

1919
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PUBLISHED EVERY WEEK. \$1.50 PER YEAR.

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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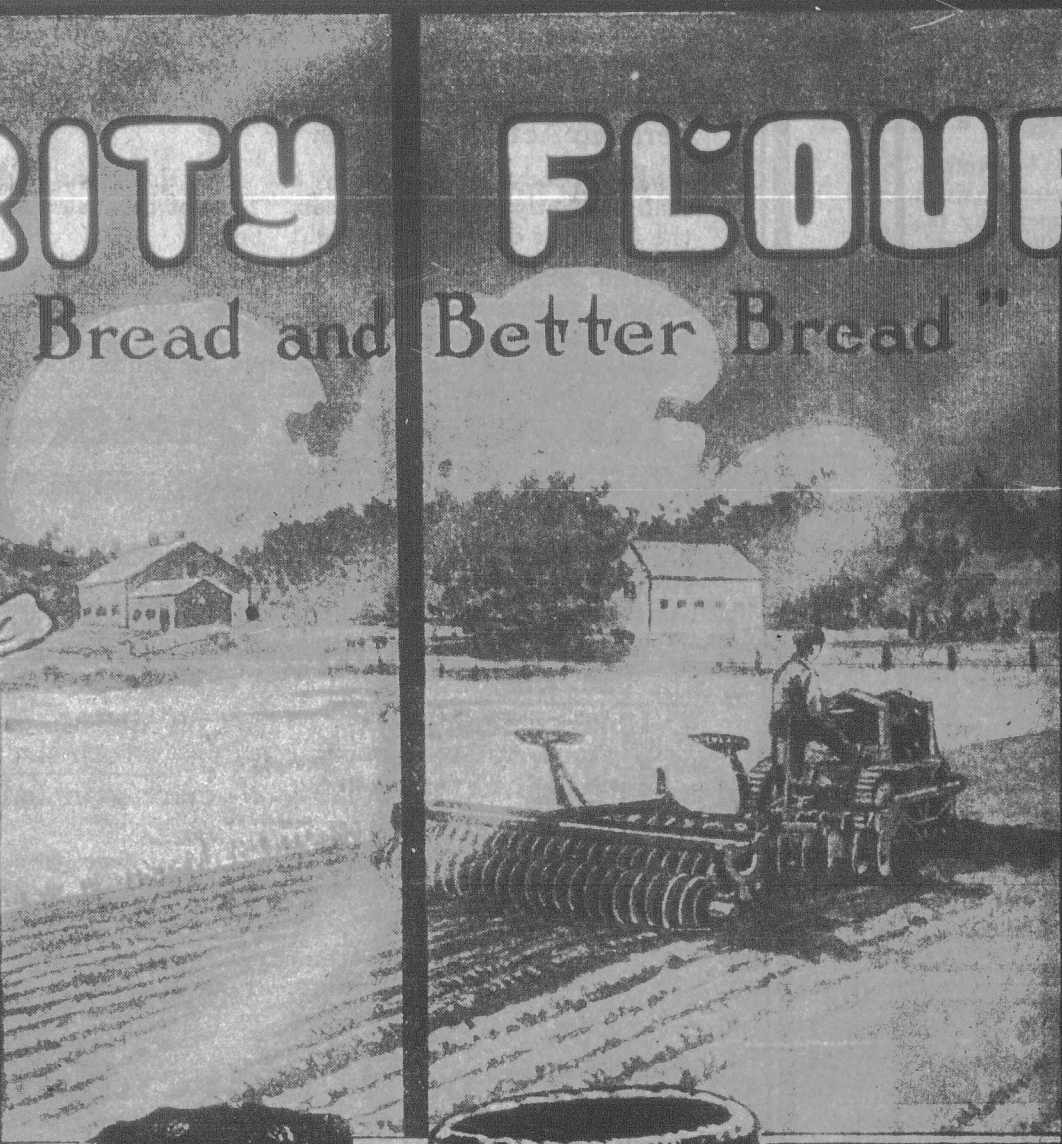
LIV.

LONDON, ONTARIO, OCTOBER 16, 1919.

No. 1412

PURITY FLOUR

"More Bread and Better Bread"



The best only is good enough
for those who farm.

PURITY FLOUR

AMERICA'S LEADING FUR HOUSE

Established 1853

TRAUGOTT SCHMIDT AND SONS

PAY THE MARKET'S HIGHEST MARK

You'll be sure of top prices if you ship your furs to us. **WE DO NOT QUOTE A "SLIDING SCALE" OF PRICES.** Instead we quote ONE **DEPENDABLE PRICE**—then stick to it. You can be absolutely positive of what you will get. We charge **NO COMMISSION** and pay you every cent your furs are worth.

WE PAY SHIPPING CHARGES

We pay all express or parcel post charges, saving you lots of money this way during the season. We send your check on next mail after furs are received, so there is no waiting or delay.

WRITE AT ONCE

For our valuable booklet "Successful Trapping"—tells you how to get the most money for your furs—dependable price-list, market news and shipping tags—all free.

FREE

SUCCESSFUL TRAPPING

Traugott Schmidt & Sons.
133 Monroe Ave. Detroit, Mich.

→ Ace High! ←

THE Dixie "Ace" Tractor has so many exclusive features that its superiority is unquestioned. It is the "Ace of Aces,"—acknowledged by everyone as setting an entirely new standard in tractor design and construction. The Dixie "Ace" leads—others follow.

You do not buy a tractor everyday—you cannot afford to do anything until you learn all about the Dixie "Ace,"—A better Tractor at a better price!



DIXIE "ACE"
MADE IN CANADA

Goes Like Sixty

Send for Free Tractor Book To-day.

GILSON Mfg. Co. Ltd.
879 York St., Guelph, Ont. 87

GILSON SILO FILLERS

THE GILSON SILO FILLER is the one blower which can be successfully operated with as little power as 4 h.p. There is a Gilson Silo Filler for every purpose—for the individual farmer, for the syndicate, and our large capacity machine for the custom jobber.

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.

Gilson Mfg. Co. Ltd.
399 York St., Guelph Ont.



MADE BY YOU

BUILDING OR REPAIRING

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

THE HALLIDAY COMPANY, LIMITED, HAMILTON CANADA

How to say "No!"

Mark Your Ballot with an X after Each Question under the word "No"

1	Are you in favour of the repeal of the Ontario Temperance Act?	YES	NO X
2	Are you in favour of the sale of light beer containing not more than two and fifty-one one hundredths per cent. alcohol weight measure through Government agencies and amendments to The Ontario Temperance Act to permit such sale?	YES	NO X
3	Are you in favour of the sale of light beer containing not more than two and fifty-one one hundredths per cent. alcohol weight measure in standard hotels in local municipalities that by a majority vote favour such sale and amendments to The Ontario Temperance Act to permit such sale?	YES	NO X
4	Are you in favour of the sale of spirituous and malt liquors through Government agencies and amendments to The Ontario Temperance Act to permit such sale?	YES	NO X

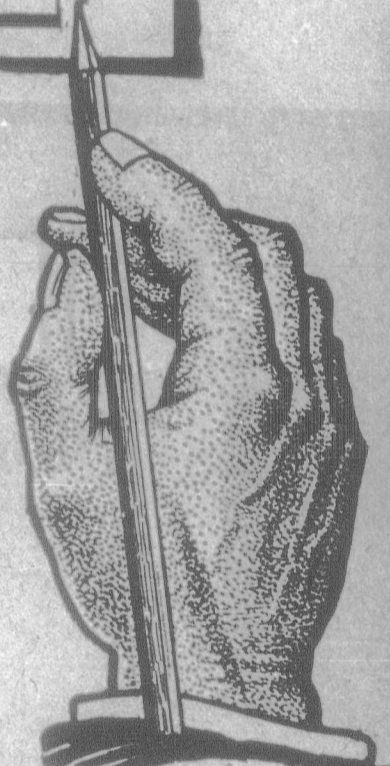
Above is an exact reproduction of the Referendum ballot, showing the correct way to Vote in order to sustain the Ontario Temperance Act as it stands.

Everybody should study the four questions and realize exactly what they mean. Do not be misled by the insidious demand for "light" beer.

The beer of the ballot is 118% stronger than the Ontario Temperance Act now allows, and over five times as strong as the limit allowed for beer defined as non-intoxicating in Great Britain and the United States.

Answer Each Question

1. Unless you vote on every question your ballot is spoiled.
2. You must mark your answer to each question with an "X" only. Anything else would spoil your ballot.
3. Unless a majority vote "No" on question 1 the bars will be restored and the sale of all kinds of intoxicants permitted.
4. Unless a majority vote "No" on questions 2, 3 and 4 the Ontario Temperance Act will become almost worthless.
5. The only SAFE course is to mark your ballot as shown above.



"No!"—Four Times—"No!"

No repeal; No government beer shops; No beer saloons; No government whiskey shops.—Four X's, each under the word "No."

Ontario Referendum Committee

JOHN MACDONALD, Chairman
D. A. DUNLAP, Treasurer
ANDREW S. GRANT, Vice-Chairman and Secretary
(100! Excelsior Life Bldg., Toronto)

"Goes Like Sixty"

This Engine Will Cost You Nothing



Gilson

You need an engine—get a Gilson on our new easy-payment plan, and it will pay for itself. You have the work for it to do this fall and winter; help is scarce and high-priced—save yourself a lot of worry, and enjoy that "Feeling of Security," which is such a definite part of the staunch, reliable Gilson Engine.

Gilson Engines have long enjoyed an indisputable reputation for dependability, power, simplicity and economy. This year finds us with an even more attractive proposition for the discriminating buyer. Prices of everything you have been buying have remarkably low prices. Write to-day for catalogue, price, and easy-payment plan, stating what else you are interested in.

Gilson Mfg. Co. Ltd., 259 York St., Guelph, Ont.

STORM WINDOWS & DOORS



SIZES to suit your openings. Fitted with glass. Safe delivery guaranteed.

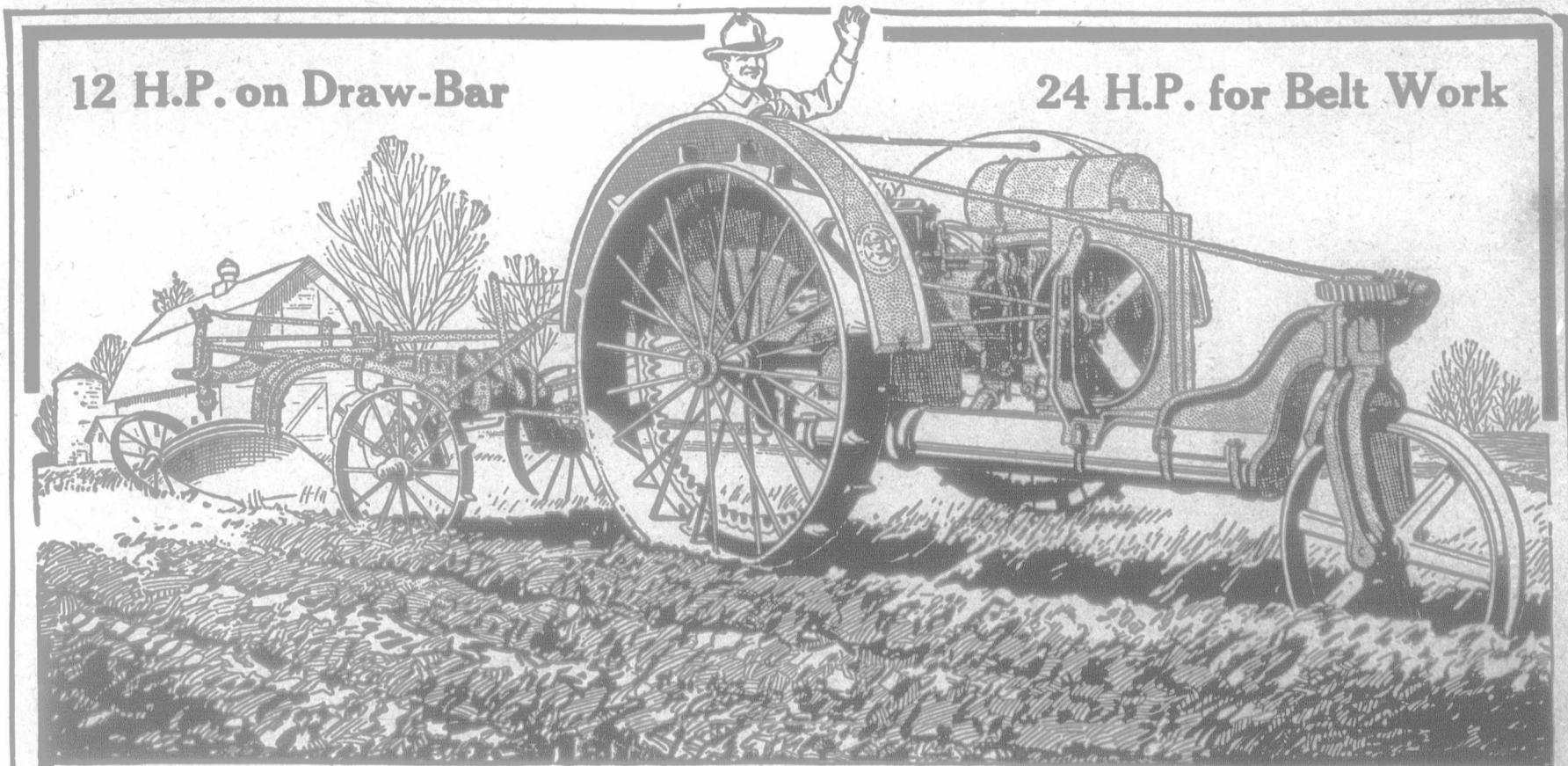
Write for Price List (B). Cut down fuel bills. Insure winter comfort.

The HALLIDAY COMPANY, Limited
HAMILTON FACTORY DISTRIBUTORS CANADA

STAMMERING

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

THE ARNOTT INSTITUTE
KITCHENER, CANADA



Leads the Field in Low Cost of Plowing

OVER and over again during the 1918 season the Happy Farmer Tractor demonstrated its superiority in contest after contest. In a hard test at Columbus, Ohio, this tractor established the record for low fuel consumption and low cost of plowing. Twenty tractors were in competition. Its nearest competitor was 21% higher. Standing alone the results of this test would mean little. So frequently are these performance records repeated, however, that they may be accepted as *standard*.

Happy Farmer TRACTOR

not only proves its high efficiency in the most exacting of tests, but it gives entire satisfaction year in and year out at lowest cost for power.

It has a remarkable kerosene motor designed to permit quick passage of the fuel mixture into the cylinders without condensation.—This engine gets the last kick of power out of cheap coal oil.

The ignition system works automatically and uses current only at the exact instant of contact, thus insuring long life of the batteries.

The simple transmission gears and differential gears, running in a bath of oil, waste least power

between motor and final drive. This means greater power on the draw-bar. Still further saving of power is assured by light weight.

These typical features of efficiency and economy mean exceptional horsepower on the draw-bar in relation to the size of the engine. It means more horsepower for your money.

