of butter in 7 days, while another one is from a 20-lb. junior two-year-old sister of the champion heifer and by Avondale Pontiac Echo, the famous son of the world's greatest milk producer, May Echo Sylvia. The fourth is a 13-months youngster by King Segis Alcartra Spofford, a son of King Segis Pontiac Alcartra (the \$30,000 sire) and has for dam the 27-lb. cow, Keyes Segis Walker Pietertje. The fifth and last is a 14-months youngster and a half brother to the new Canadian champion senior two-year-old, Lakeview Dutchland Calamity Rose. The other calves around the farm are all 1918 calves, and those from the mature cows are nearly all sired by Pontiac Korndyke of Het Loo, the sire of the world's champion junior two-year-old mentioned above. The records of the dams of these youngsters run up as high as 33 lbs. of butter in 7 days, and all are still owned in the herd. In closing we would like to add that there are now nine tested daughters of Pontiac Korndyke of Het Loo in the test, and at an average of two years and five months the average for the nine is 22.68 lbs. of butter in 7 days. Several of these heifers also have 1918 bulls two of which are sired by King Segis Alcartra Spofford and all are a choice lot throughout. When on the market for something choice in Holsteins, and just at this time Holstein bulls of serviceable age in particular, it will pay to write Mr. Shaw, Roycroft Farms, Newmarket; for full particulars regarding his present offering.

**Things War Won't Affect.**

The appetite young hogs have for skim-milk.

The questions children ask at milkin' time.

The amount of butter that's needed on batter-cakes.

Pride in a pair of new working overalls.

The fact that babies just nachally love pure milk.

That summer is coming—and green pastures.

That little fishin' stream will sing just as sweet.

**Invest Your Money in Canada**

The Dominion Government urges that Canadian Securities should be held by Canadian Investors. Taxation is likely to be imposed on non-Canadian Securities. You can be patriotic and at the same time, obtain a certain 5½% for your money by investing your funds in

**Standard Reliance Mortgage Corporation Debentures**

This Canadian Security does not fluctuate in value. It is repayable at certain fixed periods. Meantime it bears interest at 5½%, payable half-yearly at your local bank, in cash, on the day it is due.

Thousands of people have invested their savings in these debentures without the loss of one dollar invested. The debentures are issued in amounts of \$100 and upwards for a fixed period to suit your convenience.

Write for our booklet entitled "PROFITS FROM SAVINGS."

Paid up Capital and Surplus Funds - - \$3,362,378.63



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**Infantile Paralysis**

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left 8-year-old Evlyn Olson so crippled she had to crawl on her knees. Five months' treatment at the McLain Sanitarium restored her feet and limbs to the satisfactory condition shown in the lower picture. Her mother has this to say:

"We feel it our duty to recommend your Sanitarium. Evlyn was stricken with Infantile Paralysis in August, 1915, March 1st, 1916, we carried her to you. Five months later she could walk without crutches or braces. Words cannot express our thanks."

MR. and MRS. JOHN OLSON,  
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**For Crippled Children**

The McLain Sanitarium is a thoroughly equipped private institution devoted exclusively to the treatment of Club Feet, Infantile Paralysis, Spinal Disease and Curvature, Hip Disease, Wry Neck, etc., especially as found in children and young adults. Our book, "Deformities and Paralysis," also "Book of References," sent free on request. Write for it today.

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# How the Y.M.C.A. Contributes to Victory

## "Earn and Give" Campaign for Boys

Serve your Country by your labor and make a gift to the Red Triangle Fund from your earnings! What a fine chance to do a double service! Six thousand boys are asked to give \$10 each. Of the total, \$50,000 goes to help the soldiers, the balance for boys' work. Gifts must be at least \$10, the standard unit. A boy may subscribe more than \$10 in \$10 units but not less. A beautifully engraved certificate will be given to each subscriber. Ask your local Y. M. C. A. representative for pledge card and full information.



Y. M. C. A. man serving coffee 100 yards from German Trenches

YPRES, Langemarck, Festubert, Vimy Ridge, Paschendaele—how the very names thrill! They stand for deeds of the bravest of the brave—our own Canadian lads! They fight and win, not always by strength of numbers, but by unbeatable fighting spirit, or "morale."

Said a British Staff officer: "I have known morale to be found in a cup of hot coffee. I have seen it sustained by a man's merely writing a letter home. If you want an easy and short definition of 'morale' you will find a good one in the four letters Y.M.C.A."

**Y.M.C.A.**  
**Red Triangle Fund**  
**\$2,250,000, May 7, 8, 9**  
*Canada-Wide Appeal*

The staff officer pointed to the men trooping into the big Y.M.C.A. hut and continued: "Those men are going to the front line to-morrow. In the Y.M.C.A. some of them will be playing games, others attending divine service, but each in his own way will find a strengthening of his 'morale' in the comradeship of his fellows under the Red Triangle. All this is a thing which is going to turn the balance in our favor."

Through the hell of battle after battle, our brave soldiers fight. Through fire, water, mud, filth and deadly danger follows the ever faithful Y.M.C.A. man, even if he can bring but a bucket of invigorating coffee to fagged fighters. Will you help us to supply the coffee—and to render the thousand and one similar services to soldiers everywhere?

The Y.M.C.A. needs at least \$2,250,000 to meet the tremendous demands. Be generous!

## Bits from Soldiers' Letters

"The Hut is very well termed 'next to home.'"

"I went home for the first time in 18 years and I had not written for 13 years. I have given up my old habits of drinking and gambling and thank God for it. Thanks to a little word caught at one of your good-night services."

"From one end of the train to the other I heard nothing but good of the 'Y.' Your representative did his best to supply our needs, purchasing stuff at rock bottom prices and letting the boys have it the same way."

"They send guides out with parties of soldiers on sight-seeing tours all over London."

A German prisoner said: "The reason you fellows show such fight is easily understood. Your officers' canteens, Y. M. C. A.'s and padres are backing you up."

"Who pays? I don't know. But whoever they are, God bless them. They are the fathers of thousands of boys."

## Tributes

Lord Northcliffe:

"I do not think the war can be fought without the Y.M.C.A."

Maj.-General Burstall:

"The benefit to the troops is beyond calculation."

Lt. Colonel Mayes:

"Games have a tendency to increase fighting spirit. Any efforts on your part to expedite delivery of athletic equipment will be of national service."

Harry Lauder:

"We took the responsibility of sending these boys to defend us, and we must not fail them. The Y. M. C. A. huts are the soldiers' 'Home from Home.'"

Brig. Gen. Odium:

"I want to let you know how much I was impressed with the work done by the Y.M.C.A. It was simply magnificent. All ranks are enthusiastic. I have recommended one of your officers for the Military Cross. The Y.M.C.A. has endeared itself to the soldier in France as no other institution has."

## National Council, Young Men's Christian Association

Campaign Directors for Red Triangle Fund:

Ontario: Dr. John Brown, Jr.,  
120 Bay St., Toronto

Quebec: P. S. Dobson,  
Y.M.C.A., Sherbrooke



# Morale!

## British Staff Officer Defines It —How Y. M. C. A. Enhances This Great Factor of Victory

"IS VICTORY always on the side of the biggest battalions?" was asked of a British staff officer, as recorded by Dr. John R. Mott in the "Ladies' Home Journal."

"It is and it isn't," he replied. "There's something else. You cannot chart it, you cannot weigh it, you cannot express it in any military figures. But Napoleon knew what it was and he called it 'morale.'"

### How Morale Is Created

"I cannot define for you exactly what morale is, but I can tell you it comes in many different ways. I have known morale to be found in a cup of hot coffee. That sounds unromantic. But think what that means to a man who has had ten hours consecutive shelling.

"I have seen morale created by a man's taking a big risk; I have seen it sustained by a man's merely writing a letter home just before he went into action. You can describe morale," he continued, "in a score of ways, little and big.

"It may come from faith in a future life or from the thought that one is protecting the loved ones at

home. *But if you want an easy and short definition of morale, you will find a good one in the four letters Y. M. C. A.*"

### Strengthening Morale

And he took his questioner to the window and shewed him men trooping into a Y. M. C. A. hut.

"Those are men," he said, "who will be going up to the front line to-morrow. Some of them will be playing games, others will be writing home, others will be attending divine service, but each in his own way will find a strengthening of his morale in the comradeship of his fellows beneath the symbol of the Red Triangle and the inspiration for which it stands.

### Y. M. C. A. Playing Big Part

"All this is a thing which I cannot show on my charts. But it is also a thing which is going to turn the balance in our favor. Go back and tell the people at home that a dry soldier, concerned alone with military calculations, believes that the Y. M. C. A. is playing a far bigger part in winning the war than any mere civilian can recognize.

"I do not speak to you as a philanthropist. That is not my job. But I want to see the end of this horrible business, and if a soldier's words have any weight, tell them at home to help the Y. M. C. A. to carry on its work."

The **SAFEST** Matches  
in the World, also the  
**CHEAPEST**, are

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No. 3 Timothy	5.00
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Marquis Spring Wheat	3.00
O.A.C. No. 21 Barley	2.25
Canadian Beauty Peas	5.50
Golden Vine Peas	5.00
White Seed Beans	10.00

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Ask for samples if necessary.

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### Questions and Answers. Miscellaneous.

#### Hens Lay at Night.

What is the cause of hens laying off the roost during the night. My flock of 50 lay from eight to a dozen every night.  
K. B.

Ans.—We can give no direct cause for this occurrence. Eggs are frequently found on the dropping board or under the roost, but it is rather unusual to find so many laying at night. We have noticed when hens are starting to lay that this frequently happens. We do not know that anything can be done for it. If there is plenty of straw under the roosts it will prevent the eggs from being broken.

#### Starting in Bees.

We are getting three hives of bees this spring but don't know very much about handling them. We would appreciate some advice.  
D. D. G.

Ans.—It is rather difficult to explain just what treatment should be given to bees as you will find certain problems continually arising that would have to be solved. The book "A. B. C. in Bee Culture," by Root, which can be secured through this office for \$2.75, deals very fully with the bee problem, and you would find much valuable information in it. Once the bees commence gathering honey, it is necessary to keep them supplied with foundation frames and to watch them closely as the season approaches when they swarm. In Bulletin 256, issued by the Ontario Department of Agriculture, valuable information is given relative to the wintering and spring care of bees. This Bulletin may be secured from the Department.

#### Wood Ashes—Lime Sulphur.

1. When is the proper time to transplant hard maple trees and how should this be done?
2. What is the best way to apply wood ashes to the land to obtain the best results? What plant food do they particularly supply?
3. What are the proper quantities of lime-sulphur and water to boil together for making lime-sulphur, and how long should it boil?
4. Are parsnips that have been left in the ground all winter poisonous, or when do they become poisonous?

Ans.—1. Maples may be transplanted any time during the spring. The earlier it is done the better, as it is more of a shock to the tree once the leaves begin to come out. In transferring from one place to another the top should be cut back pretty well as it gives the roots a better chance to take hold. They should be planted a little deeper than they were in their original place. Fairly large holes should be dug and surface soil packed in around the roots. If the weather is dry some advise pouring a pailful of water around the roots of each tree as this aids in giving the small rootlets a start. If comparatively dry soil is packed around the roots it will draw more or less of the moisture from them, which would be detrimental.

2. If you have a large quantity of wood ashes the quickest way to apply them would be with the fertilizer drill. However, they may be spread off the wagon or may be dumped in small piles and then spread. Hard wood ashes contain a considerable quantity of potash besides some lime and phosphates. They are beneficial to practically all crops.