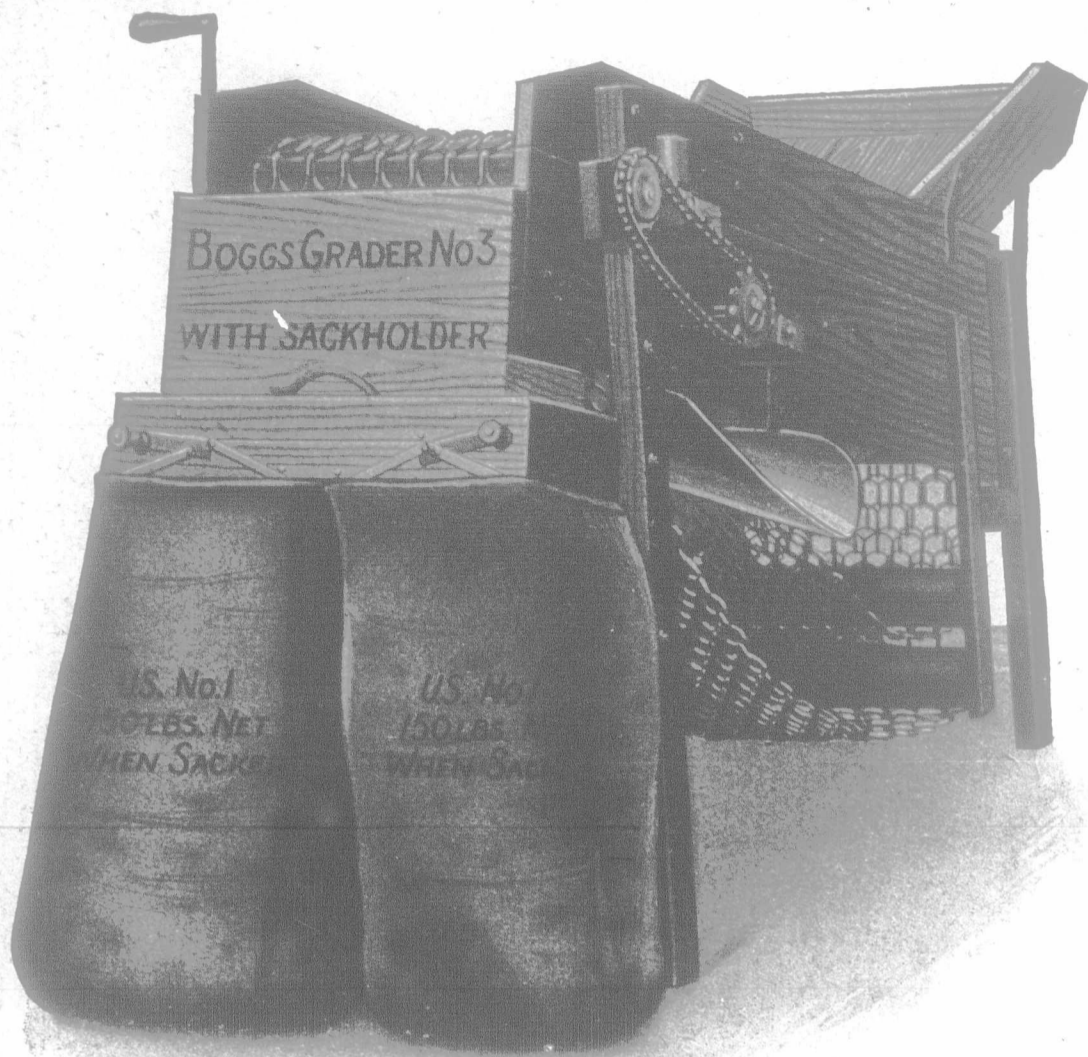
With only 3,700 lbs. weight it develops 2,000 lbs. draw-bar pull—pulls three 14-inch plow bottoms at an average depth of 8 inches. Why pay a big price for a heavy, cumbersome tractor when the light-weight Happy Farmer will do the work? And it will do it at the low first cost and low maintenance cost of a light tractor.



Our illustrated literature gives full particulars of the Happy Farmer Tractor's advantages. Write for it to-day.

The Renfrew Machinery Co., Limited, Head Office and Works **Renfrew, Ont.**
Agencies Almost Everywhere in Canada Eastern Branch, Sussex, N.B.

Other Lines: Renfrew Cream Separators—Renfrew Kerosene Engine—Renfrew 2,000 lb. Truck Scale.



Operated by hand or power

ABSOLUTELY GUARANTEED

Will last a lifetime.
Capacity—50 to 250 bbls. per hour.

Makes U. S. Government grades No. 1 and 2, besides eliminating culls and dirt at one operation.

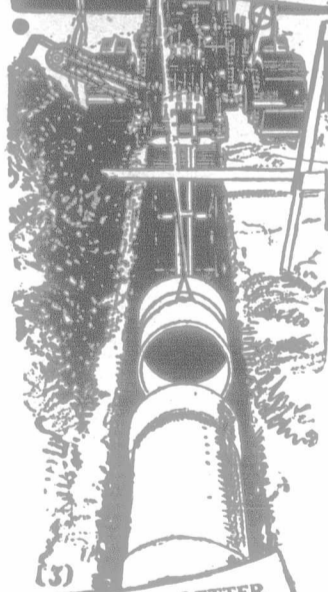
The Standard Grader

Labor is hard to get, so is money
"Boggs" saves labor, you save money

For details and prices address Dept. C.

BOGGS POTATO GRADER CO., Inc. - Atlanta, N. Y., U. S. A.

Opfer Got \$160 for 48 Hours Work



In every locality there's plenty to do. You'll be busy 7 to 10 months in the year. The income is from \$15 to \$20 a day, the expense little. Mr. Opfer is only one of many of our friends who are making that much and more with a

"A Perfect Trench at One Cut" **BUCKEYE** Traction Ditcher

With one helper you can dig more ditches each day than can fifteen men by hand. You make a perfect ditch at one cut. Farmers want traction ditching—it's better, can be done quicker and at less cost. When they know you have one, you'll be kept busy; you won't have to look for work, it will come to you. Many Buckeye owners have six to twelve months' work ahead. \$15 to \$20 daily is the net average earnings of hundreds of Buckeye owners. Here is a proposition that will give you a standing and make you a big profit each year.

Send for Free Book

A book of solid facts, tells how others are coining money, how they get the work, how much it costs to do it and all the details of operating.

Our service department is at your call to get you started and keep you going, to tell you the prices to charge and how to make big money with a BUCKEYE. Send now for this book, you can make big money too.

READ THIS LETTER
I excavated a trench 16,000 feet long, average depth 25 inches. I received 1c per lineal foot, or \$160 for the job, and operated the machine just 48 hours. The manager of that company had a length of 2,000 feet which he said would hold me down for the day. I just laughed at him. I tightened the governor to tightness and in 2 1/2 gain speed and in 2 1/2 hours and the 2,000 feet finished. Average of 800 feet per hour for the two and three-fourths hours at 1c per foot is \$2.00 per hour.
JOHN C. OPFER, Sandusky, O.

THE BUCKEYE TRACTION DITCHER CO.

203 Crystal Avenue

Findlay, Ohio



Finishes the Job

MANY tractors that do a fair job of plowing are not suited for work on soft plowed ground and fitting the seed bed.

But plowing quickly and well done, is not the end of the Cletrac's service. Because it travels on its own track, on top of the soil, you can disc, harrow, seed, harvest with a Cletrac.

20 h.p. on the belt pulley takes care of belt work—silo-filling, sawing wood, mixing cement, chopping feed. At every season of the year you can reduce costs and increase production with a Cletrac Tank-Type Tractor.

If you want to make more money out of farming, see the Cletrac. Write for our book "Selecting Your Tractor." It's free.

I made arrangements to see what a Cletrac Tractor could do under very bad conditions. We had found it was very little use of attempting it with horses. The little caterpillar tractor arrived at the field at 10 a.m. and began operations, stopped one hour at noon for lunch and worked till 5.30. Altogether being on the land for seven and a half hours, which included hitching and adjusting the plow, filling with kerosene and oil, also making detours around trees and boulders to avoid breaking the plow. It had plowed 8 acres of sod.

Yours truly,
J. H. Winters,
Manager Canadian Flax Co.

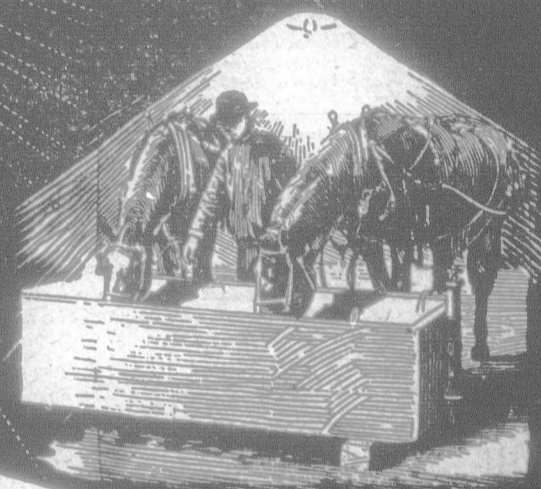
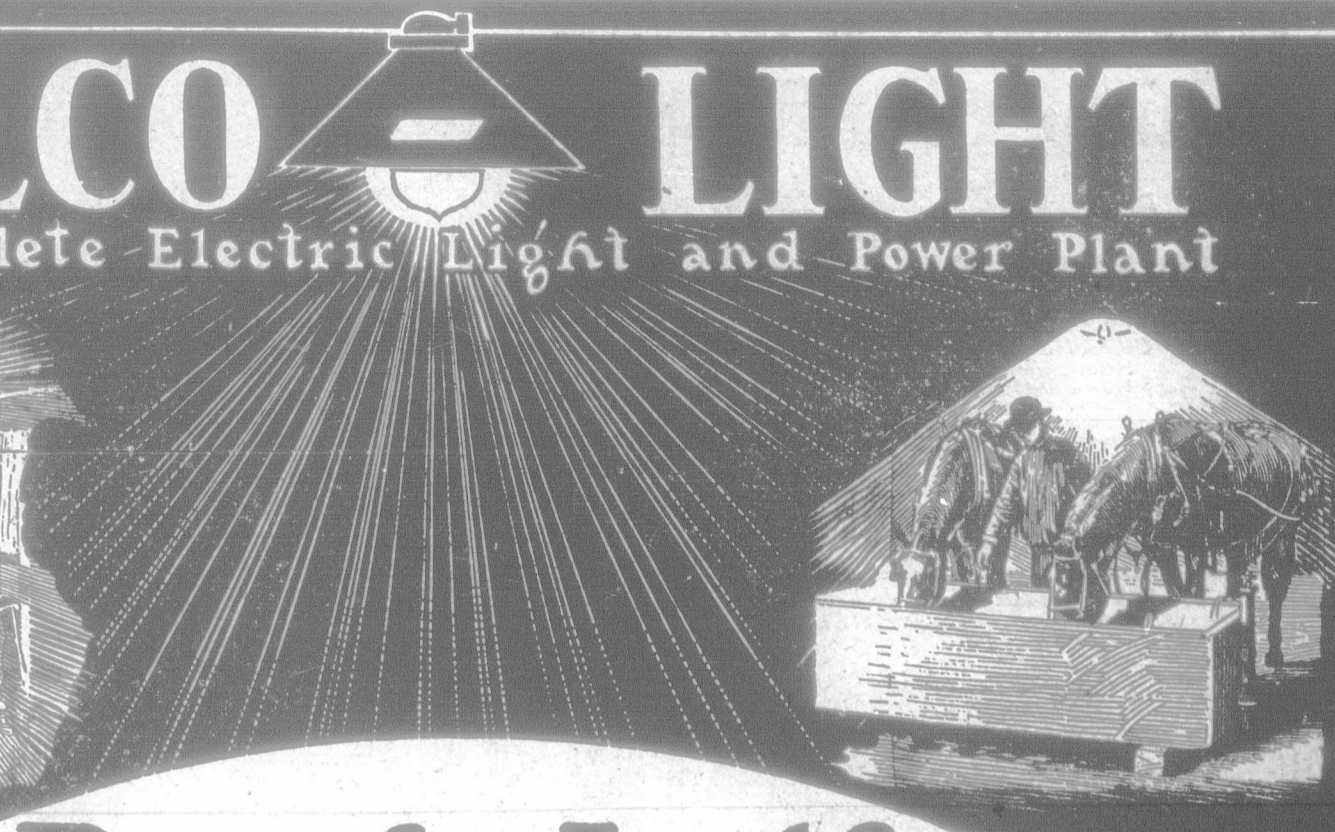
Cletrac The Cleveland Tractor Co. of Canada Limited
TANK-TYPE TRACTOR. Windsor - Ontario

DELCO LIGHT

The Complete Electric Light and Power Plant



Lights
the
Home



Pumps
the
Water

Pays for Itself

ANY one of over 75,000 users will tell you that Delco-Light pays for itself.

In money.

They will tell you that the pleasure and comfort of Delco-Light cost you nothing.

Delco-Light does work on the farm. Saves time for more productive things. Its electric power will, in most cases, save enough time to pay for the complete Delco-Light plant in three years.

The electric light you get free.

CHORES are non-productive work. Cut down chore time and you can do things worth money to you. Wm. Schneekloth says the electric power from his Delco-Light plant saves him 8½ hours a week on the churn, separator and washing machine alone—over 40 working days in a year. Think of the money he can make in those forty days.

On the Helms farm at Belleville they use Delco-Light power for the chores—in milking and feeding stock, in pumping water, in ironing and washing—and save 19 hours a week or about three months of one man's work in the year. Here's a hired man's work for three months which Delco-Light does. The cost of operating Delco-Light is less than the cost of oil for oil lamps.

But operating the small machinery around the farm is only a part of the work which Delco-Light does for you. Take the question of pumping water; with Delco-Light you can have water under pressure at taps anywhere on the farm. You can water stock easily and quickly. You can have hot and cold water in the house. S. W. Cooke and Son of Maysville, have a big herd of Holsteins. Delco-Light has pumped the water and done the milking for three years. They figure that their saving is not less than \$1,800. As Mr. Cooke says, they could pretty nearly afford a new Delco-Light plant every year. And remember this saving does not include the convenience and comfort and saving of electric lights.

J. H. Lackey raises Polled Jerseys and Poland China Hogs. He, also, needs a lot of water. His Delco-Light outfit enables him to get along without two men he formerly hired.

AROUND THE HOUSE there is a great big saving of time and work for your wife—time she can very well use for her chickens or her garden or her dressmaking. A. F. Hinnenkamp tells us that Delco-Light saves his wife 416 hours of housework a year by operating an electric iron, a vacuum sweeper and a washing machine. Besides—no lamps to clean, no matches to use, no danger of fire, lots of light.

C. F. Tressin adds in the time saved from cleaning lamps and makes a total of 547 hours a year. Think of all the things your wife could do with that extra seven weeks. And then you have electric light. You can't know the joy and comfort of electric light till you have experienced it. Just press a button and release a flood of bright, clean, safe light. No matches. No lamps. No danger. Delco-Light gives four times as much light from a gallon of coal oil as a lamp gives.

DELCO-LIGHT is a complete electric light and power plant, easy to install and easy to care for. It will give twenty-four-hour-a-day electric light and power service.

Delco-Light is direct-connected. There are no belts to slip, break or be replaced.

It is self-kranking. Pressing down a lever starts the engine.

It is air-cooled. There is no water to carry, to freeze or to boil away.

There is only one place to put oil.

A simple mixing valve regulates the fuel supply. There is no complicated carburetor.)

Ball and roller bearings cut down friction to a minimum.

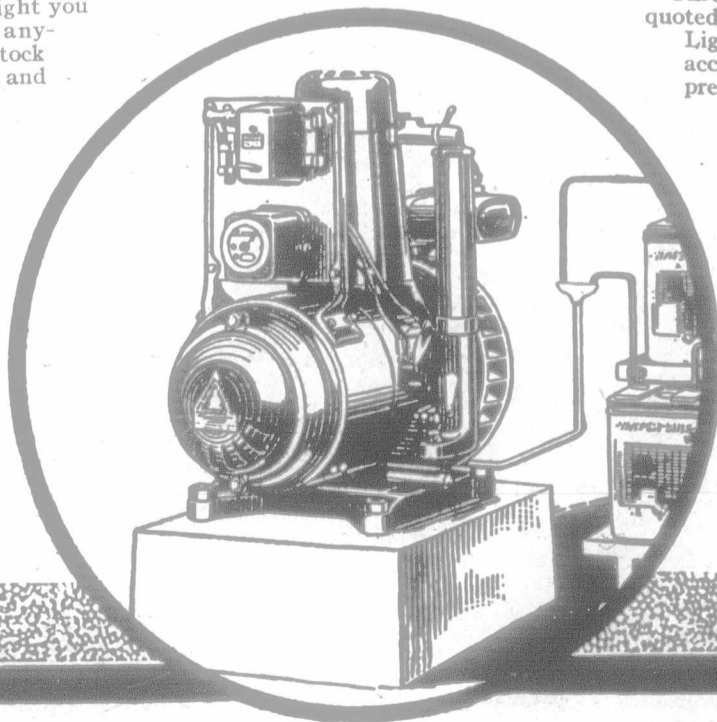
Long-life batteries mean economy.

You need to know more about Delco-Light. We have fully illustrated literature showing Delco-Light in operation. Write your nearest distributor for it.

Throughout this advertisement we have quoted from letters received from Delco-Light users. Each of these letters is accompanied by an affidavit. We have prepared a folder reproducing some of these letters, and with photographs of some farms where Delco-Light is used. Your nearest distributor will be glad to send this book to you.

The
Domestic Engineering Co.
Dayton, Ohio

Electrical Systems
Limited
TORONTO, ONT.



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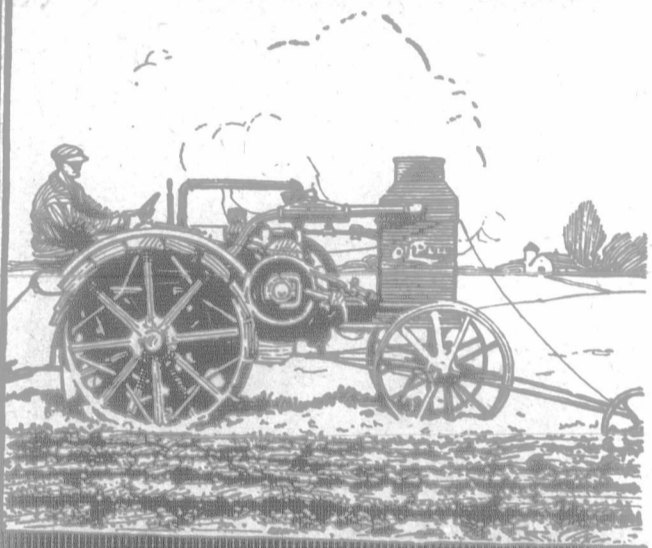
21 Points of Superiority

1. **Built complete in Advance-Rumely factories.**
2. **Kerosene burning**
Guaranteed in writing to burn kerosene successfully under all conditions, at all loads to its full rated brake horsepower.
3. **Oil cooled**
No evaporation—no refilling.
No freezing in coldest weather.
No rust—oil preserves metal.
No sediment—cooling system always open.
An even motor temperature.
4. **Kerosene motor**
Low speed—heavy duty.
Designed to burn kerosene—no makeshift.
Parts ground to thousandth of an inch.
5. **Unbreakable crankshaft**
Crankshaft built to U.S. naval specifications.
6. **High overload capacity**
Rating based upon only 80% of maximum—20% reserve power.
7. **Solid frame**
Hot riveted steel members.
No bends—no splices.
8. **Cut gear transmission**
Cut steel gears.
Enclosed and running in oil.
9. **Properly placed pulley**
On right hand side.
Driven directly off crankshaft.
No bevel gears—no intermediate gears.
10. **Governor controlled**
Speed of motor automatically regulated to meet varying loads.
11. **Shifting front axle**
Plenty of belt clearance.
No sacrifice in design.
12. **Large wheels**
Plenty of traction—easy to steer.
13. **Adjustable drawbar**
Fits all implements.
14. **Proper weight distribution**
No danger of turning over.
Front wheels stay put.
15. **Hyatt roller bearings**
Reduce friction—save power.
16. **Bosch magneto**
Highest quality—highest price.
Dependable service.
17. **Madison-Kipp lubricator**
Individual leads to all bearings.
18. **Roomy platform**
But a step from the ground.
19. **Easy to operate**
No complicated mechanism.
All levers within easy reach.
20. **Accessible**
All parts easy of access.
21. **Dependable service**
27 branch offices and warehouses.
Complete stocks machines and parts.

ADVANCE-RUMELY THRESHER CO., Inc.
La Porte, Indiana
Calgary, Alta. Regina, Sask.
Saskatoon, Sask. Winnipeg, Man.
48 Abell Street, Toronto, Ont.



make your own comparisons
— draw your own conclusions



SIMONDS

Crescent Ground
One-Man
Cross-Cut Saw
No. 228

This is the only "Crescent" Ground One-Man Saw on the market. It is accurately tapered from cutting edge to back, with an even gauge all along the tooth edge, it cuts easy and saws fast. The large opening in the double horn handle enables the operator to use mitten or glove in winter. Fully warranted.

Simonds Canada
Saw Co., Limited

St. Paul St.
& Acorn Ave.
MONTREAL, Que.
Vancouver, B.C., St. John, N.B.
6-91-5



TOWERS FISH BRAND REFLEX LONG COATS

"Takes the Wet Out of Rain."
Fish Brand Reflex Long Coats

THIS is a coat suitable for freight handlers, delivery men and all outside workers. Made of heavy material—double throughout, finished with corduroy lined collar—has inner cuffs in sleeves and inner breast piece. Made with the celebrated Reflex Edges, so that when the coat is buttoned, rain is prevented from running in at the front.



Tower Canadian Limited
Toronto, Halifax, Vancouver

KILL THE GERMS
Healthy fowls cannot exist in lice-infested, unsanitary quarters.
Pratt's Animal Dip and Poultry Disinfectant kills the roasts, nest boxes, dropping boards and runways of lice. Pleasant to use. Cost, when diluted, but a trifle over 2c per gallon. At your dealer's in 1 gal., 1/2 gal., and 1 qt. Cans. Write for FREE book on the Care of Poultry. P.D.-3
Pratt Food Co. of Can., Ltd.
Carlton Ave., Toronto

Yes sir!
I said
Snowflake
because I want
FULL STRENGTH
Ammonia

Snowflake Ammonia
Saves 90 Per Cent Soap
For Household and Disinfecting Purposes
S. F. Lawton & Co.
LONDON, ENGL.

MORE \$\$\$\$ FOR Your RAW FURS IN NEW YORK

My Prices Are Guaranteed

Beware of High Price lists sent out to deceive you and get your furs. The higher they quote the loss you get.

The secret of a square deal is honest grading at market prices. I guarantee my price until next list is issued and will not quote more than I can pay on an honest assortment.

Enjoy that peace of mind that comes to a shipper when he knows he is shipping to an honest firm.

You will make no mistake shipping to me to get you made my acquaintance.

HONEST GRADING HONEST PRICES
No commissions deducted. I pay correct to parcel post charges. Prompt returns guaranteed.

Write at once for Price List, while our furs are in season.

BENJAMIN DORMAN
147 W. 24th ST. NEW YORK

MONDS

Crescent Ground
One-Man
Cross-Cut Saw
No. 223

This is the only "Crescent" Ground One-Man Saw on the market. It is accurately tapered from cutting edge to back, with an even gauge all along the tooth edge, it cuts easy and saws fast. The large opening in the double horn handle enables the operator to use mitten or glove in winter. Fully warranted.

Simonds Canada
Saw Co., Limited

St. Paul St.
& Acorn Ave.
MONTREAL, Que.
Vancouver, B.C., St. John, N.B.
5-01-3

**FISH BRAND
LONG COATS**
"Wet Out of Rain."
Reflex Long Coats



**\$\$\$ FOR
RAW FURS
NEW YORK**

My Prices
Are Guaranteed

Beware of High Price lists
Receive you and get your list
I quote the loss you get.

A square deal is honest
and prices. I guarantee
I next list is issued
I quote more than I can pay
assortment.

space of mind that
I hope you will be
to an honest firm.

no mistake shopping to me and
my acquaintance

**ADING
ICES**

deducted. I pay
that they
are not.

list, while
live.

TIN DORMAN
NEW YORK

Traffic and Provincial Aid

CLASSIFICATION of roads and responsibility according to traffic, has been one of the chief factors of success in every country which has developed a general system of good roads. While township councils were alone responsible for all the roads within their boundaries, very little real progress was made in road improvement in Ontario.

A Step in Advance.

A STEP in advance was made, and better roads resulted, when roads were divided into two classes, and county councils were made responsible for roads carrying the heaviest market traffic. For a similar reason, Provincial Highways are a logical development in the road system.

20 Per Cent. of Roads Bear 80 Per Cent. of Traffic.

EVERY municipal councillor, experienced in the management of roads, knows that roads are expensive to maintain largely in proportion to the traffic over them. It is estimated that 20 per cent. of the roads comprise the heavily travelled market roads, and they carry 80 per cent. of all traffic.

ONTARIO has 42,000 miles of graded roads. County and Provincial roads comprise 10,000 miles, or nearly 25 per cent. the development of which it is evident, will take care of fully 80 per cent. of the traffic, and will therefore require an amount approaching 80 per cent. of the available road expenditure. To this large proportion of the road expenditure, Provincial aid and expenditure is definitely pledged.

Money Spent on Highways Justified.

AN advance programme of highway development is undoubtedly justifiable from a financial point of view. The basis of the Provincial expenditure on roads in Ontario is the revenue from motor vehicle permits. The Government has given the assurance that motor-car revenue will be devoted to this work. In 1916 the fees were substantially increased for that purpose. In 1919 the total revenue from all automobile sources amounts to over \$1,500,000. This in itself is evidence that an advanced programme is necessary.

Expenditure an Annual Charge.

ROAD expenditure should not be considered on the basis of the grand total to be spent in a term of twenty years—any more than should household expenses be estimated on that basis. It is an annual matter to be met by annual income. Township councils of Ontario are now spending over \$2,000,000 a year on their roads—or \$20,000,000 in a term of ten years. The

Province can face its obligations to roads annually in the same way.

COUNTY COUNCILS will probably make special expenditures on their market roads during the period of Reconstruction, and will be encouraged by the Highways Department to do so. But it is estimated that, on the present basis of Provincial subsidies, the normal demand on the Province for County roads will become about \$1,500,000 annually.

Province Pays 70 Per Cent. of Cost—Federal Government May Help.

THE charge on the Province for Provincial Highways is 70 per cent. of the outlay, and it is anticipated that Federal grants will relieve this to some extent. Without materially exceeding the estimated revenue from motor cars, it is apparent that a substantial annual expenditure on Provincial Highways is safely within the resources of the Province.

IT is to be remembered that the Highway Improvement Act, the principle of aid to County Roads, was adopted before revenue from motor cars was a factor in the situation, and for a period at least, until the basis of a system of highways has been established, Provincial expenditure should not necessarily be strictly limited to the income from motor cars.

No New Liability Incurred.

TO establish and assume a system of Provincial Highways does not in itself constitute a new Provincial liability. The highways are here now and must be maintained in any event. The Provincial expenditure will necessarily be limited to the amount which can reasonably be devoted to the work annually.

Dominion Government Will Aid with \$6,000,000.

THE Dominion Government has set aside \$20,000,000 as aid to highway improvement. Of this amount, Ontario's proportion will be nearly \$6,000,000. It will be granted only to work the maintenance of which will be fully guaranteed by the Province. To earn this amount in five years will require an annual Provincial expenditure of only \$1,800,000 by the Province and will result in an asset of \$15,000,000 value, on a well-distributed plan of Provincial Highways.

With Co-operation Success Assured.

THE co-operation of township councils county councils, urban councils, the Provincial Highway Department, with necessary public co-operation and support, will undoubtedly place Ontario in an enviable position as a country of Good Roads affording the farmers the most economical access to their markets.

Department of Public Highways, Ontario

HON. F. G. MACDIARMID,
Minister.

W. A. MCLEAN,
Deputy Minister.

The Expenditure of \$610,000,000

**How the last
Victory Loan
was spent**

**For
Demobilization**

**For Trade
Extension**

BEFORE buying Victory Bonds again you may want to know how Canada used the money you loaned her last year.

Canada borrowed the money to carry on the war and to provide credits for Great Britain and our Allies.

CONSIDERABLY more than one-half of the Victory Loan 1918 was spent on our soldiers. This included \$312,900,000, for paying them, feeding them, bringing them home, separation allowances to their dependents, maintenance of medical services and vocational training schools.

\$59,000,000 of the Victory Loan 1918 was paid on account of authorized Soldiers' gratuities.

\$9,000,000 was spent at Halifax for relief and reconstruction after the disaster.

* * * * *

Other disbursements were not, strictly speaking, expenditures, but National Re-investments.

To Great Britain for example:

\$173,500,000 was loaned for the purchase of our wheat and cereals.

\$9,000,000 for our fish.

\$30,000,000 for other Foodstuffs.
\$2,900,000 for Canadian-built ships.
\$5,500,000 to pay other British obligations in Canada.

Making in all \$220,900,000 advanced to Great Britain.

To our Allies we loaned \$8,200,000 for the purchase of Canadian foodstuffs, raw material and manufactured products.

The Re-investments will be paid back to Canada in due time, with interest.

These credits were absolutely necessary to secure the orders for Canada because cash purchases were impossible.

They have had the effect of tremendously helping agricultural and industrial workers to tide over the depression that would have followed the Armistice, had we not made these credit loans.

As far as money is concerned, 1919 has been, and is still—just as much a war year as 1918. Our main expenditures for war cannot be completed until well on into 1920. Thus another Victory Loan is necessary—*Get ready to buy.*

Victory Loan 1919

“Every Dollar Spent in Canada”

Issued by Canada's Victory Loan Committee
in co-operation with the Minister of Finance
of the Dominion of Canada.

The Farmer's Advocate and Home Magazine

PERSEVERE
AND
SUCCEED

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LIV.

LONDON, ONTARIO, OCTOBER 16, 1919.

1412

EDITORIAL.

Vote no.

Be a booster for the Victory Loan.

Keep the coulter sharp and the plowshare shining.

Support and help to elect a farmer candidate in your riding.

Mark your referendum ballot with an X; other marks will spoil it.

Get the root cellar ready—the last of the 1919 harvest is about ready to garner.

Politics, real politics, is becoming all together too popular among the masses to suit the professional politicians.

Prohibition has been tried and found a benefit to the Province. We cannot afford to go back to the bar or the liquor shop.

It takes a long time to build up a good herd or flock. Do not dispose of anything that will lower the standard of your breeding stock.

The Dominion Parliament has had a very uneventful session, but the members were successful in getting the "gratuity" asked for earlier in the year.

Monday next will be an eventful day in the Province of Ontario, and the ballots to be presented then should be marked with deliberate care and earnestness.

An optimist and booster may make some very serious mistakes, at times, but, on the whole, he is a valuable citizen. A knocker has little to commend him.

No one can complain very much about the weather this fall, and as a result of the openness there should be a very large proportion of the fall work accomplished.

A great many people to-day are spending too much time raving over the high cost of living and are laying off on real work that would have a tendency to bring down prices.

Every open investigation of food stuffs conducted vindicates the farmer and shows up his position more plainly to the carping critics who parrot-like pick up sentences and repeat them without knowing what they are talking about.

A writer in the United States refers to the deterioration of farm implements left unprotected as "The hundred million dollar junk pile." Are you contributing to the heap by leaving farm machinery outside? House the implements and give them a coat of paint and oil this fall.

The Victory Loan is a safe investment, and the interest rate is fair. There is no trouble about collections and one knows exactly when the principal will be paid. Five and one-half per cent. for an investment without any gamble about it is worth considering very seriously. Above all, however, the country needs funds, and one is contributing to his own prosperity as well as the stability of Canada when he subscribes to the next Victory Loan.

The Coming Election.