3. Home-boiled lime-sulphur is made by using 20 lbs. of fresh stone lime and 15 lbs. of sulphur, to 40 gallons of water. Slake 20 lbs. of lime in about 15 gallons or more of boiling water. While slaking add the 15 lbs. of sulphur, which has previously been made into a paste. Boil vigorously with stirring for one hour; dilute to 40 gallons with cold or hot water, strain, and apply at once. This is for use on dormant wood only. Home made concentrated lime sulphur is made by using 100 lbs. sulphur and 50 lbs. lime to 50 gallons of water, and an hydrometer should be used to determine the strength of the solution.

4. It is claimed that when parsnips start to grow in the spring that they become poisonous. However, up to that time they are edible. The winter frosts improve the flavor.



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Kill

1. What exterminating

Ans.—1. bisulphide an the evening. gas which is gradually se burrow, dest material is in be taken not or where th it is very poi

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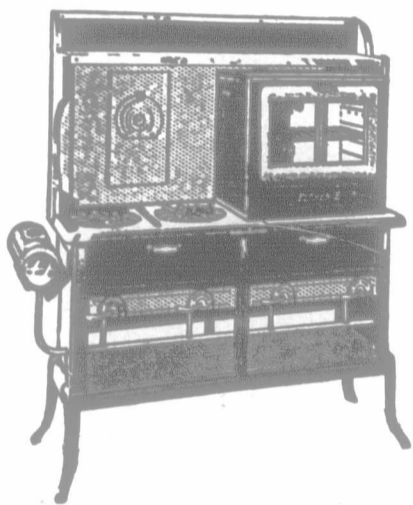
Ans.—1. T by a hen sho same manner turkey hen. taken in feeding dry. Dampne There are vari fed. After the a little drink soaked in skim gradually subs shorts may be be fed fairly d

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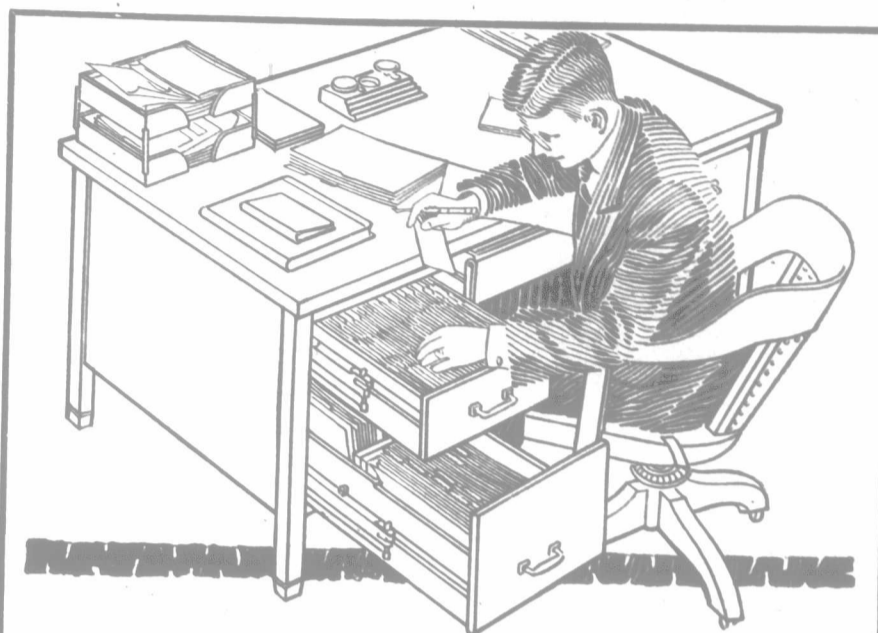
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## Questions and Answers.

### Miscellaneous.

#### Killing Ground Hogs.

1. What is a satisfactory means of exterminating ground hogs? A. M.

Ans.—1. Moisten a rag with carbon bisulphide and put it in the burrow in the evening. Carbon bisulphide forms a gas which is heavier than air and will gradually settle to the bottom of the burrow, destroying all life within. The material is inflammable and care should be taken not to handle it around buildings or where there is fire of any nature. As it is very poisonous it should be handled with care.

#### Scratches.

1. I have a five-year-old horse whose hind legs are itchy. They crack open above the fetlocks. What remedy would you recommend? A. S.

Ans.—1. Give a purgative of 8 drams aloes and 2 drams ginger, and follow up with 1½ ounces of Fowler's solution of arsenic twice daily for a week. Apply hot linseed poultices to the affected parts for two days and two nights, then dress the parts three times daily with a lotion made of one ounce each of acetate of lead and sulphate of zinc to a pint of water. If the parts affected get muddy, rub well until dry but do not wash the legs. A purgative should not be administered to pregnant mares.

#### Raising Turkeys.

1. How should turkeys be raised that are hatched by a hen?

2. Which proves the more satisfactory, a gasoline or kerosene engine? How much gasoline will a 5 horse-power engine consume in a day? A. R.

Ans.—1. Turkeys that are hatched by a hen should be treated in much the same manner as those hatched by a turkey hen. Particular care must be taken in feeding and in keeping the poulters dry. Dampness is detrimental to them. There are various rations which may be fed. After the first day or two when only a little drink and grit are given, bread soaked in skim-milk may be fed and this gradually substituted by shorts. The shorts may be soaked in milk but should be fed fairly dry. Feed should be given

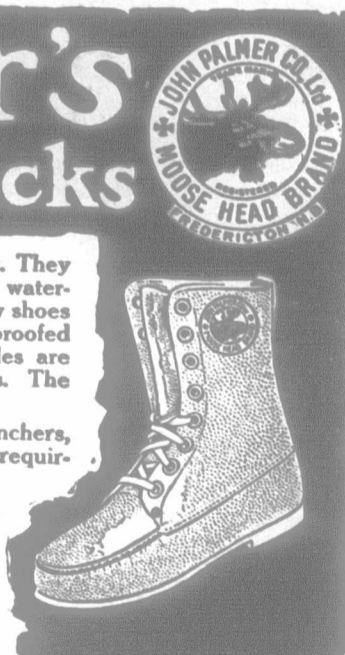
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Clydesdales and Shorthorns I still have some Shorthorn bulls, twelve and thirteen months old. Two grandsons of Old Sort, and four great-grandsons of Royal Blood; these are an exceptionally fine lot; also a number of females. Inspection invited. Apply to J. B. CALDER, GLANFORD STATION, R.R. 3.

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out of the hand as disease frequently results from feeding off the ground. All drinking fountains should be kept thoroughly clean. Finely-chopped onion tops and dandelion leaves may be mixed with the shorts; in fact, about one-fifth of the ration should be of these materials. As the birds develop, small wheat may be fed. Some use quite a bit of oatmeal with good results. Young turkeys will do fairly well on the ordinary feeds, provided they are properly looked after.

2. Both gasoline and kerosene engines are proving satisfactory. Gasoline vaporizes a little more readily than kerosene and an engine will start a little quicker with gasoline. The amount of fuel used in a day by a 5-horse-power engine would depend on the amount and kind of work being performed.

#### Weight of Stock by Measurement.

1. How can I find the live weight of a steer by the measurements? Will the same rule hold true for calves less than a year old? L. T. P.

Ans.—1. We cannot vouch for the accuracy of the following rule for estimating the weight of an animal by measurement, however, it is as follows: Multiply the girth in inches immediately behind the shoulders by the length from the shoulder back in inches, and divide by 144. If the girth is from 3 to 5 feet, multiply by 16, if from 5 to 7 feet multiply by 23, and if from 7 to 9 feet multiply by 31 to get the number of pounds live weight. Another rule is to take the diameter of the animal behind the shoulder and find the area. This is multiplied by the length of the animal's body, which will give the cubical contents of the body, figuring it as a cylinder. To do this the circumference is divided by 3 1/7 to get the diameter, this is squared and then multiplied by .7854 to get the area of the end of the cylinder, and this is multiplied by the length in inches and divided by 576 to get the number imperial stones. This is multiplied by 14 to reduce it to pounds. The same rule would apply to a younger animal.

"Strike while the iron's hot,"  
The good old blacksmith said.  
"If you want to shape that iron  
You must hit it while it's red."

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**STALLION**, rising 3 years, large size, good  
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two brood/sows (grade Yorkshires) due to farrow  
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am offering, for immediate sale, three good  
bulls. One roan, imported, 13 months,  
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**Alonso Mathews, Manager, Forest, Ontario**

**H. Fraleigh, Proprietor, Meadowdale Farm, Forest, Ont.**

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**1918 O.A.C. Examinations.**

The first, second and third-year ex-  
aminations at the Ontario Agricultural  
College have been written off for another  
year. The classes of 1917-18 were not  
as large as in former years. In the first  
year sixty men wrote their examination;  
in the second year there were twenty-  
nine, and in the third year thirty-three.  
It will be noticed in looking over the list  
that the marks scored by the various  
students were very good and that com-  
paratively few will be required to write a  
supplemental examination in order to  
secure their certificates. Following is  
the result of the examinations, arranged  
in order of proficiency. The maximum  
marks awarded for the first year were  
2,500; in the second year, 3,100, and in  
the third year 2,300. The number at  
the right hand side of the marks indicates  
the subjects in which the students failed  
to secure a pass.

First Year.—1, Jukes, 2,052; 2, Mc-  
Crimmon, 2,051; 3, Ferguson, 1,968; 4,  
Stock, 1,876; 5, Frith, 1,871; 6, Irvine,  
1,815; 7, Eidt, 1,812; 8, Simpson, 1,810;  
9, McCague, 1,759; 10, Macarthur, 1,747;  
11, Clemens, 1,702; 12, Howe, 1,697;  
13, Cole, 1,696; 14, Young, 1,690; 15,  
Deneau, 1,684; 16, Jamieson, 1,665;  
17, Shoemaker, 1,665; 18, Chamberlain,  
1,627; 19, Smith, 1,611; 20, Coon, 1,572;  
21, Jones, 1,570; 22, Macdonald, 1,559;  
23, Munro, 1,535; 24, Snyder, 1,505;  
25, Stirrett, 1,505; 4, 26, Welch, 1,497;  
27, Clark, 1,491; 28, Matthews, 1,490;  
29, Webster, H. F. R., 1,483; 30, Watter-  
worth, 1,481; 31, Barber, 1,455; 20; 32,  
Maunsell, 1,445; 20; 33, Greaney, 1,432;  
34, Sippel, 1,428; 35, White, 1,426; 36,  
Scott, 1,422; 37, Butt, 1,383; 20; 38,  
Taylor, H. H., 1,375; 39, Gibbard, 1,374;  
Katcharian, 1,346; 41, Lindala, 1,339;  
42, Laing, 1,329; 43, Taylor, W. D., 1,327;  
44, Christensen, 1,322; 45, Devitt, 1,295;  
20; 46, Cohen, 1,278; 11, 20; 47, Brown,  
1,266; 48, Lowrie, 1,265; 10, 13; 49,  
Conway, 1,263; 20; 50, Segal, 1,257; 13,  
20; 51, Collier, 1,254; 52, Goodier, 1,239;  
53, Webster, F. J., 1,231; 3; 54, Sirrs,  
1,237; 55, Ashby, 1,180; 20; 56, Alexander,  
1,178; 4; 57, Thompson, 1,140; 11, 13;  
58, Bernal, 1,099; 1, 3; 59, Lathey, 1,079  
5, 10; 60, Williams, 1,074, 1, 20.

Subjects.—1, English Literature; 2,  
Composition; 3, Drainage; 4, Arith-  
metic; 5, Hydrostatics; 6, Soil Physics;  
7, Mechanics; 8, Manual Training; 9,  
Chemistry; 10, Geology; 11, Botany;  
12, Zoology; 13, Horticulture; 14, Field  
Husbandry; 15, Animal Husbandry; 16,  
Dairying; 17, Poultry; 18, Apiculture;  
19, Veterinary Anatomy; 20, Materia  
Medica.

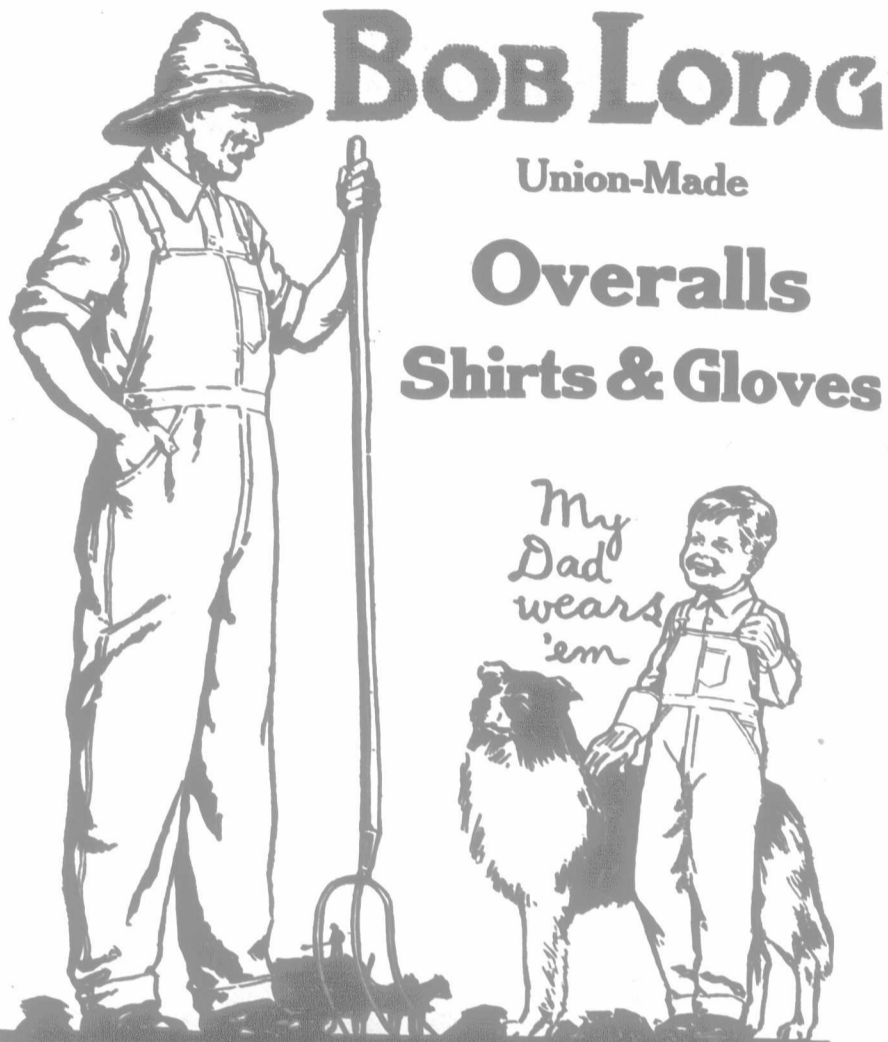
Second Year.—1, Hopper, 2,387; 2,  
Currier, 2,304; 3, Murdoch, 2,246; 4,  
Mead, 2,234; 5, Maynard, 2,224; 6,  
Zavitz, 2,212; 7, Hood, 2,182; 8, Hansuld,  
2,179; 9, Harris, 2,147; 10, Lindsay,  
2,132; 11, Hall, 2,127; 12, King, 2,083;  
13, McKay, 2,069; 14, Smallfield, 2,044;  
15, Porter, 2,028; 16, Jamieson, 2,013;  
17, Frey, 2,004; 18, Williamson, 1,997;  
19, Arnold, 1,942; 20, Leavens, 1,919;  
21, Pegg, 1,909; 22, Fraser, 1,907; 23,  
Patterson, 1,892; 24, Silcox, 1,862; 8;  
25, Wood, 1,847; 26, Scott, 1,812; 27,  
Williams, 1,754; E. 28, White, 1,724.

Less than 50% general proficiency.  
E. 29, Whiteside, 1,536, 2.

E. Indicates less than 60% average in  
English subjects.

Subjects.—1, English Literature; 2,  
Composition; 3, Public Speaking; 4,  
Economics; 5, Thesis; 6, Surveying and  
Drainage; 7, Agricultural Engineering;  
8, Electricity; 9, Farm Mechanics; 10,  
Organic Chemistry; 11, Soil Chemistry;  
12, Animal Chemistry; 13, Bacteriology;  
14, Entomology; 15, Horticulture; 16,  
Botany, (Christmas); 17, Economic  
Botany; 18, Phys. Botany; 19, Field  
Husbandry; 20, Animal Husbandry; 21,  
Feeding and Management; 22, Principles  
of Breeding; 23, Judging Stock; 24,  
Horse Judging; 25, Dairying; 26, Poultry;  
27, Vet. Pathology; 28, Vet. Obstetrics;  
29, Forestry.

Third Year.—1, DeLong, 1,940; 2,  
Campbell, 1,827; 3, Grant, 1,803; 4,  
Odell, 1,796; 5, Quail, 1,705; 6, Oliver,  
1,695; 7, Munro, 1,681; 8, Jackson, 1,664;  
9, Hunter, 1,660; 10, Brink, 1,651; 11,  
Musgrave, 1,640; 12, Clark, 1,630; 13,  
Scouten, 1,568; 14, Gunn, 1,547; 15,  
Sweeney, 1,539; 16, Malson, 1,514; 17,  
Matheson, 1,443; 18, Allsworth, 1,433;  
19, Way, 1,426; 20, McKenzie, 1,409;  
21, Caldwell, 1,407; 22, Gowlan, 1,393;  
11; 23, Jones, 1,370; 24, Tice, 1,353; 11;  
25, Allan, 1,347; 26, Stewart, 1,337; 27,  
Higgins, 1,300; 28, Stillwell, 1,234; 8;



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Shirts & Gloves**

*My Dad wears 'em*

*Bob Long says:*  
"My overalls and shirts are the best made, because—  
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Big 11—the big grey overalls—the cloth with the test.

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**BLAIRGOWRIE SHORTHORNS**

I have females all ages and bulls of serviceable age. Worth while to come and see or write  
**JOHN MILLER** Myrtle Station, C.P.R., G.T.R. ASHBURN, ONTARIO

**FAIRVIEW SHORTHORNS AND CLYDESDALES**  
In Shorthorns we can offer you a choice from 60 head, including both bulls and females, of Lavender,  
Missis. Augusta, Duchess of Gloster, Village Girl, Miss Ramsden and Clara breeding—the best of  
cattle and the best of pedigrees. In Clydesdales, write for our list of winners at Toronto, London and  
Guelph 1917 shows, Canadian-bred classes. We also have a nice offering in Shropshires.  
**ROBERT DUFF & SONS** Myrtle Station, C.P.R. and G.T.R. MYRTLE, 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, ONTARIO.** Myrtle, C.P.R., Brooklin, G.T.R., Oshawa, C.N.R.

**Robert Miller, Stouffville, Ont.**  
still has a few Shorthorn bulls, fit for service, and some females that are as good as can be found for  
the man that wants to start right in Scotch Shorthorns. They will be sold for a low price, considering  
the quality, and the freight will be paid.  
Write for anything in Shorthorns One hour from Toronto

**SPRING VALLEY SHORTHORNS**

Herd of seventy head, straight Scotch, good individuals. Headed by the great show and breeding bull,  
Sea Gem's Pride 96365, and Nonpareil Ramsden 83422. We have for sale four as good young bulls as  
we ever had, and a few females. **KYLE BROS., Drumbo, Ont.** (Phone and telegraph via Arr.)

**SEVENTY-THREE HEAD OF SHORTHORNS**

Four good young bulls of serviceable age; Nonpareil Ramsden =101081= and Royal Red Blood  
=77521=, at the head of the herd. These young bulls range in age from 8 to 15 months, and are for  
immediate sale. They are out of good dams, which will bear inspection. Our cows and heifers will  
please, and you'll like the bulls. Also three extra-good grade heifers, from heavy milk-producing dams.  
**James McPherson & Sons, Dundalk, Ontario**

**SHORTHORN BULLS** Will. A. Dryden

of my own breeding, around a year old; best families and  
good colors, are for sale. Also a few young imported bulls.  
**Brooklin, Ontario County**  
Myrtle, C.P.R. Brooklin, G.T.R.  
Brooklin, C.N.R.

**SHORTHORNS—T.L. Mercer, Markdale, Ont.**

**ROSEWOOD CHAMPION**, by Nonpareil Archer, Imp. at the head of the herd. I have almost 100  
Shorthorns in my stables at present. Marr Misses, Campbell-bred Clarets, Nonpareils, Minas, Rose-  
marys, etc.—the best of breeding and the best of cattle; bulls or females; also have a few Herefords.

**IMPORTED SCOTCH SHORTHORNS**

Our present offering includes 100 imported females and 12 young imported bulls, representing the most  
desirable lines of breeding. If interested, come and see them. Burlington Jct., G.T.R., is only half  
mile from farm. **J. A. & H. M. PETTIT, FREEMAN, ONTARIO.**

**ESCANA FARM SHORTHORNS**

Five Bulls for Sale. One roan senior yearling; one choice twelve months white calf, by Right Sort  
(Imp.); one select, dark roan, ten months calf; one roan yearling, by Raphael (Imp.); one red roan  
yearling, for grade herd. Farm 1/4 mile from Burlington Jct., G.T.R.  
**J. F. MITCHELL, Limited BURLINGTON, ONTARIO**

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The only reliable  
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Flaming's Lint  
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**Dual-Purpose**  
Herd headed by  
whose grandam  
an R. O. P. record  
testing 3.99, and v  
P. record of 10,63  
3.88. We have s  
about ready for ser  
out of dams with  
8,000 to 11,000 lbs.  
WELDW  
Farmer's Advocate

**Mardella**  
Dual-purpose bulls  
heifers—bred, some  
type, quality; som  
great massive Du  
lbs. milk, 474 lbs. b  
Thomas Graham,

**Newcastle Herd of S**  
For Sale—2 hurs 8  
boars and sows 2 to 6  
bred and 2 show sows  
All descendants of Col  
Toronto Industrial 3 ye  
Cholderton Golden Sec  
A. A. Colwill, Prop., R

**Bulls all sold.** One  
by an R.O.P.  
of 4.5; he would work  
bred to the herd sin  
Leicester rams and Yor  
ALLAN B. MANN,  
Peterboro, R.R. 4.

**GLENFOLY SHORT**  
College Duke 4th in se  
of Rothschild and T  
offering young cows and  
bull. Have a few bulls  
STEWART M. GRAI

**Evergreen Hill**  
Herd headed by the  
Nothing for sale at pre  
S. W. Jackson, R.R. 1

**Plaster Hill Herd Du**  
thirteen months. Size,  
strains.  
F. Martindale & Son,  
Spruce Lodge Shortl  
Herd headed by the  
Chief Imp. =60865=  
heifers of all ages, of c  
W. A. DOUGLAS, C

### Lump Jaw

The only reliable treatment for Lump Jaw in Cattle.