The forthcoming election on October 20 is fraught with many possibilities, and it is of unprecedented importance to the voters of Ontario. We have had many interesting elections, but none gave greater promise of affecting the future Government of this Province more than the one to be staged next Monday. Past contests have usually featured two parties where politics was the main issue, and the "sovereign" voter was impressed with that fact. There is an awakening now. Farmers are not alone in demanding that worthy principles be endorsed by the prospective candidates, and that progress rather than politics be the motto of the incoming Government. Partisanship dies hard, but the desire to return progressive, live men with high principles and a knowledge of provincial affairs characterizes the electors at this time as never before. As always "The Farmer's Advocate" is for good Government regardless of party, and if the best man wins in each riding we shall have as good a Government as is possible to build up from the timber available. We would like to see a large number of farmer candidates elected, but it would be rank partisanship on our part to endorse every U. F. O. man in the field. Those known to us personally, are good men worthy of a place in the Legislature, but there are many we do not know. There is one thing, however, for which the U. F. O. movement must be given credit, and that is the number of good farmers running on party tickets. It has been a long time indeed since so many farmers were set up as candidates by the two parties in the majority of rural constituencies, and for this the U. F. O. is largely responsible. Whether the farmer's party is large or small in the next Legislature they will have, at least, made sure the election of a considerable number of agriculturists. In one riding, which, by the way, has 12,000 urban votes there are three farmers in the field, and they all belong to the same farmer's club. This is only one of the many incidents peculiar to the election. Farmer voters should weigh the matter carefully in their minds and not allow complications, such as three-cornered fights, to confuse the issue so that in the end the farmer candidates will be counted down to defeat. We are entitled to a strong representation in the Legislature of Ontario, but we can only get it through the proper use of the ballot.

Support the Loan.

Every class in the community cannot be otherwise than vitally concerned in the success of the next Victory Loan. It is not safe at this critical time for any one class to say "let the other fellow do it." We must all pull together and make Canada secure against any financial disturbances, which, if they should arise, would act as a cold blanket spread over every industry in this country.

While the boys were overseas the people of Canada contributed liberally to the cause in funds and comforts, but there is an obligation which must still be acknowledged. Rapid demobilization, soldier settlement and re-establishment, as well as the gratuities and care of disabled men have used up a large share of the last loan, and will require more. No one would suggest letting the matter drop with the Armistice or the proclamation of peace. We must still carry on. More than \$200,000,000 was advanced in the form of credit to great Britain out of the last Victory Loan for the purchase of Canadian goods which were not required here. This money was spent in Canada for cheese, hog products, grain and other agricultural products for which we had to find a market. A portion of the next Loan is to be used for the same purpose, and the money will be spent at home.

The country has enormous obligations which must be met. Other borrowing markets are closed. There

is only one thing left to do, and that is finance ourselves, which we are quite well qualified to do. It is no time now to argue regarding what would have been a wiser plan in the past. We have a situation to meet, and Canadians will meet it.

How It Works Out.

The warning has been sounded many times that any reduction in the price of food stuffs hits back at the actual producer with a great deal more force than it affects the agents who take part in its distribution. Action has been taken to the knowledge of us all in Canada, United States and Great Britain, and, strange as it may seem, the agitation in United States and Britain has affected prices here more, perhaps, than anything done in this country to lower the cost of living.

The first commodity to be dealt with is food; while not nearly so important as some other commodities such as coal, clothing and rents in the cities, it is constantly before the public, and any reduction in price will be more spectacular and make the price-reducers apparently more worthy of their hire.

Let us, for a moment, turn to the United States. A short time ago a war on food prices was started. Wholesale seizures of stored food took place. What happened? In the Chicago stock yards the packers began to buy light on hogs. The prices started down. The packers quit buying altogether, bringing about a drop of \$4.00 in one day. On August 13, hogs sold at \$22.40. On August 29, hogs sold at \$16.75, a drop of \$5.65 in a little over two weeks; the greatest drop that ever took place in that great market in a similar time. Cattle are also down and grain prices are also lower. There has been a slight reduction in food prices to the consumer, but it does not at all compare with the reduction made to the primary producer. Coupled with this there has been no reduction in price of the main commodities entailed in production.

The action of the British Government, combined with an almost world-wide determination to give the people cheaper food and, at the same time, maintain the wage schedule, has affected prices here in Canada to a very material extent. As an instance, hogs and cheese may be cited, but the reduction has been felt, so far, only by the farmer.

The cry of the Roman rabble was "Bread and the circus." That is the cry of the people to-day in a different form. The Roman Government, to appease the rabble, gave the people free bread and free entertainment. Without understanding the importance of agriculture the Governments everywhere are trying to appease the cry of the rabble. In Great Britain the Government is even paying part of the cost of bread. To force down prices of foods here below cost of production will be to make the farmers pay part of the cost of food. Already what brought about the downfall of Rome is happening here. The Roman Government, like present Governments, failed to understand certain fundamental economic laws, and the Italian farmers quit slaving in a farm, and went to Rome where there was provided free food and free entertainment.

The people in our cities to-day are clamoring for higher wages and higher profits and shorter hours, that they may live better and have more time for play. The people from the country are drifting to the city. Census statistics show this most clearly. The authorities in this country seem ever ready to heed the popular demand in towns and cities, and strangely enough the Board of Commerce first trained their big guns on food stuffs. We understand, however, that they have been shown the folly of their ways, and will, in the future, direct their attention to certain lines that will stand investigating.

After all is said and done, the duty of adjusting conditions and making laws that bear upon all with

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equal fairness is the work of Governments. When all classes are fairly represented in the governments, principles of fair-play and justice must be the meeting ground for all, impartiality to all classes must be the rule, and honest-to-goodness work and thrift will be practiced as well as preached. Production will cure the ills of all nations, but the action that has been taken and the salve that has been applied only induces sickness and discourages work. If every member of the House of Commons, the Government, and the Board of Commerce would spend one week through the towns and cities of Canada preaching work, the need of it, and the value of it, we would soon have a volume of production and a state of mind that would stamp out this epidemic of billiousness and make the nation well.

Real Progress.

BY ALLAN MCDIARMID.

In talking with a friend some time ago I used the word "progress." "There," he said, "is the best word there is in the English Language."

And many times since, in recalling his remark, I have thought how close he was to the truth. Occasionally we hear people wondering what this life of ours is all about and what we are here in this world for, anyway. Well, the best answer seems to be in that one word—**progress**. It's not hard to see that it takes first place with Nature in the working out of her plan. Universal development appears to be her object.

In itself development cannot be the last word in the scheme of things. We must be in the process of being developed for some ultimate destiny the nature of which we are not yet able to conceive of. But it isn't necessary, probably, for us to know so much of what the future has in store for us as that. All we need to know, just now, is that it's very important for us to learn something of value every day and to have every year of our lives a good long step in advance of the one that went before it.

But whether we want to or not it hardly seems possible for us to fight this universal law by being very easy-going; or lazy, in other words. As I heard it expressed not long ago: "Nature doesn't intend to let us become contented. She has a work in the world, which, for some blind reason, she wants done, and she stings us with discontent until we do it."

Now Nature not only keeps prodding us along in this way and seeing to it that we stay on the job, but every little while she gives us some special opportunity to boost ourselves and this old world further along at one jump than it has been the habit of going along at one regular jog-trot. The war we have just been through

was one of these opportunities. In the matter of time we are still too close to it to be able to see very clearly just what it has meant and may mean to the world. But world conditions made it necessary and, although we seem to have not yet entirely recovered from our sickness, I believe it was part of the treatment that will finally lead to our complete recovery. It is natural for us to be sensitive to whatever is not just as it should be at the present time, and to forget to think of how much worse things might be, when we consider the brutal instincts with which so large a part of humanity is still endowed. The war has not yet done all, in the way of reforming this old world, that some of us hoped for. Perhaps it was only a preliminary to the general class-war that some prophets tell us is at hand. Certainly the present strikes and world-wide unrest indicate something wrong below the surface, and we are beginning to become acquainted with Nature's way of working off the trouble and getting back to normal. While we were in the actual process of taking our medicine, a couple of years ago, it seemed as though a wave of reform was sweeping over everything and everybody. If we are relapsing into our old habits and nature it must be because we stopped the treatment too soon. That means another dose of the medicine. In other words, we will have another opportunity to bring this world a step nearer the happy destiny it was meant that it should reach. And we must reach it some time. The serious thing about it is that it depends very largely on ourselves when that time shall be. We certainly don't want to be wanderers in a half-finished world like this forever. So, if we haven't profited to the extent we should have from the lessons of our great war, let's see to it that we don't waste any more time or miss further chances to get the most out of what the immediate future has in store for us.

One of the great opportunities of our present lives is upon us right now. There would be little good in my going into a discussion of the liquor business and retailing the arguments that are generally used against it. We all know them by heart. It's not a case, with most of us, of not knowing the right and wrong of the matter. It's rather a case of indifference that has a tendency to make us neglect this great chance to help the world along by voting to forbid a trade that makes it hard for so many men to do right and so easy for them to do wrong. When the hardship and suffering of the war was upon us we were practically agreed as to the waste and immorality that went with the sale of liquor and our Government passed a law against it. If we do it now, and without the compelling force of war, it should be something to our credit, and the question of Progress, so far as Ontario is concerned, will be pretty well settled in the mind of every man who has the welfare of his country at heart, and who has given the matter the thought it deserves.

There has been some talk of "liberty" in connection with the above subject, but I guess we all know that there is no man so free as he who has gotten rid of all his bad habits, and that is the kind of "liberty" we should want, and help to get, for others.

So, talking of Opportunity again, let us not miss this chance to give things another little push ahead by getting in our vote next week for a continuation of present good conditions, or for any better that can be had.

We've all found it rather hard at some time in our lives, probably, to say "No." But if we say it next Monday and say it four times in succession the result will likely be worth the effort.

I've heard it said that "every knock is a boost," so now is the time to knock out the trade in whiskey and other poor thirst-quenchers of a like nature, and to give a "boost" to industry, order and progress. Don't miss the Opportunity.

Nature's Diary.

A. B. KLUGH, M.A.

Nature in Poetry, No. 7.—Flowers.

Very naturally the references to flowers in poetry are innumerable. If we eliminate all references to cultivated flowers, and also all passages in which flowers are mentioned merely incidentally, we still have a very large number of passages dealing with flowers.

A good deal of the poetry dealing with flowers is marked by gross anthropocentrism, that is, implies that flowers exist solely to gratify man's aesthetic taste. This is shown in the lines in Gray's elegy:—

"Full many a flower is born to blush unseen
And waste its sweetness on the desert air."

To the naturalist it is apparent that no "sweetness" is "wasted" as long as the flower is thus able to attract insects and thus become pollinated. The anthropocentric idea perhaps reaches its climax in Thackeray's "Song of the Violet":—

"A humble flower long time I pined
Upon the solitary plain
And trembled at the angry wind,
And shrank before the bitter rain,
And oh! 't was in a blessed hour
A passing wanderer chanced to see
And, pitying the lonely flower
To stoop and gather me."

The whole idea of the violet fearing the rain upon which it depended for its life and rejoicing in the destroying hand of man is so absurd as to make one wonder how a poet could write such twaddle.

In "Foresight" Wordsworth says:—

"Daisies leave no fruit behind
When the pretty florets fall.
Pluck them and another year
As many will be blowing here."

which may be good poetry, but is neither good botany nor common sense, and is obviously untrue since daisies do leave fruit behind "when the pretty florets fall."

Wordsworth reveals the antropomorphic viewpoint, or the attributing of human characteristics to forms of life other than man in "Early Spring":—

"Through primrose tufts, in that green bower,
The periwinkle trailed its wreaths,
And 'tis my faith that every flower
Enjoys the air it breathes."

In "To the Small Celandine" Wordsworth says:—

"Ill befall the yellow flowers
Children of the flaring hours."

It is rather hard for the lover of nature to see why ill should befall any flower, yellow or otherwise, and if he reflects for a moment he will see what a gap would be left in the floral adornment of our autumn landscape if ill should befall the yellow flowers, and the golden-rod and other yellow flowers should be completely eliminated. He is more in sympathy with Whittier when in "Among the Hills" he says:—

"Heavy with sunshine droops the golden rod."

Sarah Curzon, one of our Canadian poets, in "Invocation to Rain" has given us one of the most accurate yet beautiful descriptions of a flower to be found in the whole realm of poetry. Writing of the Squirrel-corn, sometimes known as Dielytra, she says:—

"The Dielytra puts her necklace on
Of pearly pendants, topaz-tipped, or rose,"

and in the same poem she thus excellently characterizes some of our spring flowers:—

"Tender Hepaticas peep forth, and mottled leaves
Of Yellow Dog's-tooth vie with curly fronds."

"Of feathery ferns," in Bryant "The Old Man's Counsel", gives us the following fine piece of floral description:—

"Within the woods
Whose young and half-transparent leaves scarce cast
A shade, gay circles of anemones
Danced on their stalks; the Shadbush, white with
flowers,
Brightened the glens."

In "The Yellow Violet" Bryant's description is not so happy, he says:—

"When beechen buds begin to swell
And woods the bluebird's warble know
The yellow violet's modest bell
Peeps from the last years leaves below."

The expression "modest bell" is rather inapt, as no violet has a bell-shaped corolla.

Bryant's description of the Painted Cup in the poem of that name:—

"Scarlet tufts
Are glowing in the green, like flakes of fire",
is decidedly good.

Dora Goodale's verse "Wild Clematis" is an excellent description of the habitat and habit of growth of this plant:—

"Where the woodland streamlets flow
Gushing down a rocky bed,
Where the tangled alders grow
Lightly meeting over head,
When the fullest August days
Give the richness that they know,
Then the Wild Clematis comes
With her wreath of tangled blooms
Reaching high and drooping low."

Sarah Davis in "Summer Song" thus describes the haunts of the Indian Pipe:—

"Where the long slant rays are beaming
Where the shadows cool are dreaming
Pale the Indian Pipes are gleaming."

Charles G. D. Roberts in "The Solitary Woodsman" gives a good picture of the Bunch-berry and at the same time reveals that he writes of the Maritime Provinces:—

"When the Bunch-berries emboss—
Scarlet beads—the roadside moss."

Whittier gives us a charming description of the Witch-hazel in "Hazel Blossom":—

"The summer songs have died away
And withered in the footpath lie
The fallen leaves, but yesterday
With ruby and with topaz gay."

Yet through the gray and sombre wood
Against the dusk of fir and pine
Last of the flower sisterhood
The hazel's yellow blossoms shine."

THE HORSE.

Hereditary Unsoundness in Horses.

An unsound horse is always sold at a discount when the purchaser detects the blemish. It would, therefore, seem like utter folly to use as breeding stock either sire or dam that is marred by an hereditary unsoundness. Horses sound in "limb and wind" are the only kind that can be raised profitably so it is unwise indeed to breed from parentage that possess defects classed as hereditary. The Stallion Enrolment Board in Ontario has been on the lookout for horses showing defects that might be transmitted to their progeny and in this way mare-owners have been protected. However, farmers generally will not get the full benefits of the Act if they breed mares with hereditary blemishes to sound horses. Both sire and dam should be able to show a clean bill of health in regard to any faults that are known to be transmittable, for only in this way has a breeder any guarantee of soundness in the offspring. In a recent report of the Stallion Enrolment Board, C. D. McGilvray, Principal Ontario Veterinary College, has discussed "Hereditary Unsoundness" for the guidance of inspectors, but the information is valuable to all horsemen so we are reproducing Dr. McGilvray's comments in these columns. His treatise on the subject follows: The enrolment of stallions for public service has for its attainment the improvement of horse breeding through a standard of qualification for sires.

To accomplish the desired purpose the enrolment requirements are designed so as to eliminate as far as possible from public service stallions of undesirable type and poor conformation and to discourage the use of unsound sires likely to transmit their defects. The disqualifying forms of unsoundness are these considered to be a hereditary nature, meaning an inherent diathesis or predisposition to defects likely to be transmitted to the progeny, thus interfering with their usefulness and lessening their value. In general experience it is found that an unsoundness present in a horse with structural weakness and poor conformation is very likely to be hereditary. In examining stallions for enrolment the following described diseases or defects should be thoroughly understood and carefully considered.