**Fleming's Lump Jaw Cure**  
 Price \$2.50 a bottle. Sold under a positive guarantee since 1896. Your money back if it fails. Write for Fleming's Vest-Pocket Veterinary Advisor 96 pages and illustrated. It is Free. Fleming's Chemical Horse Shop.

A small quantity applied when calves are young will prevent growth of Horns. A 50c tube sent postpaid is enough for 25 calves.

FLEMING BROS., Chemists,  
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**Ontario Creameries, Limited**  
 London, Ontario

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Breeders of—  
**Milking Shorthorn Cattle**  
**Berkshire Swine**  
**Belgian Draft Horses**

All Shorthorns eligible for registry in the American Shorthorn Herd Books are now also eligible for registry in the Dominion Herd Books. We will register and transfer in both herd books all animals sold by us.

**Dalton**  
 Massachusetts

### Dual-Purpose Shorthorns

Herd headed by Dominator No. 10624, whose grandam on his sire's side has an R. O. P. record of 13,535 lbs. of milk, testing 3.99, and whose dam has an R. O. P. record of 10,689 lbs. of milk, testing 3.88. We have several choice bulls, about ready for service, from this sire, and out of dams with records running from 8,000 to 11,000 lbs. in one lactation period.

**WELWOOD FARM,**  
 Farmer's Advocate London, Ontario.

### Mardella Shorthorns

Dual-purpose bulls, 20 young cows and heifers—bred, some calves by side. Size, type, quality; some full of Scotch. The great massive Duke—dam gave 13,599 lbs. milk, 474 lbs. butter-fat—at the head.

**Thomas Graham, Port Perry, R. 3, Ont.**

### Newcastle Herd of Shorthorns and Tamworths

For Sale—2 years 8 and 12 months old, several boars and sows 2 to 6 months old. Young sows bred and 2 show sows 2 years old, safe in farrow. All descendants of Colwill's choice, champions at Toronto Industrial 3 years in succession, and Imp. Cholderton Golden Secret. Long-distance Phone. A. A. Colwill, Prop., R. R. No. 2, Newcastle, Ont.

**Bulls** all sold. One extra good roan bull calf by an R.O.P. dam with an average test of 4.5; he would work by July. Also a few females bred to the herd sire, Royal Choice 79864. Leicester rams and Yorkshire sows. C.P.R., G.T.R. **ALLAN B. MANN, "The Hawthornes," Peterboro, R. R. 4.**

### GLENFOYLE SHORTHORNS.

College Duke 4th in service—a high-record son of Rothschild and Taylor's noted stock. Am offering young cows and heifers, bred to this great bull. Have a few bulls of breeding age on hand.

**STEWART M. GRAHAM, LINDSAY, ONT.**

### Evergreen Hill R.O.P. Shorthorns

Herd headed by the R.O.P. bull, St. Clare. Nothing for sale at present.

**S. W. JACKSON, R.R. No. 4, Woodstock, Ont.**

### Plaster Hill Herd Dual-Purpose Shorthorns.

Six young bulls from four to thirteen months. Size, quality and good milking strains.

**F. Martindale & Son, R.R. 3, Caledonia, Ont.**

### Spruce Lodge Shorthorns and Leicesters

Herd headed by the Butterfly-bred bull, Roan Chief Imp. #90865. Young bulls, cows, and heifers of all ages, of good breeding and quality.

**W. A. DOUGLAS, CALEDONIA, ONTARIO**

29, Anderson, 1,233; 30, Minielly, 1,217, 8; 31, Lamont, 1,191, 11; 32, Light, 1,188, 11; 33, Cook, 1,049, 10, 11.

Subjects.—1, English Literature; 2, Journalism and Public Speaking; 3, Economics; 4, French; 5, Heat; 6, Meteorology; 7, Cold Storage; 8, Inorganic Chemistry; 9, Qualitative Chemistry; 10, Quantitative Chemistry; 11, Organic Chemistry; 12, Geology; 13, Botany (Christmas); 14, Botany, (April); 15, Systematic Entomology; 16, Economic Entomology; 17, Bacteriology.

### Questions and Answers. Miscellaneous.

**Removing Telephone.**  
 About ten years ago 150 farmers joined together and built a rural telephone line, each paying an equal part in the erection of said line and had the company incorporated. One man sells his farm; can he remove the telephone if nothing was said in the agreement?  
 J. D.

Ans.—1. Unless specified in the agreement we believe the man is at liberty to remove his telephone.

**Cutting Grain.**  
 1. Is it best to cut wheat a little on the green side and let it ripen in the stook, or let it get ripe before cutting? Which will shrink the least? E. H. S.

Ans.—1. Allowing the grain to ripen before cutting will possibly give the best results and will cause the least shrinkage. In the case of oats some prefer to cut a little on the green side as it gives them a little better quality of straw for feed. It does not tend to materially injure the grain.

**Moving a Building.**  
 1. Have bought a building 22 feet by 30 feet and about 20 feet high, in a village, and wish to move same on to my farm. Have I the right of way in regard to telephone, telegraph and electric light wires and concrete bridge with concrete railing? If so, what steps should I take, and how many days' notice should the respective companies receive from me? Any information will be much appreciated.  
 SUBSCRIBER.

Ans.—1. No, it is a matter for arrangement with the municipal and other corporations interested. We would suggest your first seeing the Reeve.

**Paying for Farm.**  
 My husband purchased his mother's farm and the writings stated that a certain sum was to be paid annually. It is all paid but \$400. The time has expired when the entire sum should have been paid and his mother refuses to give receipts for small payments. If anything should happen to my husband, would I be able to hold the farm by paying for it? We have a large stock and could finish paying for the land.  
 E. L.

Ans.—1. As we understand it, the mortgage has run out and evidently the mother wishes payment in full. By paying the remainder of the mortgage you would have the farm. It would be well to raise the money even if it necessitated the dispersal of some of the stock, then you would have the deed of the farm and further trouble in the matter would be avoided.

### Vermin on Horse.

1. A six-year-old mare appears very itchy. She bites her legs and body at every chance, and rubs against the sides of the stall when in the stable. What is the matter with her? Can a cure be effected? How should she be fed? Will medicinal treatment be effective? H. R.

Ans.—1. It is possible that the mare is infested with vermin in which case she might be washed with some disinfecting material, or a mixture of 4 parts cement to 1 part hellebore might be sifted into the hair. If this is done care must be taken that the mare does not get wet for a few days after the cement is applied. There may be a skin disease, such as eczema. This would be indicated by small pimples. Treatment for this consists of purging with 8 drams aloes and 2 drams ginger, following up with one ounce Fowler's solution of arsenic twice daily for a week. Dress the parts twice daily with a warm 5 per cent. solution of one of the coal-tar antiseptics. Keep the animal comfortable and warm and thoroughly dry after each dressing.

The quickest way to save money to pay for an engine is to buy an ALPHA now

PERHAPS you have been putting off buying an engine until you could lay by enough money to pay for it.

A much better way to save the money would be to install an ALPHA Gas Engine NOW and put it to work. It would soon save its own cost, as the thousands of Alpha users in Canada will tell you.

You may be able to buy engines that cost a little less than the Alpha, but bear in mind that an engine that costs you less to buy also costs the manufacturer less to build. And that can mean but one thing—inferior quality throughout the engine.

You don't want that kind of an engine. Its life will be short, its fuel and repair bills high, and you will be subject to time and money-wasting delays.

Send for our catalogue, which tells why the farmer who buys an Alpha gets the most for his money.

Alpha Gas Engines are made in 12 sizes, 1 1/2 to 28 H. P., and are furnished in stationary, semi-portable and portable styles, with hopper or tank-cooled cylinder.

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### HIGH-CLASS SHORTHORN BULLS

We have a number of choice young bulls on hand, ready for service. Some are straight Scotch and others are bred for milk production. Also offering the four-year-old Duchess-bred bull, Duchess Hur for sale or exchange.

**GEO. MORDEN & SON, OAKVILLE, ONT.**

### THE MANOR STOCK FARM---SHORTHORNS

Bulls all sold. Have Wimples, Rosemarys, Minas, Roan Ladys, etc., for inspection.

**JOHN T. GIBSON**  
 DENFIELD, ONTARIO.

### BURNFOOT STOCK FARM

Breeders of high record, dual-purpose Shorthorns with splendid conformation for beef. Have a number of bulls calved last fall and early in winter.

**S. A. MOORE, PROP. (Farm one mile north of Caledonia) CALEDONIA, ONTARIO**

### WELLAND DISTRICT SHORTHORN BREEDERS' CLUB

New sales list out: cows, heifers bred, young bulls, also stock bull Morrison Pride #102330.

**Chas. Gainer, Secretary, Box 607, Welland, Ontario. A. E. Howell, President, Fenwick, Ont.**

### GERRIE BROS.' SHORTHORNS

Herd headed by Gainford Matchless, one of the very best sons of the great Gainford Marquis. Our breeding cows are Missies, English Ladys, Duchess of Glosters, etc. Present offering of young bulls are by our former herd sire, Master Missie, Junior Champion at Brandon last summer.

**GERRIE BROS., ELORA, ONT**

### FLETCHER'S SHORTHORNS

Our herd of Scotch Shorthorns represents Orange Blossom, Kilbean Beauties, Matchlesses, Mysies, Missies, Clementinas, etc., and is headed by the Watt-Stamford bull, Victor Stamford #95950, a Toronto winner. Present offering—two young (show animals); also several heifers and cows.

**GEO. D. FLETCHER, ERIN, R. R. 1, ONT. (Erin Station, C. P. R. L.-D. Phone**

### 30 Shorthorns for Sale

—Eight bulls and a lot of good breeding, registered females, in all conditions. Buyers from this herd in past years want more of the same kind. As breeders, feeders and milkers they satisfy the people. Only selected bulls have headed this herd from the first. Price of bulls from \$125 to \$250; females, \$150 to \$400. One choice milk strain bull near two years old, \$185. **JOHN ELDER & SONS, Hensall, Ont.**

### FIFTY IMPORTED SHORTHORNS

I have fifty head of newly imported Shorthorns (42 females, 8 bulls) which are acknowledged to be one of the strongest lots that have left Britain this season. You should see these if you are wanting something choice. **George Isaac, (All Railroads: Bell Phone) Cobourg, Ontario.**

### PLEASANT VALLEY FARMS

Present offering—A number of good young Scotch cows with calves at foot and rebred to (Imp.) Newton Grand Champion; also a number of 2-year-old heifers bred to same sire. Suitable for good herd foundations; priced to move them. Inspection invited.

**GEO. AMOS & SONS. Farm 11 miles east of Guelph, C.P.R. MOFFAT, ONTARIO**

### MAPLE HALL SHORTHORNS

Present offering, 7 yearling bulls:

One Cruickshank Duchess of Gloster Five Cruickshank Butterflys. One Shepherd Rosemary  
 All pure Scotch, and extra good; also a few young cows with calves, and yearling heifers.

**D. BIRRELL & SON, CLAREMONT, ONT.**



**A 29-pound sire going to head the herd of W. T. Davidson & Son, Meadowvale, Ont.; 10 months old. Note the splendid development. Perhaps I have the one you want.**

**Gordon S. Gooderham**  
Manor Farm                      Clarkson, Ont.

**Choice Grandson of Queen Butter Baroness**

I am offering a choice 14-months bull from a 21-lb. junior two-year-old daughter of Louis Prilly Rouble Hartog, and sired by Baron Colantha Fayne, a son of Queen Butter Baroness, the former 33-lb. Canadian champion cow. Also have others younger. T. W. McQUEEN (Oxford Co.) TILLSONBURG, ONT.