BONE SPAVIN OR JACK SPAVIN. This is a bony deposit forming an enlargement which is noticeable usually at the inner and lower part of the hock. A spavin is always an unsoundness, as it may cause lameness at any time. Certain formations of hock are predisposed, particularly those which are small and weakly supported. The hereditary tendency to bone spavin is beyond doubt, and it is, therefore, always considered as a disqualifying unsoundness in stallions.

BOG SPAVIN. Is a soft swelling or puffy enlargement occurring on the front and inner part of the hock. It is due to the capsule of the joint being over-distended with the synovial fluid or joint oil. It does not always cause lameness, but is an unsightly defect in any case. In some strains of horses there is a decided tendency to bog spavin. It should be considered as a disqualifying unsoundness when present in stallions with short weak hocks, or those which are bent or otherwise faulty in shape. Slight puffs on well formed hocks occurring only after considerable use at service or work, and after the age of eight years, need not always prevent qualification, as there may not be any undue hereditary tendency.

THOROUGHPIN. This name is given to a puffy swelling at the upper and back part of the hock. It is due to an overdistension of the tendon sheath with fluid, and can be pressed through from side to side of the hock, hence the term thoroughpin. It does not always cause lameness, and is most liable to occur in short "beefy" upright hocks, and is frequently associated with bog spavin. They are regarded as hereditary, unsightly defects to the same degree as bog spavin.

CURB. This term is applied to a swelling or thickening on the back border of the hock about six inches below its point. This thickened condition of the ligament or tendon is noticeable in the deviation of the straight-line that extends downwards from the back of the hock. Long, narrow, bent or sickle-shaped hocks are known as curby hocks, and are very liable to spring a curb. Legs of this kind affected with curb constitute an unsoundness liable to be transmitted to the progeny, and a stallion so affected should be disqualified. A slight curb on a strong, well-formed hock need not always prevent qualification.

STRINGHALT. Is also termed Chorea, and is manifested by a peculiar spasmodic jerking upwards of one or both hind legs. The peculiar movement may be

slight or decidedly noticeable when the horse is either walking, trotting, turning or backing up. Some horses only show it when first exercised, and after a time drive out of it on becoming warmed up, while in other cases it persists irrespective of the amount exercise. The true cause of stringhalt is not known. To detect stringhalt often requires careful examination and close observation of the horse in all its movements. Stallions, showing decided stringhalt should be disqualified, as it is a form of unsoundness with a decided tendency towards being manifested in the progeny.

RING-BONE. This name is applied to a bony growth forming an enlargement extending around the pastern. It may affect either the front or hind pasterns and frequently causes lameness which persists. Faulty pasterns are a predisposing cause, and in this regard very long weak pasterns and very short upright pasterns are both inclined to the occurrence of ring-bone. It is one of the most serious forms of unsoundness and the hereditary tendency is acknowledged so that stallions affected with ring-bone should be disqualified.

SIDE-BONE. This name is given to a hardened condition or ossification of the lateral cartilages, which are thin plates of gristle situated on each side of the foot to permit expansion at the sides of the hoof head. When they become hardened their flexibility is destroyed, thus preventing expansion and causing lameness in many cases. There is a decided hereditary tendency to the formation of sidebone, particularly in some of the heavy breeds, especially those with coarse legs or which have low, weak heels and flat spreading feet. The hereditary predisposition is confirmed by the occurrence of side-bone in a large percentage of the progeny from certain sires, and its appearance in young horses before they have commenced to work. Sidebones generally affect the front feet and are very liable to cause lameness in horses when used for work on paved streets and hard roads. In examining for side-



Margery Daw.

Grand Champion Clydesdale female at the Central Canada Exhibition, 1919, for B. Rothwell, Ottawa.

bone each side of the foot should be pressed firmly with the fingers, and if the cartilages are sound they will be small and pliable. When side-bone is present the cartilages are enlarged and hard and do not yield to pressure. Side-bone is considered as an hereditary unsoundness in stallions.

NAVICULAR DISEASE. This is a disease which affects the front feet and is commonly known as coffin-joint lameness. It consists of an inflammation affecting the structures connected with the coffin joint of the foot. There seems to be an hereditary predisposition to this trouble in certain individual animals of the lighter breeds of horses. The hereditary tendency probably depends largely on peculiarities of conformation, such as narrow, contracted, weak heels or extremely high heels, long toes and poor pasterns. It causes a very serious lameness which persists and is difficult to overcome. To detect this disease requires careful examination of the feet and close watch as to the position in which the feet are kept when standing and the manner in which the horse walks and trots. When standing the lame foot is usually kept slightly in front of the other which is referred to as "pointing." The affected foot also appears smaller, being contracted at the heels, and the frog appears shrunken. In walking, the step is short and stubby and at the trot he goes stiffly and "digs his toes" to keep pressure off the heels, causing him to stumble sometimes. Navicular disease is a disqualifying unsoundness.

PERIODIC OPHTHALMIA. This is a disease of the eyes and is commonly known as moon-blindness. When the eyes become affected with this disease periodical inflammation occurs which finally results in the horse becoming blind. When the eye is first affected it becomes inflamed and sensitive with an abundant secretion of tears and watery discharge. With succeeding attacks the eyeball becomes cloudy and the sight

is gradually destroyed. When this takes place the eyeball gets smaller and appears sunken and the upper eyelid is very much wrinkled. The exact cause of this disease is not definitely known, but the hereditary predisposition is accepted and as a result in many countries stallions affected with this trouble are disqualified. In France they are particularly strict in the examination of the eyes of stallions for periodic ophthalmia and cataract.

ROARING. This term is applied to horses which breathe with a loud unnatural sound when they are exercised. As a rule the sound is only produced when the horse is sharply exercised and subsides when the animal is at rest or moving slowly. Owing to the differences of sound made by horses "affected in their wind" the following distinguishing terms are used:

1. **Grunter:** This term is applied to a horse which grunts when struck or threatened, as by a jab on the lower ribs, and is always very suggestive of a possible roarer. Such a horse should be carefully examined for roaring.

2. **Wheezer:** This term is applied to the wheezing sound which is generally made by horses when they are affected with heaves or broken wind.

3. **Whistler or Piper:** This term is applied to a shrill blowing noise made by some horses when in high fettle and from an acquired habit or playful flapping of the false nostril. This sound should not be confounded with true roaring. The differences are that the noise of a high blower always disappears when the animal is put to the top of his speed, while in cases of true roaring the sound would be increased and the breathing further aggravated with increased exertion. In cases of true roaring the sound is produced as a result of an obstruction or narrowing of the laryngeal passages or "throat" at the upper end of the wind pipe, and which interferes with the free passage of air for rapid breathing. In testing a horse for roaring, he should first be tried for grunting by jabbing him on the ribs. He should then be exercised at top speed for ten or fifteen minutes, and then suddenly brought to a standstill close to the examiner so that he can listen to the breathing. If the horse is a roarer there will be a distinct noise heard in the breathing and the nostrils will appear dilated or wide open. By allowing the animal to stand quietly the noise gradually subsides and the nostrils become smaller. Roaring is always an unsoundness, but its hereditary nature is now being disputed. This is owing to the fact that in many cases roaring occurs after an attack of Influenza and Strangles, causing an enlarged condition of certain glands which by pressing on a nerve known as the left recurrent laryngeal-nerve results in paralysis of the vocal cords. In some cases roaring follows an attack of sore throat causing a thickening of the vocal cords. Another thing to be considered is that many cases of roaring can be relieved by an operation on the larynx, and as a result the horse may then be apparently sound, in that the breathing is normal. The view is becoming more generally accepted that roaring is in many cases secondary condition following attacks of infectious febrile diseases rather than a primary disease of itself. The fact that many horses can be relieved of roaring by an operation has also some significance. For example, supposing two stallions of equal merit are affected with roaring. One of them is operated on and relieved of roaring and is classed as sound for breeding purposes. The other one is not operated on and continues roaring and is classed as having a hereditary disease and disqualified for breeding purposes. In so far as the hereditary phase is concerned, both horses are still alike, the only difference being that in one case the sound was removed through the relief afforded by an operation, while in the other case, the sound remained because relief through an operation is withheld. To carry the point still further, reverse the process; that is to say, afford relief by an operation to the other one and withhold the operation to give relief in the other case. The result would be that the operation in either case removed the abnormal sound in the breathing, but the hereditary phase in its relationship to each remains unchanged. The logical deduction is that the hereditary phase if acknowledged must still prevail in both cases to an equal degree. In view of these considerations many good authorities now question the justification for considering roaring as an essentially hereditary disease, particularly in draft stallions of good type and conformation.

It must be clearly understood, however, that roaring is an unsoundness, and that it is only the hereditary phase is not universally accepted and is still an open question.

LIVE STOCK.

Make your entries to the winter fairs early.

It is now time to breed for the middle of March lambs.

Send the cull, boarder and non-breeder to the shambles. Feed is too high priced to waste time on them.

Scours is an enemy of the young calves. Good feed, clean stalls and sanitary surroundings help ward off this trouble.

Did you envy your neighbor who recently sold feeders of the same age as yours for from fifteen to twenty dollars more than you got? Use a pure-bred, high-quality bull and get the top market price.

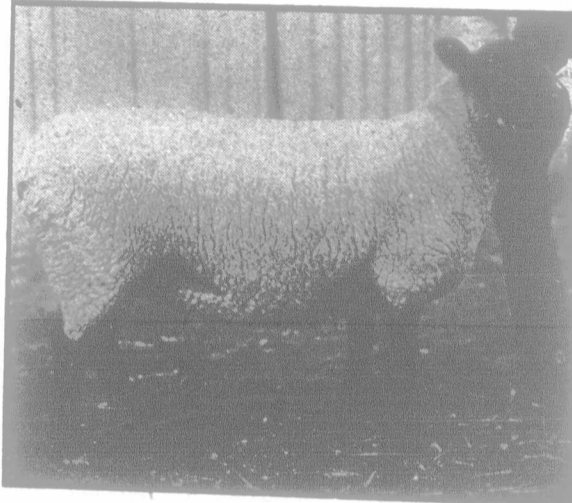
Feeding the Fall Litter.

The change in price of hogs and the firmness of the feed market are responsible for more than the usual number of sows being shipped in place of being bred. Young pigs have dropped fifty per cent. in price on some markets. The effect will be a scarcity of marketable hogs next spring. No one is in a position to say what the market will be six months from now, consequently the feeder is in a quandary as to the number of pigs it is advisable to feed. If price setting on farm products was on a basis with the manufactured articles, then the farmer would know that he would get a certain price for the product he had to sell several months in advance, and the uncertainty would be removed. He would know if he could afford to put sixty-five dollar a ton feed into hogs. Few wish to take a big chance, and, as a result, there is every reason to believe that the supply will be below the average next spring. Stability of prices and a definite relationship between feed prices and that of the finished product are necessary to the advancement of our bacon industry. Just at a time when Canada has an opportunity of greatly extending her bacon trade, circumstances occur which hamper production. If other countries get a footing on the English market and can produce the products, then Canada's chance is injured for many years. Instead of decreasing hog production, more and better hogs should be raised, but only a pronounced optimist would increase his hog holding with price on the decline and feeds bearish.

There are many fall litters that will be raised, and the problem is how can these be handled to best advantage?

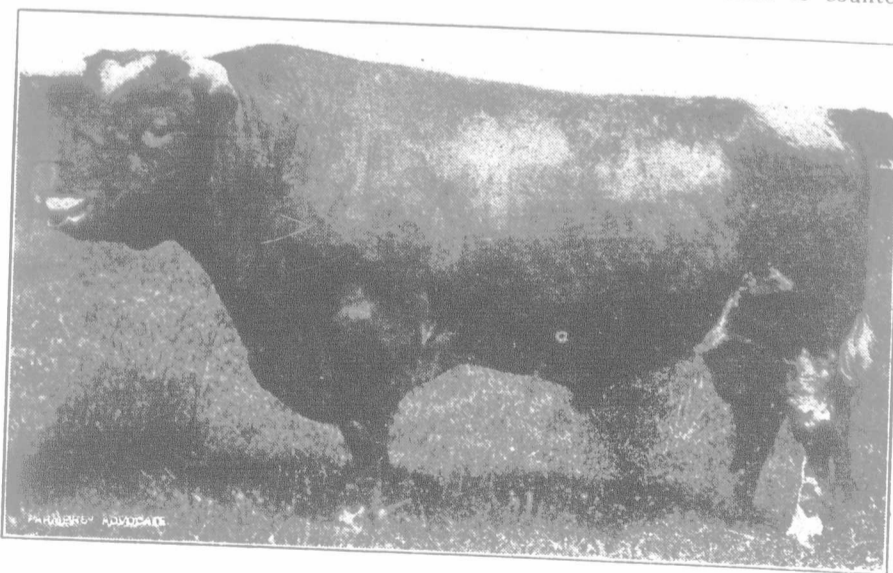
The pig which makes the most economical gains is the one which receives proper attention the first three months of its life. Many pigs in a large litter become stunted before they are weaned because of lack of sufficient feed. When pigs are two weeks old they can be taught to drink milk from a dish, and the more of the lactic fluid they will take the more rapid is their development. Of course, young pigs which are being heavily fed must be forced to take plenty of exercise in order to avoid contracting thumps. By the time the pigs are old enough to wean they should be getting sufficient feed from the trough that they have practically weaned themselves, and thus suffer no setback when the sow is removed from the pen. Young pigs will eat a considerable quantity of mangels if given a chance. This green feed is excellent for them, especially if they are confined to a pen. The more the pigs can run outside the better it is for them. At this time of year, for a few weeks at least, the sow and litter might have the run of a paddock, or, if it is not convenient to turn the sow out, then an opening could be made in the pen to allow the young pigs to roam around and root in the fresh earth. This tends to promote the development of bone and muscle. In feeding pigs, and, in fact, all classes of young stock, the feeder should bear in mind that there are certain substances which the animal must have for proper development. The tendency is to feed a fairly heavy carbonaceous ration to the hog. This is all right for the production of fat, heat and energy, but unless there is a certain quantity of protein and mineral matter the ration is unbalanced and the maximum development does not take place. Protein is necessary for the making of lean meat, skin, hair, hoof and tissues. In order to supply this essential nutriment, feeds containing it must be fed. Clover or alfalfa pasture or hay is a splendid source of supply. When these are not available then tankage, skim-milk, oil cake, bran and oats will assist in supplying the protein. The latter two feeds are somewhat bulky for young pigs, but if the oats are finely ground no better cereal will be found for the growing animals. Without a plentiful supply of mineral matter, the bone will be small and lacking in strength. Calcium and phosphorus are two of the essential minerals, but these are not found in abundance in many of the hog feeds. Legume roughages, such as alfalfa and clover, contain a large quantity of calcium, and feeders will find it to their advantage to let the pigs have all of these feeds they will consume. There are three reasons. These roughages are cheaper than the cereals and are an economical source of supplying protein and mineral matter. Comparatively few use these roughages in the hog ration. A rack could be built in the pen and good clover or alfalfa hay fed in the same manner as it would be fed to sheep or cattle. It is surprising how much hay the pigs will eat. There is always a supply of leaves where the hay is thrown out of the mow; these could be gathered up and fed either dry or steeped. The phosphorus will be found in such feeds as skim-milk, tankage and bran. Young pigs have been raised and marketed profitably without any of any of these three feeds comprising the ration. However, for best results the young pigs should get alfalfa or tankage. It will also be found an advantage to feed tankage to the brood sows previous to farrowing.