**Costly Sentiment on the Farm.**

EDITOR "THE FARMER'S ADVOCATE":  
In peace times one could probably afford to indulge sentimental views regarding different kinds of stock but it is hardly in league with the patriotic spirit. Boss may be a good cow, but has she not outlived her usefulness? Does she pay is the most vital question at present.

It is hard to estimate the amount of money lost on our farms through plain sentiment. Our own personal experience proves this. On coming to the country my brother, whom we hadn't seen for a number of years, presented my mother with a cow. She had just come from the range in Montana. We thought her a beautiful cow, rather long in limb and slight of frame and as to her breeding it was as the boy remarked about his dog: "Mister I don't know what kind of a dog he isn't". She was a deer. No man had put hands on her. She was left to freeze until hungry and cold. She permitted herself to be put in the stable after her call came. She gave a good quantity of milk for a time. For fully eighteen years she lived and neither she nor her progeny could be kept in pastures. Jump! She could jump anything. That restless, uncontrollable spirit predominated through all. We have been milking as many as five of her own progeny at one time and I never knew one good milker. Just what we lost in dollars and cents would be hard to say, but it never entered our heads to sell her. Bob gave her to us.

When I was married father wanted to give me one of her calves, but my farsighted husband foresaw trouble and kindly refused. I see his wisdom now, for was I not brought up to worship that sacred cow? My father being Scotch "said naething," but when my boy arrived along comes dad with the cow tied to a wagon "for the laddie". We could not refuse, but when pasture, fences and gates were scornfully used a few times the cow was sold and money banked for the boy.

Just the other day a neighbor looking for a team of young horses remarked to me that he had three horses over nineteen years of age. His wife, he said, was a goat hand at keeping old favorites, but he had come to the conclusion it

ONTARIO WIND ENGINE & PUMP CO. LIMITED

# TORONTO HIP ROOF SILOS



**A TORONTO Silo has outstanding merits, the most exclusive of which are—extra capacity and airtight construction.**

The Hip Roof adds several tons capacity at practically no extra cost. It makes it possible to tramp the ensilage thoroughly round the sides right to the top of the walls.

Toronto Silos are airtight because the spruce staves are DOUBLE tongued and grooved. The air cannot penetrate the double barrier. The construction is as thoroughly good, with all woodwork impregnated with hot tar and creosote, so that the farmer with an eye to profit and better ensilage will decide on the TORONTO Silo. Send for the booklet to-day. Address

**Ontario Wind Engine & Pump Co., Limited**  
Atlantic Avenue • Toronto  
12 St. Antoine St., Montreal

**York County Holsteins**

At Auction

IN THEIR ANNUAL "QUALITY" SALE

AT RICHMOND HILL FAIR BUILDINGS

**Wednesday, May 15th, 1918**

SIXTY HEAD

Nearly all females fresh or due to freshen soon. A number of choice young heifers; a few bulls of excellent quality.

York County is well known as a Holstein centre. Our herd sires include a 33-lb. son of the great King Segis, a son, a full brother, and grandsons of the world's record cow, May Echo Sylvia and sons of King P.A. Canada.

York County has probably more thirty-pound cows than any other county in Canada, as well as several world's record cows.

We feel sure the satisfied buyers at previous sales and the determination of York County breeders to give satisfaction will, as before, insure the success of this sale.

SEND FOR CATALOGUE TO

**R. W. E. BURNABY,                      JEFFERSON, ONTARIO**

SALE COMMITTEE:

**R. W. E. BURNABY,                      R. F. HICKS,                      W. F. ELLIOTT**

**WALNUT GROVE HOLSTEINS**

I am offering a choice lot of bull calves, all sired by May Echo Champion, who is a full brother to the world's champion, May Echo Sylvia. All are from R.O.M. dams and good individuals. Also have the usual offering in Tamworth swine. C. R. JAMES. (Take Radial Cars from North Toronto) RICHMOND HILL, ONTARIO

**SILVER STREAM HOLSTEINS**

Present Offering—six extra well bred bull calves, sired by bulls with 34-lb. backing, and from tested dams, individually as good as their breeding. For fuller particulars and prices, write, or better come and see them. J. MOCK & SON, R. R. 1, TAVISTOCK, ONTARIO

When writing Advertisers please mention Advocate

would have to be "cut out". Probably, like ourselves, that conclusion should have been reached twenty years ago. Certainly one cannot now afford to keep "star boarders."

Put aside enough horses to run spring machinery and take stock of the culls. A little extra feed and curry comb and brush will work wonders for them. Sell if you get near value for them. Breed only your best stock. Test all cows' milk, and fatten poor ones. It is less trouble getting water out of a pump; one can use a wind-mill. Better have it stationary.

As to chickens, take stock of your flock. It's questionable if hens pay in their year. Get leg bands and mark this spring's chickens and so keep culling old and poor ones. Books on poultry raising can be had free from agricultural colleges. One must have good information now if ever.

What about those extra dogs and cats? Two cats are enough and one dog unless kept for wolves. Rats are easily dealt with if one has a little patience. Set a broad board and nail a chunk of cheese in the centre. Put a wall of Gillett's lye about eight inches from the cheese, all around, and believe me that cheese will last a long time. Rats will be more interested licking their legs than eating cheese. The lye kills rats quickly. This applies to mice as well. Put it under the floor or where hens can not reach it. Rodents are too expensive to keep.

No scrap of food should be wasted in barn or house. At the live stock meeting, held in Brandon recently, one farmer remarked that every house should be able to feed an 80 to 100 pound pig from kitchen scraps. That farmer didn't know some women. A close high board fence wouldn't keep that pig in if all he got was scraps from some houses. Personally, my pig would be a genuine razor back. J. M. H.

**Family Limitation Desired.**

Mrs. Norah Mulvaney met her friend, Mrs. Bridget Carr, who had in her arms her twelfth child.

"Arrah, now, Bridget", said Norah, "an' there ye are wid another little Carr in yer arms."

"Another it is, Mrs. Mulvaney," replied her friend, "an' it's me that's hoping 'tis the caboose."

**A NEW DAY**

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**HOLSTEIN-FRIED**

1 bull 2 years of from a 23 1/2 lb. bull 13 mos.; oth R. M. Holtby,

**For Milk, Butter**

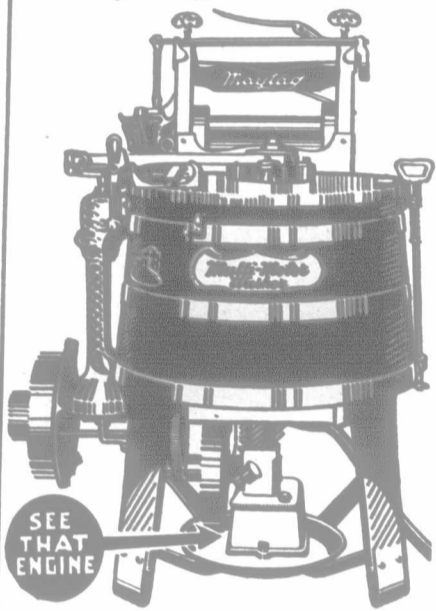
HOLSTEIN-FRIED W. A. Clemons, - Se

KING SEGIS P A 1/4 brother to the \$500 young bulls sired at ready for service. W. R. W. Walker & Son G. T. R., Pon

### A NEW! MAYTAG MONDAY

The old MONDAY with its washday worries becomes a NEW DAY of pleasant work for the woman who uses a

### Maytag Washer



For particulars, drop a card to:

**WHITES LIMITED**  
Collingwood, Ont.

### LIFT YOUR CORNS OFF WITH FINGERS

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

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

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

No pain, not a bit of soreness, either when applying Freezone or afterward, and it doesn't even irritate the skin. Hard corns, soft corns, or corns between the toes, also toughened calluses, just shrivel up and lift off so easy. It is wonderful! Seems magical! It works like a charm! Your druggist has Freezone. Ask him!



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FACTORY DISTRIBUTORS

### HOLSTEINS

1 bull 2 years old; 1 bull 18 mos. old, from a 23 1/2 lb. 3-year-old dam. One bull 13 mos.; others younger.  
**R. M. Holtby, Port Perry, Ont.**

### For Milk, Butter, Cheese, Veal Holstein Cows Stand Supreme

If you try just one animal you will very soon want more.

WRITE THE **HOLSTEIN-FRIESIAN ASSOCIATION**  
W. A. Clemons, - Secretary - St. George, Ont.

**KING SEGIS PONTIAC DUPLICATE**  
A 3/4 brother to the \$50,000 bull is the sire of our young bulls offered at present. Two of these are ready for service. Write us also for females.  
**R. W. Walker & Sons, Manchester Station, C.P.R., Port Perry, Ontario**

### The Community Church.

The Community Church is becoming a term of common parlance in these days. It behooves us therefore to give it consideration. There are two good words in the title—Community and Church. There is, to say the least, something very human about one of these and something very divine about the other. The one term comes to us laden with traditions of more or less glory and honor; the other name connotes hopes and possibilities for the future. These names stand well together. They have a vital though not an official connection with each other. The right kind of a church in a community is its salvation; the wrong kind would be its damnation.

Great changes are portended all over the world. From Greenland's icy mountains to Africa's sunny plains the leaven of freedom and autonomy is working. The old ideals are shattered. The old quilts are too narrow to cover the growing ambitions of men. The human family needs leadership in a greater degree than ever. It is not that men resent authority; it is the right kind of authority they want. A monarchy in a democracy seems to be the ideal for which the race is striving.

Truth is one. God is one. Revelation is one. There are many aspects, but harmony everywhere in fundamental things. What about the church? There is something fundamental about that too. But we have divided over the aspects. That is not surprising, however. Human beings are full of shortcomings. We are slow to learn; but we are learning. One of the big lessons we are now learning is our kinship in religion, and our common agreement on fundamental things. Hitherto we have leaned on our church creeds and confessions to carry us along. We believed what they believed, forgetting that after all these creeds were some one man's view of the truth that God has placed before each of us. The whole man and the whole truth are facing each other. The sectarian cannot speak for the community. The gospel message is for all people. If it is offered to a section of the world it cannot be offered right or understood right.

To come to some definite point let us say this—the time has come to face the proposition of a community church. Humanity never moves forward in an orderly, scheduled way. The few see the signs of a new day and press forward. The rest will come along. The time is now opportune for a forward move. The war has shaken us out of our ruts and nests. It was time to get out. We were perishing for lack of exercise. "Slothfulness casteth into a deep sleep."

Let us see then where we are at and what are the elements we must hold to as we go forward. If the community church idea means anything it means a great deal. It does not mean that we are going to get off easier. Democracy in politics and religion mean more responsibility, not less; more thought and sweat, not more ease and leisure.

The community church must have a deep reverence for the past. We cannot cut loose from our history. Past and present are organically connected. But reverence for the past does not mean that we are to carry it along and encumber ourselves with surplus baggage. The past is to instruct and inspire. History is a prophecy; we are here "that it might be fulfilled." The letter killeth. The spirit of the past, rightly appropriated, will give hope and life.

The community church must distinguish between essentials and non-essentials in religion. Christ appealed to men as men. We have been appealing to them as Americans, Europeans; as Protestant, as Roman Catholic. It is time we profited by the experiences of the generations and selected what is fundamental and cosmopolitan. If some are slow to get the right point of view, we must be patient. They have been long under the spell of the letter and the party ism.

The people and the truth must be trusted more. Some fear for the truth. Some fear God will be forgotten. Needless fears! If there had been any possibility of that, it would have happened long before we came on the stage of human action.

The church of the new day must recognize the diverse temperaments in men and make proper allowance for them. There are not so many types after all. Some communities as at present constituted have not more than two or three. There is a greater variety of opinion in

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If you had had an Ideal Green Feed Silo this last winter, your cows would have given 25 per cent more milk and your feed bills would have been 20 per cent less, in the bargain.

From this you can figure how much bigger your profits would have been, with milk at such high prices.

You can't remedy your oversight now, but you can prepare now to get all the milk you are entitled to, next winter.

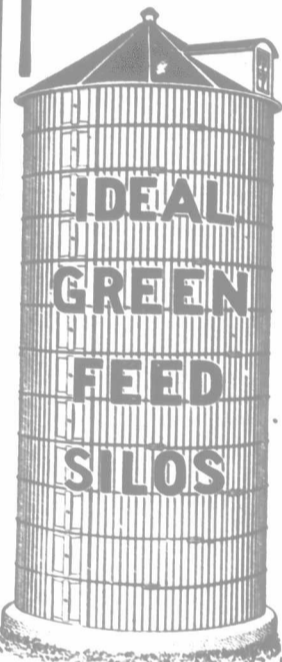
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Write today for our catalogue, which not only shows why the Ideal is the best silo you can buy, but contains much valuable information about silos and silage.

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Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos, Alpha Gas Engines, Alpha Churns and Butterworkers. Catalogues of any of our lines mailed upon request  
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50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



### CHOICE BULLS READY FOR SERVICE

No. 1—By a son of MAY ECHO SYLVIA. His two nearest dams (both Canadian champions), average 35.62 lbs. butter in seven days. Price \$1,000.  
No. 2—By a son of MAY ECHO SYLVIA. His two nearest dams (one a four-year-old), average 34.17 lbs. butter in seven days. Price \$600.  
Some extra choice young bull calves from \$200 to \$1,000. We have sold 37 bulls this winter.  
**HIGHLAND LAKE FARMS**  
R. W. E. Burnaby, (Farm at Stop 55, Yonge Street Radial) Jefferson, Ont.

### Hospital for Insane, Hamilton, Ont.

#### ONLY THREE BULLS LEFT

(1) A splendid fellow, more white than black, born May 1917. He is a grandson of Dutchland Sir Mona, and his dam is a half sister of the famous Toitilla of Riverside.  
(2) Born September and December, 1917, of A. I. R.O.P. dams.

APPLY TO SUPERINTENDENT.

### "GOING TO SELL 'EM"

We have 5 thirteen-months bulls and are going to let them go. Three are by Pontac Korndyke of Het Loo and brothers to Het Loo Pieterje (the world's champion heifer) while the other two are by King Segis Alcartra Spofford and Dutchland Colantha Sir Mona. Act quick if you want them.  
W. L. SHAW. (Electric cars from Toronto) Roycroft Farm, Newmarket, Ontario

### SUMMER HILL HOLSTEINS

A number of choicely-bred bulls. One a real show bull, beautifully marked, dam a 30.76 junior four-year-old; sire's dam 34.60. The three nearest dams average over 100 lbs. milk a day. Can spare a few good heifers.

**D. C. FLATT & SON, R. R. 2, HAMILTON, ONT.**

### DUMFRIES FARM HOLSTEINS

Present Offering—A few bull calves.

**S. G. & ERLE KITCHEN, ST. GEORGE, ONT.**


**Here's a Top-notch!** Sire, King Segis Walker; dam, 30-lb daughter of Pontiac Korndyke, who herself has a 30-lb. daughter. He is a youngster, but he'll grow.  
**A. A. FAREWELL, Oshawa, Ont.**

### RIDGEDALE STOCK FARM

offers for sale young bulls from high-testing dams, such as Lakeview Dutchland Wayne Rose, the highest producing cow of her age in the world. It will pay you to inspect these before buying.  
**DR. F. A. HESLOP, Prop., R. R. No. 1, FREEMAN, ONTARIO. CHAS. HESLOP, Manager**

### SOVEREIGN STOCK FARM

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

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**LAKESIDE AYRSHIRES**  
A choice selection of young bulls for sale from Record of Performance dams imported and Canadian bred.  
**SIRES:** Auchenbrain Sea Foam (Imp) 35758 many times grand champion.  
Fairfield Mains' Triumph (Imp.) 51137 a son of the noted Hobsland Perfect Piece.  
Write for catalogue.  
**Geo. H. Montgomery, Proprietor, Dominion Express Building, Montreal. D. McArthur, Manager, Phillipsburg, Que.**

**SUNNYSIDE AYRSHIRES**  
We have, at present, the strongest lot of young bulls we ever offered—1 by Hobsland Masterpiece, 1 by Sunnyside Matchless—and the others by our present herd sire, Sunnyside Masterpiece.  
**JOHN W. LOGAN, HOWICK STATION, QUE.**

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For imported or Canadian-bred Ayrshires, bulls or females, get my prices. My importations win wherever shown. Write me for one animal or a carload. St. Louis Station, Que.

Please mention this paper

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International GROFAST Calf Meal will raise three or four calves at the cost of raising one calf on new milk. Sell your Cream and still raise your calves, at a handsome profit. GROFAST is a complete and cheap scientific substitute for Milk. Endorsed by farmers everywhere. **Your dealer sells it. Write us for Booklet, "How you can Raise and Grow Calves at a Low Cost Without Milk."**

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**HILLHOUSE AYRSHIRES—F. H. Harris, Mt. Elgin, Ont.**

Headed by Burnside Lucky Master Swell, a combination of blood so hard to equal, being of the Masterpiece and Lucky Girl families, a combination which means quality, production and constitution. Ninety head to select from. Special offering—20 yearling heifers and 3 bulls. Inspection invited.

**KELO FARM R. O. P. AYRSHIRES.** Herd headed by Palmston Speculation Imp. We never had a stronger line-up of R. O. P. producers than we have at present. Our 1917-1918 young bulls are sure to please. **D. A. MacFarlane, Cars Cross-Ing, G. T. R., Athelstan N. Y. C.; Kelso, Que**

**JAS. B. ROSS, MEADOWVALE, ONTARIO,** for high-producing, show-yard AYRSHIRES. Herd headed by SNOW KING 47376, first-prize two-year bull at Toronto, 1917. Write me also for anything in Yorkshires.  
**Meadowvale P.O., Streetsville Station**

**GLADDEN HILL AYRSHIRES**  
Herd headed by Fairvue Milkman. Have one choice bull of serviceable age for sale—a 3rd-prize senior calf at Toronto, 1917—17 months old. Also a few females. Two Canadian-bred Clydesdale stallions from Imp. stock. **LAURIE BROS., AGINCOURT, ONT. C. N. R., G. T. R., C. P. R.**

the average large city church than in some whole towns with five or six churches in them.

The new church must be alert and aggressive, giving practical embodiment to the "goodwill" which it has been charged to exemplify before all men. It must demonstrate till "Gentiles come to its light and princes to the brightness of its rising." The new church must undertake the leadership of the people; it must undertake human nature. It must relate itself to the real life of the people and keep down the invidious distinctions between sacred and secular, religious and moral, ethics and politics, and so forth. In short it must lose its life and save the community.

R. O. ARMSTRONG.

**Limitations of Powers of Leave-of-Absence Boards.**

The following information concerning the powers of Leave-of-Absence Boards was obtained from Headquarters, Military District No. 1, and may be of interest to many who are liable for military service:

The Leave-of-Absence Boards are established for the purpose of dealing with the cases of men who have been ordered under the Military Service Act, to report for Military duty, but who think there is good reason why they should, nevertheless, be allowed to continue for a period in civil life. The grounds on which they seek this may be compassionate grounds or business grounds. The authority which established these Boards has, however, set limitations to their powers, some of which are as follows:

1. Applications not presented to the Commanding Officer of the 1st Depot Battalion, W. O. R. (the unit to which draftees are assigned) within one week after the man reports for duty, cannot be received.
2. Men surrendering or arrested as defaulters are no longer entitled to claim exemption.
3. Where applications for Leave-of-Absence are presented in cases which have been dealt with by the Tribunals established under the Act, the decision of the Tribunals should not be overridden by the Leave-of-Absence Boards, (except in case of farmers) unless, subsequent to such decision, circumstances have arisen which, had they existed at the time the case was considered by the Tribunal, would have justified the granting of exemption.
4. The foregoing paragraph does not apply to the case of farmers for the reason that in most instances neither the Local nor the Provincial Appeal Tribunals were aware of the seriousness of the food situation. Such cases may, therefore, be dealt with by the Leave-of-Absence Boards after the claims have been refused by the Local or Appeal Tribunals. The principles laid down by the Central Appeal Judge, however, must be strictly followed. Furthermore, if an individual case has been before the Central Appeal Judge and he has refused leave to appeal or has disallowed the claim for exemption, leave-of-absence should not be granted, unless, in the meantime, a serious change has occurred in the man's circumstances which would justify such action.
5. No application for leave is to be considered except in cases of extreme urgency.
6. All applications must be made in the first instance to the O. C., W. O. R., and must be accompanied by a statutory declaration setting out the facts relied on. The Declaration should also state what Tribunals have dealt with the matter and what their decisions were.
7. Many persons have been coming to London at their own expense to put in applications for such leave in cases which, under the above mentioned rules, were hopeless from the first and it is pointed out that a study of those rules may save such fruitless quests in future.
8. The employment of counsel before the Leave Board is quite needless and is now prohibited by Headquarters Order.

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**Cutter's**  
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Cutter's Blackleg Filtrate positively protects against Blackleg.

Cutter's Blackleg Aggressin, made directly from animal tissues, affords even greater protection and is recommended for Pure Breds.

Neither the Filtrate nor the Aggressin can possibly produce Blackleg in even the most susceptible animals since both are germ free.

Both have given 100% protection wherever used.

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10 dose pkge. Filtrate...\$2.00  
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N. B.—Cutter's Filtrate (a "cultural product" aggressin) is full 5 c.c. to the dose, as we believe that smaller doses, whether concentrated or not, afford less protection.

Write for booklet telling what germ free vaccines are and wherein "cultural product" Aggressins differ from Cutter's Aggressin made from animal tissues.

While these new "germ free vaccines" have advantages that should be known to every stockraiser, we see no reason for a quick change to them by stockraisers who have had satisfactory results from the use of

**CUTTER'S**  
**BLACKLEG PILLS**

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Year in and Year Out they have given better satisfaction than any other vaccine made, and as far as price and convenience of administration are concerned, they have all the advantage.

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Insist on Cutter products. If unobtainable, order direct. We pay shipping charges.

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**Linseed Oil Cake**

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**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.

**Education and the Franchise.**

The state has seen fit to spend enormous wealth in erecting public schools, in equipping them, in paying salaries; in fact, education is one place where the statesman or the politician can border on extravagance and not be called in question. Why? Because education is regarded as the essential condition of good citizenship. We want our people to be an educated people. Yet when we come to look into the requirements of our citizenship we find that education is not once mentioned except it is required that a man be sane enough to keep out of the asylum. Twenty-one years of age, three years in the country, a naturalized British subject, these are the requirements. I purposely leave out the fourth requirement, that of male sex, because it is rapidly being dropped. But which one of these three remaining qualifications is it which ensures that the person receiving the ballot has any real conception of its value or its use?