Hog raising and dairying are two branches of farm work which go together very nicely. Skim-milk or buttermilk, by-products of the dairy, are valuable feeds for pigs of all ages, and particularly the young pigs. The dry matter in skim-milk is practically one hundred per cent. digestible, which aids in increasing its feeding value. There is a possibility, of course, of over-stepping the mark. A person can overdo it with skim-milk. Instead of making it the sole feed, use it to supplement cereals in the ration. Carefully conducted tests have proven beyond a doubt that skim-milk has a high feeding value for pigs. The higher the price of grain the more valuable the milk. Feeding two or three pounds of skim-milk to a pound of grain effects a greater saving in grain per hundred pounds of milk consumed than when a much larger quantity is fed. If skim-milk is not available, then the protein part of the ration can be balanced up by feeding a little tankage or oil meal. Finely-ground oats and shorts can be used to advantage up to the time the pigs are three or four months old, and then some of the heavier grains can advantageously be added.



Champion Suffolk Ewe.
Shown by Hastings, Bros., Guelph, Ont.

Some feeders secure much better results than others largely because of their ability to study the animal's wants, and to supply that want with the proper feed in the right proportion. A dry pen, free from draft, is essential and it is also important that the feeding be done so that the pigs will always be ready for their next meal. Raised platforms help to keep pigs dry, or a sleeping bed raised two and a half to three feet off the floor will be found very satisfactory. The pigs will keep much cleaner in it than if they sleep on the floor. Throughout the fall and winter a liberal quantity of roots should be fed. These are less expensive than the grains and not only have they a fairly high feeding value, but they also serve as a conditioner. Mangels are preferred to turnips. Towards the end of the fattening period the roots might be eliminated. Some make a practice of soaking the feed a meal ahead. Experiments have shown this to be a slight advantage, although it is doubtful if it is sufficient to counter-



Proud Diamond
The senior sire at the head of the Shorthorn herd at the O. A. C. A bull with a good deal of character, and one which transmits his good qualities to his progeny, a few of which are in the O. A. C. Sale.

balance the extra work. Using the self-feeder, and having water in a separate trough, has given good results. The aim should be to grow the pigs as fast and as cheaply as possible, and then use heavy feeds for finishing. Pigs will produce a pound of gain from four or five pounds of dry matter; thus it will be seen that they handle the cereals and other feeds economically. Feed to get rid of the pigs at as near six months of age as possible. Every week that they are kept after that age decreases the profit. Hogs are kept and fed for the money they will turn in. If they do not make a profit, attention and feed should be turned to some other line of live stock.

If pigs are to do well they must have protein and mineral matter.

English Live Stock Notes.

From January 1st until August 30th, 1920, British breeders of pedigree stock have exported £860,480 worth of horses, cattle, sheep and pigs, or some 55 per cent. above the total for the corresponding period of 1918. In August, 518 horses were sent away worth £96,043. Holland took 102 head worth £116 7s. 5d. each, and Belgium 98 head worth £270 6s. 8d. a piece. In August 916 cattle were sent away worth £82,999 i.e., declared value to the Government officials. The United States took 31 head worth £80 12s. 1d. each. Canada bought 41 at £65 each. Uruguay secured 30 head worth £459 6s. 8d. each, and the Argentine 99 head returned at £216 9s. 1d. each. In August some 1,819 sheep were exported worth £40,938 or £22 10s. 1d. each. The Argentine took 306 head at £48 9s. 1d. apiece. The United States took 480 head returned at worth £11 15s. 10d. each. Canada's purchases were 466 at £11 14s. 7d. each. Canada bought two pigs in August costing £37 10s. each. All told 137 pigs were exported in August at a value of £18 19s. 1d. each. The August total exports from Britain reached the fine sum of £257,554 or 652 per cent above the returns of August, 1918.

J. Carson, an Irishman, settled in Essex for some years has just sold off his herd of Jerseys. Seventeen males made £2,104 and 83 females £11,749. A record for the Jersey breed in England was established when a newcomer to the Island cattle paid 875 guineas for the 3 1/2-year-old cow, Noble Fern Maracas, that won her class at the Cardiff Royal Show. T. S. Cooper & Sons, American breeders, had a commissioner acting and they nearly got the record breaker. Agies & McKinnin had young Dutton bidding for them, and he got a fine bunch of The Cid's stock. Coopers bought about 30 head all told. Carson has sold his chief stock bull, The Cid to the Coopers.

Italian buyers are once more scouring England for Hackney stallions. Japanese buyers have had a good turn round and got some strong, big-boned horses. Hackneys are making big money in the Old Country where Alex. Gemmill is doing some nice deals for American Exhibitions.

Dairy (milking) Shorthorns continue to make useful prices in England. Some 38 head belonging to a Belgian stock breeding farm at Thorpe, Satchville, realized an average of £190 0s. 5d. each. Orsett Telluria 2nd realizing 400 guineas to the Hon. E. A. Fitzroy. A bull made 330 guineas.

The Prince of Wales paid 700 guineas for a four-year-old beef Shorthorn cow, Adbolton Princess Royal at F. B. Wilkinson's sale. A Clipper five-year-old cow made 520 guineas and a Jilt 620 guineas. The 59 head averaged £165 8s. 4d., and gave Wilkinson the nice sum of £9,759 15s.

Oxford Down breeders in the homeland are pleased with the prices their rams and ram lambs are making in Kelso and other Scottish sales. The breed is getting a wee bit more publicity.

Peterborough Shire Mare and Foal Show is one of the best of the autumn held in England. In open mares Sir Walpole Greenwell won with Eugenie that has size, quality and character. Best of the colt foals was E. I. Appleby's bay by Marden Dagnam out of Blackhurst May Queen. Best of the fillies was the Penoley Stock Farm Co's. bay by Champion's Goal-keeper dam Penoley Duchess. She has a fine look-out, muscular arms and thighs and lots of bone. This filly won the championship and challenge cup; Appleby's colt being reserve.

Smithfield Show will be held in London from December 8th to 12th, and £4,555 will be awarded in prize money.

English bloodstock, i.e., race-course horses are making phenomenal prices. A yearling by Swynford has just topped record i. e., 11,500 guineas paid by Lord Glanely. The colt is, of course, nominated in the Derby of 1921, and all the other great races of that year. Joseph Watson, the soapman, spent 30,000 guineas on young stock for his new stud at Manton, Wiltshire. By the way, Lord Glanely has won £23,119 on the English Turf this season. All told 230 thoroughbred yearlings realized 223,430 guineas at Doncaster sales, or an average of 971 guineas each. In 1915 when the war slump came the average was down to 196 guineas for 261 youngsters.

Farms are making extraordinary prices all over England. One of 375 acres at Hookstow, Lincolnshire and belonging to Lord Yarborough has been sold for £14,000. Another of 163 acres made £3,500. These farms carry a lot of sheep.

Scrub Rams.

Considering the cost price of a real good ram, one would naturally expect that at the head of every flock would be a full-blooded sire, possessing good breed-type and character. However, this is far from being the case. There are many flocks in which constructive breeding is not practiced. Quality and character are apparently not considered. The ram that can be bought for the least money is the one used, and the young stuff in the flock certainly show the effect of this short-sighted policy. A well-graded-up flock is a good commercial proposition both from the mutton and wool standpoint. It is not imperative to dispose of the scrub ewes and buy in better bred ones. In the course of a very few years, by the use of a pure-bred, high-quality ram and displacing the cull ewes with lambs, a wonderful improvement can be made. This is the most economical way of getting into a high-class flock. It is not necessary to use a scrub ram. There are good ones to be had but they will cost a little above second grade mutton prices. S. N. Chipman, who is the market

Stock Notes.

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representative of the Live-Stock Branch at Montreal, estimates that more is lost to the farmers each year through the use of scrub sires than can be gained under the most improved system of marketing. Quality is counting for more than weight, and at all the yards scrub stock is discounted to the extent of four to four and a half cents per pound. This would make a loss of a little over \$2.50 per head. If there were twenty lambs to market from the flock, it would mean a loss of over \$50. This amounts to a good deal when figured on the number of scrub lambs put on the market each year. Mr. Chipman asks if a farmer can afford this. The live-stock industry of Canada certainly cannot afford it. Those who have made a practice of using a low-grade sire would do well to look around a bit and purchase one with quality and character. Not only will it pay the individual but will help to raise the quality of stock marketed.

Intestinal Diseases of Swine.—Con.

OBSTRUCTIONS TO THE BOWELS.

This term is used when some mechanical impediment obstructs the passage of faeces. Causes.—An accumulation of hard, impacted faeces, an accumulation of any hard substance as cinders, solid or semi-solid secretions of any nature, tumors in the intestines, strictures, twisting of the bowels, strangulation by a portion of the bowel passing through a rent in the diaphragm, or the walls of the abdomen, as in some cases of rupture, etc.

Symptoms.—The symptoms may appear suddenly, and in such cases there is well-marked restlessness, usually vomiting, straining to void faeces, with the effect that the abdomen will swell, the patient show symptoms of intense pain, and probably soon die. In other cases the symptoms develop slowly, the animals makes ineffectual efforts to defecate, which symptoms may continue in spite of the administration of purgatives until death occurs.

Treatment.—If possible ascertain the seat and nature of the obstruction. In the majority of cases this is not easily done. If the obstruction be in the rectum it can be removed mechanically by giving injections and using the forefinger or a looped wire, spoon or other instrument. In cases where this cannot be done, a laxative of 1 to 4 oz. raw linseed oil, according to the size of the patient, should be given and followed up by 2 to 8 grains of nux vomica 3 times daily. It is also good practice to give rectal injections of warm, soapy water every 2 or 3 hours. When the pain is severe give 1 to 2 grains each of opium and calomel every 2 to 3 hours.

As post mortems reveal that a large percentage of obstruction of this nature is composed of coal cinders, swine should not be allowed access to such, charcoal and wood ashes are safe.

STRICTURE OF THE RECTUM.

When there is noticed great straining and difficulty in evacuation, stricture of the rectum may be suspected. A careful examination of the bowel will reveal its presence when it exists. There are different conditions which cause a lessening or stricture of the passage, and wholly or partially prevent the evacuation of faeces, as a thickening, or other organic derangements of the coats of the rectum, prolapsus of the rectum, the presence of tumors or spasmodic stricture.

Symptoms.—This affection is usually well advanced before any well-marked symptoms are noticed, when more or less violent straining efforts to defecate will be observed, but the results of such efforts will usually be the evacuation of small quantities mucous, with probably a small percentage of faecal matter. When these symptoms are noticed the forefinger should be well oiled and introduced into the rectum; if the cause is beyond the reach of the fingers, a round, smooth instrument about the size of the finger should be used. If the nature of the trouble can be discovered it should be removed if possible. If it be from thickening of the membranes and not too far forward, the bowel should be forcibly dilated and the thickened parts rubbed with tincture of iodine once daily. If it should be a tumor of any nature it should be removed by knife or ligature. This operation is not easily performed, except where the trouble is near the anus. Spasmodic stricture can be overcome by introducing a little fluid extract of belladonna and laudanum into the rectum. When relief cannot be given the animal should be destroyed.

PILES.

Hemorrhoids or piles is a term applied to soft tumors which are easily made bleed, and are in or about the anus. In cases where there is no bleeding they are called "blind piles." They are also divided into internal or those within the anus, and external or those without. They cause the animal great annoyance, and at times more or less fever, loss of appetite and consequent failing in flesh. In most cases the tumors can readily be seen, especially during or immediately following defecation.

Treatment.—Give a purgative of 5 to 15 grains of aloes and 3 to 8 grains of calomel, the effect of which often relieves the congestion and effects a cure. If not, the tumor or tumors should be lanced and the blood squeezed out and the part dressed with a mixture of 20 grains tannic acid, 1 oz. glycerine and 1 oz. water, twice daily. Cold water injected into the rectum several times daily relieves the inflammation. The patient should be fed on laxative food and kept in comfortable quarters.

Breed sows require a bulky ration. Alfalfa or good clover hay may be fed advantageously to hogs.

The Packer's Council.

For reasons which it is unnecessary to dilate upon here, there has always been a great gulf fixed between the producers of live stock and the packers. Of late the consuming public has considered the packers as typifying big business rather than philanthropy. Sometimes the feeling runs high; at times there is an ebb in the public indignation, but through it all the slaughter-house business goes on with its daily task ostensibly regardless of the inborn public distrust. Circumstances, however, now point to a desire on the part of the packers to cultivate a more friendly relationship with the two main classes of society, namely, the producers and consumers. The first step to this end is the organization of "The Industrial and Development Council of Canadian Meat Packers." The second step is the acquisition of S. E. Todd, as Secretary and Executive Officer. Mr. Todd was for five years Director of the farming operations of the Institutional Farms under the late Hon. W. J. Hanna, and later Secretary of the Canada Food Board during its war-time regime. Mr. Todd, therefore, combines an intimate knowledge of the conditions and viewpoints peculiar to the consumer and producer.



The Chinch Bug—Adult and Nymphs all Much Enlarged.

Whatever the primary object of this organization may be the literature they are circulating would lead one to believe that the initial effort will be directed toward securing the goodwill of producers, and they say in part that the object is "to provide means of meeting breeders and producers of live stock for the purpose of discussing and taking action on all matters of mutual interest to producers of live stock and packers of meat and its products." The question arises as to through what channels they will meet the producers. Had we a live-stock council fully established and endowed with power, the problem would be simplified, but as it is there seems little chance of the great number of producers getting any inspiration from or coming to a better understanding with the packers. It seems very strange that the producers in a country such as Canada, where live stock is the very foundation of her agriculture, should have so little knowledge of and concern regarding the manner in which their product is handled and disposed of, and so little say in what they shall receive for it. Here is where producers should become more interested. Without the packers the live-stock industry would not be an industry at all, and yet the same packers in their reticent, independent way exercise wonderful powers and until recently have not been accountable to anyone.

If there is any lack of understanding the producers are certainly not at fault, for there is no industry so devoid of secrecy and so open to the world as that of agriculture. Anyone with ordinary intelligence could ascertain in a short time how much it costs to produce a pound of pork on the farm. The Government is constantly sending forth this information; but we venture to say that very few outside the packing industry know how much it costs to cure or process the various products of a hog carcass, and more than that, they would have a hard time finding out. Let the packers be frank with the producers and the relationship between the two will be more amicable; the confidence thus inspired will build up the live-stock industry, and in turn make more business for the packers. There is a market abroad in which Canada is concerned. Our success in gaining a foothold and retaining it depends on the Canadian producer, packers and the Government. If the latter two will take producers into their confidence the future will be brighter.

The progeny of a good registered bull is worth in the neighborhood of \$20 more at birth than the offspring of the scrub bull.

THE FARM.

The Outbreak of the Chinch Bug in Lincoln County, Ontario.

EDITOR "THE FARMER'S ADVOCATE":

The Chinch Bug—an insect which is frequently very destructive to staple grains in the United States—appeared in large numbers this past summer in the vicinity of Bismarck, Lincoln Co., Ontario. Meadow grasses, particularly timothy, were in some instances killed outright; oats were injured to a considerable extent—the infested plants ripened prematurely and produced little or no grain; and some damage was also done to corn.

DESCRIPTION.—The adult chinch bugs are black, winged insects about one-fifth of an inch long (see illustration). The nymphs, or immature bugs, are yellowish or bright red, becoming darker as they grow older. The bugs cluster on the stalks and roots of grains and grasses, and by means of their sharp sucking mouthparts feed on the plant juices or sap, thus causing the plant in extreme cases to wither and die.

LIFE-HISTORY.—The winter is passed in the adult stage. The bugs hibernate in meadows, wasteland and the borders of woods under the shelter of leaves, fence-rails and rubbish of all sorts, and among tufted grasses. They come out in spring, mate, and in due course the females lay their eggs on the roots or about the base of their food plants. The small bugs which hatch from the eggs feed at first below the surface of the ground on the roots of grasses and grains, but later they also attack the stalks. When forced to migrate by the drying out or harvesting of the plants which they infest, the bugs march in armies to adjoining fields. This past summer, for example, bugs were observed on the roads and farm lanes travelling in large masses from one field to another.