The following illustration will show how much intelligence is required to cast a vote. During the second last Federal campaign it happened in an important town in Alberta that several citizens who had been born in other lands were discussing the affairs of the day. "What's this procity thing that everybody is talking about?" asked one man. No one seemed to be able to offer an explanation. Another man came along just at that time and seeing the chance for some fun he said, "Why, Reciprocity is a new horse that is just beginning to make its mark. I tell you he's a dandy, boys, and in a few days there is going to be a great race between Reciprocity and Dan Patch and a good many believe that the colt will win." Within a few moments wagers were offered and accepted two to one, that Reciprocity would beat Dan Patch. Those men were naturalized citizens, and within a few days would cast their ballots to determine the trade relationships between Canada and the United States.

But to return to our subject. What relationship can there be established between education and the franchise? Briefly this—that there should be some educational standard required for the franchise. It would seem that there is a natural standard almost ready-made waiting only to be recognized. The state provides an education as far as the end of the public schools absolutely free; in fact, we go so far as to try to force every child to obtain this standard of education for this very reason that we think it will make him a better citizen. Moreover, this standard is very nearly uniform throughout the provinces. Why not standardize it and make it the basis of our franchise? Here, then, would be our ideal compulsory education law, an enforced attendance at school, not in order to evade the payment of a fine, but in order to secure the privileges of citizenship.

Of course such a change could not affect the standing of anyone who is already enfranchised, nor could such a change be brought in suddenly. Time would need to be given for all those who are now beyond the age of compulsory attendance at school and who have not obtained their entrance certificate, time would need to be given them to get their names on the voters' list before the change would come into effect. But boys and girls ten years of age and under could not lay any charge of injustice if they were told to-day that unless they passed the examination commonly known as the entrance examination, or its equivalent, they could not be recognized as enfranchised citizens of Canada.

Exceptions would, of course, have to be made. There are still pioneer districts where adequate school accommodation is impossible. Dispensation would have to be granted in such cases; sickness would have to be taken into consideration, but every policy of reform has to make room for exceptions. Only two classes would in reality be debarred from voting by this measure, those who can not learn, and those who will not learn.

An electorate where illiteracy is debarred would do away with a good many of the sources of political corruption. It may be argued that it is educated men who devise corrupt methods, nevertheless it is certain that an illiterate person is more readily misled than one who has an education—if not, why should we spend enormous amounts of money in

Made in Canada  
**Tarvia**  
Preserves Roads  
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Good enough for town streets,  
yet cheap enough for country roads

This street is just good macadam which has been "wear-proofed" by spraying with "Tarvia-B" from a modified sprinkling-cart.

Tarvia applied thus every three or four years is the cheapest known method of road maintenance. In fact, it lowers road costs so much as to make macadam more available than ever before for rural highways. The old fear that macadam would cost too much to maintain is removed—Tarvia makes the macadam endure.

The Tarvia actually enters into the road, cementing the stone together, making a tough, plastic surface over the whole road, excluding water and frost, and making it automobile-proof, dustless, mudless and durable.

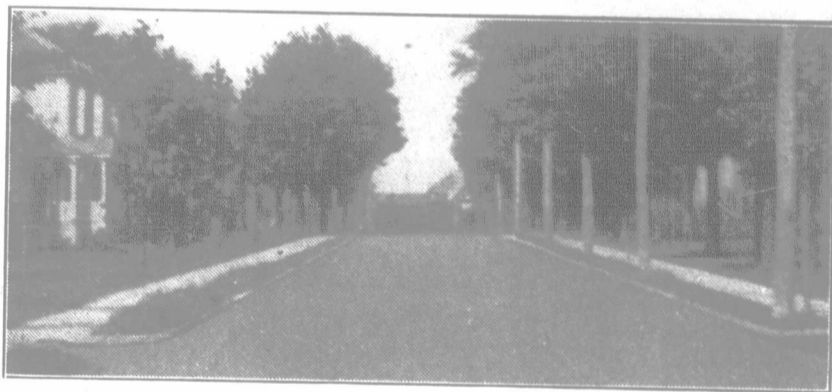
Thousands of miles of cross-country roads in the Dominion and the States are tarviated now as a matter of net economy.

The main roads of whole counties in the States have been converted to Tarvia. Some counties have fifty miles or more of tarviated rural roads that are just as good as the nice residential street in Woodstock shown below.

Booklet telling about the various Tarvia treatments free on request.

The **Barrett** Company  
LIMITED

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



Winnett Street, Woodstock, Ontario, treated with "Tarvia-B" in 1917

**JERSEYS**

"The Lord might have made a better butter cow than the Jersey, but he didn't."—[EX.-PRES. GREEN.]

According to the R. O. P. records, a four-year-old and a mature Jersey cow have each produced more butter in one year than any other cow of any breed in Canada. For information, apply to:

C. J. C. C., B. A. Bull, Sec. Brampton, Ont.

**BRAMPTON JERSEYS**

We bred and owned the dam, and imported the sire of the champion R.O.P. butter cow of Canada. We own the champion four-year-old R.O.P. butter cow of Canada. To make room for 1918 importation, expected to arrive in May, we are making special offerings of females and bulls, all ages.

B. H. BULL & SON BRAMPTON, ONTARIO

THE **WOODVIEW FARM** CANADA'S MOST BEAUTIFUL JERSEY HERD

Imported Champion Rower at its head. This bull, with his get, won first prize on the island of Jersey, 1914, second in 1916, and again first in 1917. Present offering—A few yearling heifers in calf to our great young bull, Woodview Bright Prince (7788), and bred from imported sires and dams. We show our work cows and work our show cows.

**RECORD OF PERFORMANCE JERSEYS**

CHOICE BULLS AND FEMALES. We have six young bulls of serviceable age, all from R.O.P. dams. Three are by our senior sire, Brampton Dairy Farmer, and three are by our junior sire, Brampton Bright Togo. Write for records. We also have females.

R. & A. H. BAIRD (G.T.R. Stations—New Hamburg, Bright) NEW HAMBURG, ONTARIO

**THE EDGELEY CHAMPION HERD OF JERSEYS**

Write us about your next herd sire. We now have sons of our present herd sire, Edgeley's Bright Prince, who is a son of Canada's champion butter cow, Sunbeam of Edgeley. Pay us a visit. Sunbeam of Edgeley is not the only high-record cow we have. We are pleased to show our herd at all times.

JAMES BAGG & SONS (Woodbridge, C.P.R., Concord, G.T.R.) EDGELEY, ONTARIO

**THE DON JERSEY HERD**

OFFERS:—Several young bulls, all of serviceable age, and 11 from R. O. P. dams. These are price of right. Interested parties should write or see these at once. We also have females of breeding age.

D. DUNCAN & SON, Todmorden P.O., Duncan Station, C.N.O.

## Saving Money by Spending.

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

# Renfrew

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

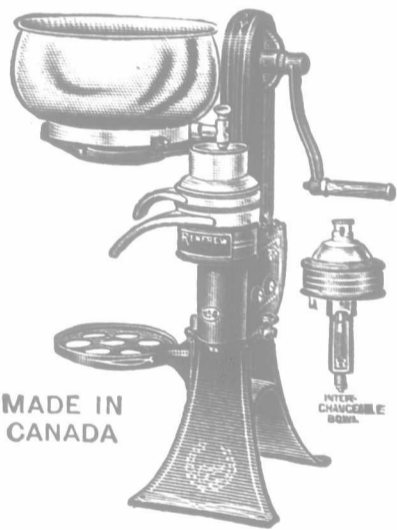
This sum saved is accepted by us as a first payment on a Renfrew. The saving soon pays for the machine—and then the \$48 per year for eight cows becomes extra profit.

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

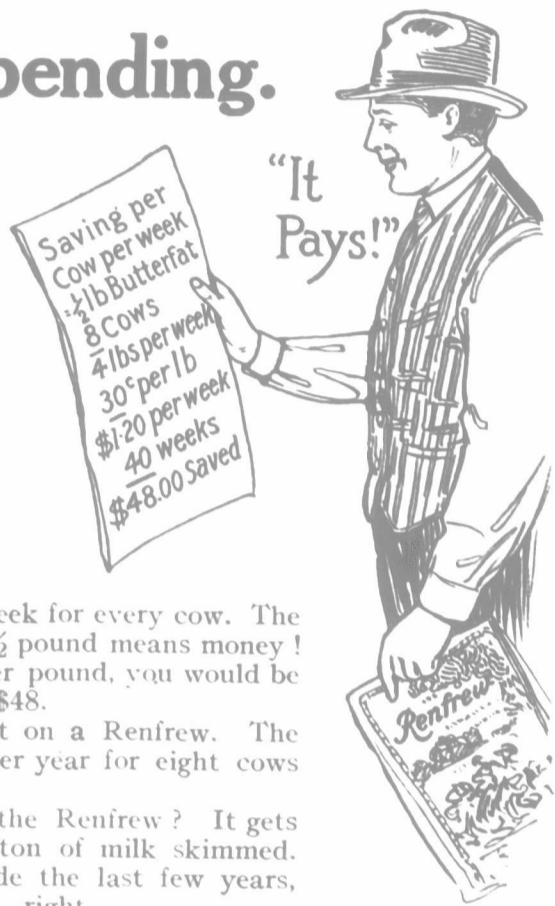
wouldn't it decide you right away to get the close-skimming Renfrew?

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

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



MADE IN CANADA



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

## The Renfrew Machinery Co., Limited

Head Office and Works: Renfrew, Ontario  
 Eastern Branch: Sussex, N.B. U.S.A. Branch: Milwaukee, Wis.  
 Agencies almost everywhere in Canada

### Kent or Romney Marsh Sheep

The hardest and best grazing mutton and wool sheep of Great Britain. Successfully acclimated wherever grazing sheep are required. Annual Ram Show and Sale, 300 head, Ashford, Kent, on Thursday and Friday, September 26th and 27th, 1918.

Descriptive pamphlet, list of breeders and all informat on from A. J. Burrows, 41 Bank Street, Ashford, Kent, England.

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

### Shropshires and Clydesdales

Besides my regular offering of ram and ewe shearlings, I have the three-year Clydesdale stallion, Cairnbrogie Heir 18299. Write quick, don't wait. W. H. PUGH, Myrtle Station, R. R., Ontario

### Morrison Tamworths and Shorthorns

Bred from the prizewinning herds of England. Tamworths, both sexes; boars from 2 to 12 months. Shorthorn bulls from 5 to 10 months old, reds and roans—landies. CHAS. CURRIE, Morrison, Ont.

### TAMWORTHS

Young sows bred for spring farrow and a nice lot of young boars for sale. Write: John W. Todd, R. R. No. 1, Corinth, Ontario

### Meadow Brook Yorkshires

Have a splendid offering of young stock to offer at reasonable prices. Write your wants to: G. W. MINERS, R. R. No. 3, EXETER, ONT.

### Sunnyside Chester Whites and Dorsets

In Chester Whites we have both sexes, any age, bred from our champion of many years. In Dorsets we have ram and ewe sired by our Toronto and Ontario champion and out of Toronto, London and Ontario champions. W. F. Wright & Son, Glenora, Ont.

### Credit Grange Farm Berkshires

Large lot of young stock, including a few bred ewes, butchers' stock of young boars and sows. J. B. PRYOR, Manager, Meadowdale, Ontario

### Beaver Medi Chester Whites

Write your wants to: M. ROBERTS & SONS, Beaver Medi Farm, Peterboro, Ont.



## WELDWOOD FARM YORKSHIRES

Four choice litters almost ready to wean. Orders filled in rotation as received.

WELDWOOD FARM

FARMER'S ADVOCATE, LONDON, ONTARIO

### ELMHURST LARGE ENGLISH BERKSHIRES

From the finest importation of sows, together with the stock boar, Suddon Torredor, we are prepared to sell 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

trying to make education possible for all?