In the Central American States there are two broods of chinch bug each year, but fortunately in Ontario there is only one.

NATURAL CONTROL.—Weather conditions are of very great importance in checking the increase of this pest. Frequent rains during the hatching period destroy the young bugs almost to the extent of extermination. Furthermore, wet weather is favorable for the development of a fungous disease which kills the bugs. It is also highly probable that long, cold winters such as we have in Ontario are fatal to many bugs. In fact, it would appear that the Canadian winter is the chief factor responsible for the infrequency of chinch bug outbreaks in this country.

PREVENTION.—Climatic conditions may suppress the outbreak in Lincoln. However, it would be far from safe to rely on this means of control, and for this reason we would urge farmers in the infested area to apply the following preventive measures:

So far as practicable, all waste places should be burned over in the fall and plowed under. Infested meadows should be plowed deep late in the fall, care being taken to turn under every bit of grass; and all rubbish in and around the fields should be burned.

Clean farming and the regular rotation of crops are of prime importance in preventing outbreaks of this and other insect pests.

If the chinch bug threatens to become destructive again next year, a warning notice will be published in this paper, and remedial measures will be outlined.

Vineland Sta., Ont. WILLIAM A. ROSS, Dom. Entomological Laboratory.

Making 18-Inch Cement Tile.

EDITOR "THE FARMER'S ADVOCATE":

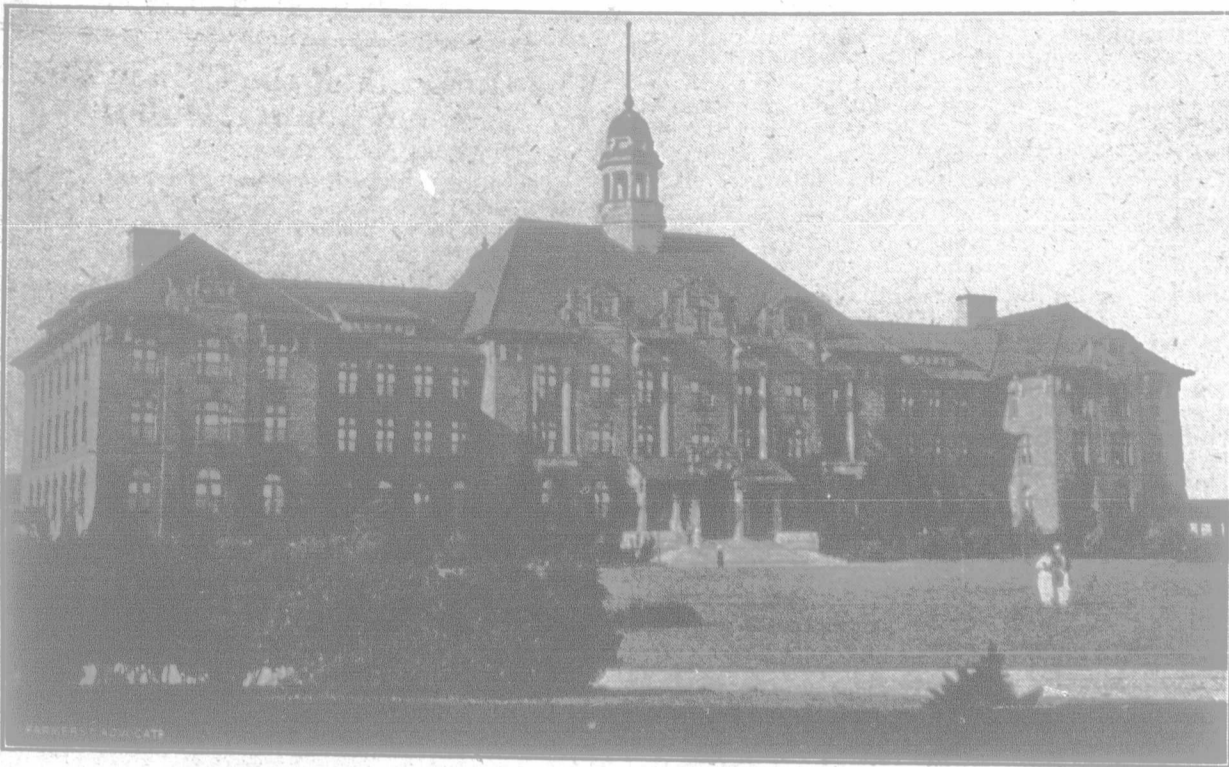
Every day fresh cases of profiteering are brought to light, but we seldom see any method of curing these evils. However, there is one source, which, if he will, the farmer can take into his own hands. This is the cement tile business. How successfully this can be done, we have learned by personal experience; but let it be understood that this applies only to larger tile, 16-inch, 18-inch, and upwards. Our own experience was with 18-inch tile.

Five or six years ago the drain I speak of was surveyed, and the last 4,300 hundred feet were specified as open drain. We asked for an estimate on the tile; the engineer smiled and gave one. No wonder he smiled.



Sons and Daughters of Victor Fairfax.

Herefords shown at Toronto and London, by J. Hooper & Son, St. Mary's, Ont.



The Main Building at Macdonald Agricultural College, Quebec.

Eighteens were thirty-eight cents a foot so you can estimate the value of the tile yourself. Here we decided to try our own hand at manufacturing. The men interested in the drain met and approved of the plan.

Gravel was twenty cents a yard, cement was \$1.60 per barrel although owing to the magnitude of the work it was procured at \$1.55. The regular 18-inch tile has a 1½ inch wall. Our tile had a full 2-inch wall. These tile were made in proportion of four parts of gravel to one of cement. The regular tile may be but they certainly never have the appearance of the tile we made. The regular tile then cost thirty-eight cents while ours cost twenty-one and a fraction; a saving thus was shown of between seventeen and eighteen cents.

The work commenced in winter. The men on the drain began drawing gravel to the scene of work for the spring. Permission was obtained from the pit owner to screen the gravel at the pit. A screen of parallel iron rods was made to cover the wagon boxes and the stones just went off the other side of the wagon. Drawing is not considered in the estimate of cost. It is equally difficult to draw the tile from the yard or station and drawing is not included at thirty-eight cents from the manufacturer. Thus we consider the drawing in either case just balanced.

In the spring a man familiar with cement work was secured to make them. He was paid ten cents a foot. He made the work pay him well. He secured several men at current day wages and often made from \$7 to \$10 for himself which was more than usual for that class of work before the war. He supplied his own outfit but even the cost of this was reduced by a little inventive work. He only had one mold. This was made possible by another idea. He secured sheets of galvanized iron the required width of thirty inches this being the length of each tile. It was about four or five inches longer than the greatest or outside circumference of the tile. This was placed inside the mold fitting tightly to the outside. These had a simple iron fastener on each sheet.

These were rivetted to each edge and took up no thickness from the tile wall. The mold was filled and packed. The outside mold was then removed, leaving the galvanized wall to maintain the outside pressure. Then inside iron is removed. There is now no support on the inside but as long as the outside pressure remains constant there is absolutely no danger of inside collapse. These are left on for about twenty-four to forty-eight hours and then the tile are stripped. This means a vast saving as steel molds are expensive.

There is also the matter of base boards on which to rest the tile. These are octagon boards which the tile stand on while being made and until dry. It requires many more of these than of the sheet iron casings. About enough for three days work is sufficient of the casings. Then each morning those which are oldest are stripped. But a tile which has set sufficiently to stand without a casing cannot be moved. Consequently a sufficient number of base boards must be provided to do for nearly a week's work.

Our tile were made about five or six years ago, and they are perfectly satisfactory. They are as good as a factory tile and we consider them better for, as previously stated, they have a thicker wall by half an inch. However, it must be considered that all prices have changed. Cement has gone from \$1.60 to \$2.80. Gravel is probably about the same. While cement tile have also greatly increased, though I do not know to what extent it is certain that the manufacturer must have a good profit.

Any farmer who has 18-inch tile or larger to put in should consider this. And any farmer who has an open drain which an 18-inch tile would clear, should consider it still more. I have tried to make this as plain as possible but any questions sent to "The Farmer's Advocate" will be answered if this is not sufficiently clear.

Oxford County, Ont.

R. L. E.

Should the Fall Fair Prize List be Open or Restricted.

Now that the fall fair and events in connection with it are fresh in the minds of all, it seems an opportune time to give full consideration to the manner in which these fairs should be conducted. One matter which has been brought to our attention this fall is the inroad made by professional exhibitors on the funds represented by the prize-list. In one instance a professional exhibitor at a small fair came with over fifty entries and took away in prizes just about as much money as the fair received in Government grant. This does not appear right to some, and yet there are good arguments against restricting the prize-list. There is nothing like competition to encourage one to bring out good entries in either live, stock, farm produce, or ladies' work. Where the prize-list is restricted to the township, the same exhibits frequently come back year after year, and win the first prize. On the other hand, a professional exhibitor who travels over the country and perhaps shows at twenty or more fairs during the season, will take more care in the preparation of his exhibits than a local exhibitor can afford to do. This tends to discourage entries made within the township. It might be advisable in some instances to restrict certain parts of the prize-list so residents of the township would enjoy the full privileges of that section, and professional exhibitors would be barred. However, on the whole the argument seems to be in favor of an open fair. Some time was given to a discussion of this subject at the last annual meeting of the Association of Fairs and Exhibitions, and we herewith reproduce some of the statements made for and against the restricted prize-list:

In opening this discussion R. B. Henry, of Orangeville, said: I have had a long experience in fair work, and I bring before you an important subject. I happened to mention this at a directors' meeting, and it is something I have been thinking of for some length of time. I do not wish to interfere with the rights and privileges of any society in talking on this question. I give my own personal views and leave it with you. Should an agricultural society restrict its prize-list to exhibitors from its own municipality? That is the question that I have been taking up for some time. I have had experience with fairs where this is done. Personally, I think that all societies getting the Government grant and coming under the Wet Weather In-

urance as well, should not restrict their fairs. They should be open. I know one or two societies—one especially where people living a mile out are restricted from exhibiting. I have known where the president and directors of that same fair had taken quite a number of prizes at neighboring shows, but would not allow others to compete at their own fair. That is not right. I would like to hear what the rest of the representatives from the different parts of Ontario have to say.

The Chairman: We have contended for a number of years that any society receiving aid from the Government should have their fairs open to the Province in stock, grain and roots. We allowed them in years past to make some restrictions in ladies' work because of professionals travelling around the country and operating at the local fairs, but we would like to see every fair open to the Province for agricultural products.

Mr. McMillan: Our Society has conducted 68 annual fall fairs and is preparing for the 69th, and competition is confined to the Township of Erin, with the exception of a few classes for harness horses which are open to Toronto. We have the largest exhibits in the hall of any fair in our township. We pay out more money in prizes than any in the county with the exception of Brampton, which is a large place. We have this large exhibit because we do not allow professionals to come in there, and our own amateurs are encouraged to make up what they can. Our directors are contemplating opening up the live-stock classes this year, but they do not wish to be dictated to how they should conduct their fairs. We have never postponed a fair in all that time, nor declared one off on account of weather, and everyone of them has been a success.

W. Hanna: Our fair has been in existence over forty years, and I have been treasurer for thirty-six. We conduct a fair that is open to the whole Province. We have some competitors in that fair who go to Toronto and Ottawa and take first prizes. In some cases they have taken as high as 13 prizes. Some of our competitors come from the adjoining townships and compete. We have local men who take prizes over those even who go to Toronto and Ottawa. I think our fairs should be open to all parts of the Province.

We have had some experience with professionals. A lady came to our society with a trunkload of stuff, and the first year she cleaned up the list pretty well, but next year she found that her prize-list was so small that she considered it was hardly worth while, and the third year she dropped out entirely. Our local women can equal anything that can be brought in by professional prize-winners.

About the Field Crop Competition: Every man competing in the Field Crop Competition is supposed to be a member of the society. I have had two instances in the past year where those men, while they were members on retained membership, did not show at the ordinary fair for 1918. When it came to that prize-list I took it upon myself to retain \$1 membership from those men for the present year of 1919, and I think that if they had to exhibit a sheaf of grain for which prizes were given, they would come in as ordinary exhibitors; otherwise I feel that from every man receiving a prize \$1 each year should be retained for membership fee for the coming year.

Mr. Ault: We have been conducting our fairs very successfully, and have left it open to all comers. The delegates who took exception to that said that his society allowed harness horses to come in from outside. Where will you get more professionals than you will among exhibitors of harness horses? You are barring the ladies and are allowing the professional horseman to come in and show against the amateur. How much better would your fair be if you allowed outside competition? In going from fair to fair, in the ladies' work you will see rag carpets and stuff awarded prizes from year to year that are a disgrace to any fair, and the quicker you get outside competition, the quicker will you educate your own ladies to get up-to-date stuff and compete against the professional. I am in favor of opening the competition to every one, and it would be a slur on the ladies in our section to bar outsiders, because they are just as competent in doing high-class work as any one outside.



One of the Principal Buildings at Macdonald Agricultural College, Quebec.

AUTOMOBILES, FARM MACHINERY AND FARM MOTORS.

Piston Troubles and Back-Firing.

Besides causing trouble from compression leakage, pistons also cause a loss of power and wear on the various parts by binding and sticking. An excessively tight piston will quickly destroy the cylinder bore, spring the connecting rod and ruin the engine. The writer knows of one case, and there are probably many others, where the engine was completely demolished by a sticking piston due to the overheating of the cylinder.

A tight piston is accompanied by pounding in the cylinder and this is a sign of distress that should not be overlooked for an instant, especially if the motor shows indications of over heating. Stop the engine, and if small enough try to turn it over by hand. If this is impossible, with cool crank shaft bearings, it is evident that the trouble is in the piston, and the engine should be allowed to cool off. A piston may seize suddenly and stop the engine, or it may cause symptoms of over loading.

Incorrectly designed pistons will cause binding due to the expansion of the piston head forcing the inner end against the bore; all piston heads should be slightly crowned or rounded to avoid the expansion side thrust.

Tight rings caused by carbonized oil in the grooves, or by too narrow a split will cause binding, but the most common cause, by far, is overheating of the cylinders and poor lubrication.

A stuck piston after becoming cool can be removed from the cylinder with less difficulty, if a quantity of kerosene oil is poured into the cylinder to loosen the gum under the rings. The piston and cylinder should be allowed to soak in the kerosene for a couple of hours before the removal is attempted. Pouring hot water into the jacket, after the cylinder has cooled, will expand the cylinder before the piston has become warm and will make the removal easier.

Start to pull on the piston the instant that the water flows into the jacket, as there is not a great interval of time between the heating of the cylinder and the heating of the piston.

As soon as the piston is removed from the cylinder it should be thoroughly cleaned, and all deposit and gum should be removed from the piston rings and grooves with kerosene, and should be well oiled before replacing in cylinder.

Clean the cylinder bore thoroughly with kerosene before inserting the piston.

The rings should always be cleaned with kerosene when the cylinder has been overheated.

The piston sometimes becomes rusted to the bore after the engine has been standing idle for a time, and may be loosened for removal with kerosene or turpentine.

Inspect the condition of the rings when the piston is out of the bore and reject all that have been broken or lost their elasticity. Always mark the pistons of multi-cylinder engines so that they may be replaced in the proper cylinder; as a misplaced piston often causes trouble either from binding or play. Test the pistons for roundness and also for fit, before reinstalling them.

See that the piston pin or wrist pin is perfectly smooth and round, and that it fits snugly in the bore provided for it in the piston. A loose wrist pin will cause knocking and if allowed any side play will score the cylinder or wear the connecting rod bushings.

Always have the set screws bear firmly on the pin and lock them firmly in place so that they cannot back off.

The wearing surface of the pin should be hardened to prevent wear.