The greatest difficulty would arise in determining the educational standing of the foreigner who would come to our country after such an act had been enforced. But the foreigner would have to be made to realize that ours is a franchise based on intelligence, and it would be necessary for him to prove his qualification either by certificate or by taking an examination. We are very determined in our ideas at the present time that the patronage system shall be done away with, and that men should be appointed to public positions on their merits. To this end civil service examinations have been instituted. No one feels that it is an unnatural request that a full grown man or woman should be asked to take those examinations before being given a position as a civil servant. Neither should it seem an unnatural request that a man should be asked to pass an examination to qualify for the position of an elector. One of the most abused of all the phases of patronage has been the handing out of naturalization papers to those who have been thoroughly incompetent to use them in the best interests of the country. The franchise of Canada should be placed on the same plane as we hope to place our civil service; the basis of qualification should be some recognized standard of efficiency.

It is humiliating for a statesman who wants to be fair and upright to face an illiterate section of his electorate, who can neither read nor write nor speak the English language, and who he knows would respond more readily to the sight of dollar bills than to the most profound reasoning. Why should we translate our national policies into a score of foreign languages in order to determine which policies we shall adopt? This is a part of the British Empire and the man who comes here to make this his home, who will not learn to speak or read our language, who does not avail himself of the opportunity to have his children educated in our ways free of cost, that man is not in a position to understand, much less is he qualified to determine what our political policies shall be.

Saskatchewan trustees are setting a splendid lead in demanding that the English language be taught in every school and in demanding that those who undertake the duties of trustees shall possess at least sufficient education to enable them to read and write the English language. What they have demanded of a trustee by way of education and intelligence is not too much to be demanded of any man before he is permitted to exercise the franchise as a citizen of Canada, and the future generation should be made to go further and attain the standard of education commonly known as the entrance examination.

C. CARROLL.

### Cheer Up.

BY W. E. VAPLON, COLORADO AGRICULTURAL COLLEGE.

For thirty days or more I've plowed to get my backyard garden plowed, but every afternoon it rains and every night I'm filled with pains to think that I have sown no seed to help the nation in its need. A third call bond I want to buy, but when I went to see the guy down at the bank to get the mon, he said, "You poor son-of-a-gun you haven't paid for number two, the interest on your note is due." This morning when I went to feed, my fowls, of ancient standard breed, I found the leader of the flock stretched on the floor dead as a rock; I raved and wildly tore my hair and gave myself to dark despair. And now they say we get no wheat and prices have advanced on meat; the butcher says, "no more dog scraps" my little chicks have got the gaps; I am so tired of getting bills, I feel like fleeing to the hills. The farmers say they'll raise less beets which means a double tax on sweets, and spuds are rotting by the ton and Kaiser Bill is on the run to cut the English from the French, to confiscate our Sammy's trench. But what's the use; a thousand years or so from now our salty tears will only be a little spot upon time's books, and we, forgot. The Sultan and his brother Bill will each his 6x3 box fill, and we who now are sore distressed will take it easy with the blest. From off his throne Mars will be hurled for Liberty will rule the world, and war will then be out of date, so cheer up friends, let's celebrate.

Earlies grown Bus. 4 Improv market prepaid Irish C Ripens suited Extra E tubers, flesh is Green believe ness is crown prepaid Gold Co The fles bag (90) When bu THE WILLIA KING ALSO AT DU "Specia Lo Great Safety

# RENNIE'S

## War Time Production Seeds

**T**HE farmer will be well advised who makes certain of a good crop of potatoes. In selecting your seed potatoes, get Rennie's—the best. We have secured a supply of good seed potatoes absolutely free from disease; but the supply is limited and we advise you to send your order right away.

### Seed Potatoes

**Earliest Six Weeks**—The Ohio type; very similar to potato now grown in the Northwest. Very prolific, and a first-class market sort. Bus., \$3.50; bag (90 lbs.), prepaid, \$4.99.

**Improved Early Ohio**—The earliest heavy yielding potato in the market to-day. It is the standard early potato. Bus., \$3.50; bag (90 lbs.), prepaid, \$4.99.

**Irish Cobbler**—Chunky, white-netted early potato of splendid quality. Ripens one week later than Improved Ohio. A splendid yielder, especially suited to dry climates. Bus., \$2.95; bag (90 lbs.), prepaid, \$3.95.

**Extra Early Eureka**—An extra early variety producing fine large tubers, of a shortened oblong form, thick through and with few eyes. The flesh is firm and of good flavor. Bus., \$2.95; bag (90 lbs.), prepaid, \$3.95.

**Green Mountain**—Its cropping qualities are phenomenal, and we believe it to be one of the heaviest yielding potatoes grown. Its productiveness is largely attributable to the uniform size of the potatoes, but its crowning merit is its superb cooking quality. Bus., \$2.75; bag (90 lbs.), prepaid, \$3.95.

**Gold Coin**—The eyes are small and there is but little waste in paring. The flesh is fine-grained, and cooks to a dry, floury whiteness. Bus., \$2.75; bag (90 lbs.), prepaid, \$3.95.

**Study Your Catalogue**

Our 1918 catalogue contains information that no farmer should be without. Watch especially the paragraphs enclosed in the star borders containing special values that cannot be beaten.

When buying from dealers insist on Rennie's Seeds.

THE WILLIAM **RENNIE** COMPANY LIMITED,  
KING & MARKET STS TORONTO  
ALSO AT MONTREAL WINNIPEG VANCOUVER

# DUNLOP TIRES

## "Special Tread" - "Traction Tread"

### Long in Service

More People buy  
**DUNLOP TIRES**  
because they have to  
buy them less often.

**Greatest Safety ::**



**Greatest Mileage**



## GIVE YOUR WIFE A SQUARE DEAL

**D**ON'T force her to carry water for drinking, cooking, washing, scrubbing, etc., but save her time, her health and her strength by installing an Empire Water Supply System, which furnishes a constant supply of pure, fresh water—direct from the well, spring or cistern—to any point about the house—or barn.

Always ready for instant use any hour of the day or night. Never freezes. Easy to install. Costs but little. The

## Empire WATER SUPPLY System

creates improve living conditions on the farm for every member of the family and helps you get and keep better farm help.

**WRITE FOR OUR FREE BOOKLET**

We want to tell you about the many advantages of the Empire System. Our Free Booklet gives descriptions and illustrations. We will also send you an Information Blank, which, when filled out, will enable us to send you full particulars and the cost of a system adapted to your particular needs.

Get posted—write us to-day.

**THE EMPIRE MANUFACTURING CO., LIMITED**

Head Office and Factory:  
London, Ontario

Branch Office and Warehouse  
119 Adelaide Street, West,  
Toronto, Ontario

Since 1914 the price of Hogs, of Cattle, of Wheat has more than doubled. The price of

# MILTON BRICK

has advanced VERY LITTLE. NOW is the time to improve your farm by building an attractive, warm, substantial Milton Brick house.

**MILTON PRESSED BRICK CO., LIMITED**  
Head Office: Milton, Ont. Toronto Office: 50 Adelaide St., West

## 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.  
HON. G. H. FERGUSON, Minister of Lands, Forests and Mines.

## Market Your Wool This Year Co-operatively

What co-operation is doing to raise prices and stabilize the market in Ontario

### Last Year—

About 300,000 pounds of wool were sold co-operatively in June at Guelph at new, high-record prices for Ontario. Before the sale wool was ranging anywhere from 5 cents to 20 cents per pound less than the average Guelph price. The very fact that a Co-operative Sale was in prospect, of course, tended to stiffen the market prices. It is safe and fair to say that the Sale influenced the wool prices at least 10 cents per pound in favor of the Ontario wool grower who sold through the Ontario Sheep Breeders' Association. That means \$30,000 more cash on the 300,000 pounds.

And that isn't all—as soon as the Co-operative Sale took place it fixed new high prices from which every grower benefitted. Ontario wool growers who sold their clip independently, after July, certainly got a higher price than they would if there had been no Sale—at least 10 cents per pound more. On a total of say another 300,000 pounds of wool that means extra cash amounting to another \$30,000.

If enriching the wool growers of Ontario in one season to the tune of \$60,000 isn't evidence of the value of Co-operative Wool selling, then what could be?

**Ontario Wool Growers—to a man, you are invited to send your Wool to Guelph for Co-operative Sale this year. If every one will get behind this movement it will simplify and encourage wool buying and put every one of you in touch with your final customer—and you know that always means more profits for you.**

### This Year—

With the experience of last year behind us we believe the farmers are justified in selling their Wool co-operatively through the Ontario Sheep Breeders' Association.

All Provincial Wool Growers' Associations are now united, forming the Canadian Co-operative Wool Growers, Limited. This Company will sell Wool direct to the manufacturers, thus bringing the farmer in direct touch with his final customer without the intervention of several middlemen—who, of course, must always have their profits.

If the bulk of the Wool in Ontario is marketed in this way there is an added inducement for buyers to bid on Ontario Wool.

The method of preparing the Wool for market by using paper twine in jute sacks ensures to the manufacturer a product put up in the best possible condition.

The fact that the wool is graded gives the buyer full information as to the product offered; he knows exactly what he is getting and is willing to pay full value for it.

By making application, the farmer can get full supplies and he can ship his wool without pre-paying the freight. As soon as the wool is received in Guelph it will be weighed and an advance payment of about 75% of the estimated value will be sent at once, and the balance after the sale of the wool.

Application form and full information, also twine and sacks will be furnished by your District Representative or by the Secretary of the Ontario Sheep Breeders' Association. R. W. Wade, Parliament Buildings, Toronto

### Some Pointers to be Observed When Shipping Wool to the Ontario Sheep Breeders' Association.

The fleece should be placed with the clipped surface down. Then fold in the sides and roll from each end to the centre, after having carefully removed the dung locks, and then tie with paper wool twine. Never tie the fleece with sisal or ordinary binder twine, and avoid tying with neck portion. The dung locks should be placed in a separate sack from the fleeces.

The fleeces should then be packed in wool sacks, or in case of small shipments of 15 fleeces or less use ordinary jute bran sacks, being certain the inside surface is clean.

The wool will be graded by wool experts of the Live Stock Branch, Ottawa, and will be sold through the medium of the Canadian Co-operative Wool Growers, Limited, which insures all profits to you.

A CHEQUE REPRESENTING AN ADVANCE OF ABOUT 75% OF THE APPRAISED MARKET VALUE OF THE WOOL WILL BE SENT IMMEDIATELY UPON RECEIPT OF THE WOOL. THE REMAINDER WILL BE SENT UPON COMPLETION OF THE SALE.

The Canadian Co-operative Wool Growers, Limited, in selling the Wool will charge only actual operating expenses.

For your information, the following are the Directors of the Ontario Sheep Breeders' Association: J. D. Brien, Ridgetown; James Douglas, Caledonia; E. Robson, Denfield; J. E. Cousins, Harriston; W. H. Beattie, Wilton Grove; Cecil Stobbs, Leamington; George L. Telfer, Paris; James Bowman, Guelph; H. M. Lee, Highgate; W. Whitelaw, Guelph; J. W. Springstead, Abingdon. The Officers are: President, James Douglas, Caledonia; Vice-President, George L. Telfer, Paris; Secretary, R. W. Wade, Parliament Buildings, Toronto.

The Ontario Department of Agriculture

Parliament Buildings, Toronto

SIR J. H. HEARST,  
Minister of Agriculture

DR. G. C. CREELMAN,  
Commissioner of Agriculture