Carefully remove all carbonized oil from the head of the piston and remove all roughness and sharp edges to reduce the liability of preignition. Should this deposit be allowed to accumulate to any extent it will appreciably increase the compression.

A worn or loose piston should be replaced with new, as there is no "cure" for a small piston.

Misfiring and back firing are sometimes caused by leaking valves or valves that do not seat properly because of wear or defects in the stem of spring.

Back firing consists of explosions in the carburetor, intake manifold, or mixing valve, which results in "popping" noises or loud reports issuing from these parts.

The explosions are caused by the fresh charge leaking past the inlet valve into the intake manifold during compression, the gases being afterwards ignited by flame leaking through the valve during the working stroke. This leakage may be caused by pitted or warped valves, by a shoulder worn on the valve stem, by a weak or broken valve spring, by a bent valve stem sticking in the guide, by a worn or bent valve guide, by too much or too little clearance between the end of the valve stem and the push rod, or by particles of scale lodging on the valve seat. Always examine the clearance between the stem and push rod, this clearance should vary from the thickness of a visiting card on small engines, to 1/8 inch on the large.

If the clearance is too great, the valve will not lift high enough, if it is too small, the valve cannot seat properly as it rests entirely on the push rod. Poor timing due to worn cams or stripped gears may cause back firing, as may a worn cam shaft bearing, but this defect seldom exists on a well-built engine, in fact, any disturbance in the engine that will retain the burning gas in the cylinder will cause back firing. Be sure that the inlet valve does not open before the exhaust closes unless the engine is built for very high speed.

Weak springs on automatic or spring controlled intake valves are causes of much back firing.

Misfiring consists of explosions in the exhaust pipe and muffler which are accompanied by loud reports at the exhaust.

Leaking exhaust valves are sometimes the cause of misfiring, as the fresh mixture that leaks past the valves into the exhaust pipe is ignited by a leakage of flame past the valve, or by the opening of the exhaust valve during the following explosion stroke.

The leakage may be caused as explained under "back firing."

Any cylinder leak that will admit and dilute the entering mixture, will cause misfiring.

Worn valve stem guides, weak or broken valve springs, pitted valves, leak around sharp plug or priming cock, leaking piston rings, leaking gaskets, weak automatic intake valve, carbonized cylinder, or by the inlet valve opening too much.

Incorrect timing of the valves is the cause of much misfiring and may be due to wear on the cams, cam shaft bearings on the end of valve stem (clearance between stem and push rod) or to gear slipping on the shaft or incorrect meshing.

Any defect in the valves or valve timing on a multiple cylinder engine, that will cause one cylinder to take more mixture than the others, will cause misfiring of one or more cylinders. Of these defects may be mentioned; one cylinder carbonized more than the others, unequal lifting of the inlet valves, leak in one cylinder, valves not closing at the same time, or unequal clearance between the ends of the valve stems and the push rods.

To determine which cylinder is missing disconnect the wires leading to the spark plugs, or igniters, one at a time, while the engine is running. When a wire is removed that does not reduce the speed of the engine, you may be sure that you have one of the "dead" or misfiring cylinders. Disconnecting the wire from a live cylinder decreases the speed, without decreasing the misfiring.

The cylinders may also be tested by opening the priming or relief cocks while the engine is running and locating the missing cylinder by the sound of the escaping gas.

An exhaust pipe or passage that is clogged with carbonized oil and soot will cause a loss of power or overheating because of the back pressure.



A Veteran.

S. E. Lowden, of Wentworth County, cutting oats in his 77th year

The exhaust pipe should be cleaned out at least every six months with kerosene, and every particle of soot should be removed. The life of the exhaust valves is largely determined by the rapidity with which the gases leave the cylinder, and as the escape of the gas depends on the condition of the pipe, it is evident the temperature of the valves is greatly increased by accumulations in the passages. Excessive lubrication and poor mixture cause deposits that grow rapidly and choke down the engine.

Cylinder defects often cause the engine to lose power or speed, the general causes of lost power being compression leakage, misfiring or intermittent power impulses, or a tight piston due to overheating. Incorrect timing, although of comparatively rare occurrence, will greatly reduce the output, and is most commonly met with on old engines that have seen hard service, or are much worn.

Lost motion in the valve operating mechanism will reduce the lift of the valves and strangle the charge taken into the cylinder or cause back pressure due to the small opening afforded by exhaust valves. An increase of the clearance between the end of the valve stem and the push rod or tappet lever due to wear is a common cause of a decrease in the valve travel.

Power loss is often the result of an extremely long exhaust pipe or a pipe with too many bends or turns; for efficient service the pipe should be short and straight.

A clogged pipe or muffler is a source of loss that is easily remedied. See that the air intake is free that check valves seat and open promptly.

Two stroke cycle engines often lose considerable power through the loss of the charge compressed in the crank chamber. Leakage along the shaft through the bearings, leaking check valves, and joints contribute to this loss, as the cylinder does not receive a full charge. Thorough lubrication of the crank shaft bearings of a two-stroke cycle engine will be a great help in maintaining the crank-case compression.

The total power delivered by a multiple cylinder engine is not always equal to the sum of the full power of each cylinder. This is due to the fact that the valve

lift is greater on some cylinders than on others, or that the charge is offered more resistance in some of the intakes.

Excessive cooling of the cylinder will cause a considerable loss of power due to the waste of heat, and all possible care should be taken to keep the temperature of the overflow from the jacket at 160° F. for gas and gasoline engines, and at 200° F. for kerosene. If cold water from a hydrant is forced rapidly around the jacket, the engine will sometimes suffer a reduction of 50% in output with a corresponding increase in the amount of fuel used. Poor lubrication, especially the lack of oil on the piston, will reduce the power output, because of the increased friction and loss of compression pressure.—Gas Engine Troubles by J. B. Rathbun.

Fire Losses and Prevention.

According to a pamphlet issued by the Ontario Fire Prevention League, in affiliation with the Ontario Fire Marshal's Office, the fire waste in Ontario, not including forest fires, for the year 1918 was \$14,856,329, caused by 9,588 fires. This means a tax of \$6 per capita for every man, woman and child in the Province. This is an enormous loss, and, to a large extent, is caused by carelessness.

Of the 9,588 fires, 836 were barns, causing a loss of \$1,093,931. This is a terrible toll to pay for carelessness. A good many fires each year are due to steam engines. When light wood, or even soft coal, is used for firing the engine will send out sparks unless a good screen is placed over the smoke pipe. The law provides that the steam threshing-engine be equipped with an efficient spark arrester. However, these may get out of repair, and in the most unexpected moment a live spark escapes and lodges on the roof or in a crack in the barn. In a few minutes the structure is ablaze, and, as there is no fire-fighting equipment on the average farm, the barn and its contents are destroyed.

Smoking around barns and stables is the cause of many fires. Too many smokers are careless. They light a match and drop it without ascertaining first whether or not it is dead. The ashes containing a spark of fire are knocked out of the pipe, or the cigar or cigarette stub is thrown carelessly aside. In ninety-nine cases it may be all right, but the hundredth one smolders for a time and then when no one is around bursts into flame.

Carrying matches loosely in the pocket should not be condoned. When pulling the hand out of the pocket a match may be dropped on the floor. This may become ignited hours or days later by someone stepping on it. If more care were exercised regarding these things, fewer barns and stock would be destroyed. On many farms to-day there is a gasoline engine, which operates grinder, separator, etc. Oil dripping from the boxings of the machine will saturate the floor and may cause spontaneous combustion. Oily waste or rags should under no condition be left around the house or barn.

Explosions and fires are also caused by the accumulation of dust particles. The finer the dust the more easily it is ignited. Thus we hear of a large number of fires due to dust explosions in threshing machines.

It is estimated that two out of every three fires occur in the dwelling house, and these two are largely the result of carelessness. In the pamphlet above mentioned, the following are some of the suggestions relative to the prevention of much of this loss: "Keep attics and cellars, yards and outbuildings clear of rubbish and inflammable material. Do not start a bonfire near the house, fence or buildings when the wind is blowing. Screen all open fires. Be sure the chimney is safe and clean, and that all flue holes not in use are covered with tight metal caps. Should any be left open, a sudden pressure of air from the heavy winds may force fire into the room. See that all stovepipes are clean and free from rust holes. The floor underneath and surrounding the stove should be protected with a metal plate, and asbestos or sheet metal used on the wooden partitions near stoves or pipes. Never fill the lamp with coal oil except in daylight, and see that the burner is clean and the wick fits properly. Matches should be kept in a metal receptacle, out of the reach of children, and nothing but the 'strike on the box' safety match used. Matches should not be left in the pockets of clothes hung in the closet. Use metal cans for ashes. Never use gasoline in the house. Use an electric flashlight, rather than an open flame, when looking for articles. Using coal oil to light or quicken a fire has caused the death of many people. Leaving a pipe, cigar or cigarette stubs lying around the house is a dangerous habit and invites disaster."

It is a good plan to have clean-up days around the house and barn. If rubbish is not allowed to collect, the danger of fire is lessened. In towns and cities, where there is water pressure, there is a means of fighting fire, but in the country where the water supply is drawn from the pump the fire cannot be fought with water.

There are a number of automatic chemical fire extinguishers on the market which have proven effective in extinguishing fire. On comparatively few farms, however, are these chemical extinguishers kept. True, the extinguisher might be in the buildings for years and never be needed, but that is no reason for not having it handy in case a fire should break out. It is important that every effort be made to prevent fire from destroying the buildings. Fire is a good servant, but a very poor master. There is so much inflammable material about the farm that once the blaze gets a start it is soon beyond control, unless a person is on hand with a liberal supply of water, or with the chemical fire extinguisher. By observing some of the precautions above mentioned the danger from fire breaking out will be greatly lessened.

By observing some of the precautions above mentioned the danger from fire breaking out will be greatly lessened.

THE DAIRY.

Cleanliness and System on the Dairy Farm.

EDITOR "THE FARMER'S ADVOCATE":

While visiting a certain large dairy I saw two notices that seemed to me rather interesting. One was a list of rules for the dairy and the other was a time-table.

The former was as follows:

1. Cows to be bedded 30 minutes before milking.
2. Cows to be brushed 20 minutes before milking.
3. Udders and flanks to be brushed with a clean cloth just before milking.
4. Sleeves to be rolled up clear of the wrist while milking.
5. Hands and face to be washed before milking.
6. No milk on hands while milking; vaseline to be used if necessary.
7. No unnecessary talking while milking.
8. Cows to be treated kindly.
9. Cows to be milked gently, quickly and thoroughly.
10. No tobacco chewing while milking.
11. No smoking in barns or stable at any time.

The farmer who has read this over, will, in all probability say to himself, "That is all very well for a big dairy, but it is not applicable to me;" but just a minute, let us take each rule separately.

Surely enough has been said about the disturbing of the bacteria in the air, by bedding or shaking up straw while milking, to make it unnecessary to say much about rule number one; and for the sake of personal feelings isn't it nicer to milk in a clean stable?

With regard to No. 2 if you do not brush the cow's flanks just take a look at the strainer after you have milked a couple of cows and notice the hairs and dirt. The same applies to rule No. 3.

With regard to rules 4 and 5, just think for a minute that the milk is either directly or indirectly for human consumption, and then consider how you would like it, if your wife were to do her cooking with her hands and face dirty, or her sleeves dangling in the flour. Without a doubt, you would be the first one to say something, unless of course, you were very much afraid of her; even then you would no doubt, think things about it. After all, it is not much trouble to have a towel and wash bowl in the cow stable. Regarding rule No. 6, putting milk on the hands while milking is obviously a dirty habit, while vaseline, besides being far cleaner, is an excellent thing for the cows teats.

Nos. 7, 8 and 9 are simply a matter of dollars and cents, for no cow will let down her milk as quickly, or give as much if everybody is talking or shouting, or doing anything that tends to make the cow excited. So far as milking quickly is concerned, this is one of the most important things in milking.

Nos. 10 and 11 so obviously show commonsense that they are not worth commenting on.

It can easily be seen that these rules are as good for a big dairy as a small one; the only hard part about it is the start and the only way to get over that is to make up your mind to start right away.

With regard to the second notice—the time-table—perhaps the one in this particular stable would not be applicable to all farmers, but the idea is the same. I have visited several farms lately and the thought that struck me most forcibly was the absolute lack of any system, even of the simplest kind. If a store-keeper were to run his store with the same lack of system as some farmers, I have no hesitation in saying that he would only be a store-keeper for a very short time. Now that the rush of harvest is over, just for an experiment try making a rough time-table to suit yourself. For example it might run as follows: Rise 5.30 a.m.; milk 6 a.m.; breakfast, 7 a.m.; start work, 7.30 a.m.; dinner, 12 noon, start work 1 p.m.; stop working 4.30 p.m.; supper, 5 p.m.; chores and milking 5.30 p.m. Try this for about a week, and notice how much more pleasantly things run. In a very short time, you will find yourself doing things on time, without any fixed time-table. For the returned men on the land this should be easy, just substitute "Reveille" for rise, "cook house" for meals, "fall in" for start work, and "retreat" when you are through.

By observing a little system, you will soon find, that, although one works shorter hours, in the end, more work will be accomplished because a man is only at his best for a certain number of hours. The hired help question will be simpler also. Personally, I worked on a farm for a year, where we started work

at 5 a.m. worked till any time between 5 p.m. and 7 p.m., and then muddled through the chores, finishing usually about 9 p.m., just about time to go to bed in order to get a decent sleep before going through the same routine the next day.

From this place I went to another farmer and found the absolute reverse. We were always through by 6.30 p.m., and yet I noticed we were always well up with our work, simply because we worked a little systematically. Of course in the busy time we worked later, yet that was easily put up with when we considered the time we used to have in the village when things were slacker.

Try, during this winter to make the word system your motto and see how much more pleasant the work seems.

Lambton Co., Ont.

E. C. C.

Selecting a Dairy Sire.

Many dairymen will be attending the fall, winter and spring sales in search of a herd sire, and others will be visiting breeders with the intention of buying privately. The importance of placing a good sire at the head of the herd, and the wonderful influence exerted by the bull, makes it imperative that more attention should be given to this matter than has been the custom in the past. There is a universal swing from the grade to the pure-bred, and with it a tendency in some cases to purchase a pedigree without regard for conformation or ancestral endowments. This practice is in some respects worse than using a grade, for a pure-bred is as a rule more prepotent than a grade and when he is endowed with undesirable characteristics he is going to pass them on with even more surety than will the non-pedigreed sire. Pure-bred breeders realize the remarkable influence exerted by the sire, and endeavor to get one better than the last, for only in this way can they expect to bring about improvement in their herds. There are those with grade cows who complain about a pure-bred costing a lot of money. So does anything worth while, and it is unreasonable to think that one can get quality and production in breeding cattle without paying for it.

Before purchasing a herd sire one should take this very important point into consideration. The first generation of heifers will carry one-half the inheritance

improved breed. The careful breeder gives a great deal of thought to the selection of the sire for his herd. The more skilled the breeder the greater the care taken in this respect. Almost any pure-bred bull will improve a scrub herd, but only the bull of the best inheritance will increase or even maintain the standard of a highly-developed herd."

It is, therefore, evident, and the majority of dairy breeders will substantiate this statement, that one cannot place too much emphasis on the immediate ancestry of the bull purchased. That is to say, his dam and granddam should be high-producing cows, and his sire should boast of similar lineage. There are, in fact, only two ways to be sure when selecting a bull; one is on the basis of his ancestry, and the other is to obtain a proven sire with tested and qualified daughters. There are certain dangers connected with the acquisition of an aged bull. There is the probability of his becoming cross when moved from familiar environments to new surroundings, and furthermore many have proven impotent after being introduced at the head of a new herd. Ninety-five per cent. perhaps, of the bulls purchased for breeding purposes are obtained before they are a year and a half old. In such a case they have no daughters that indicate their value, and one must purchase on the basis of pedigree.

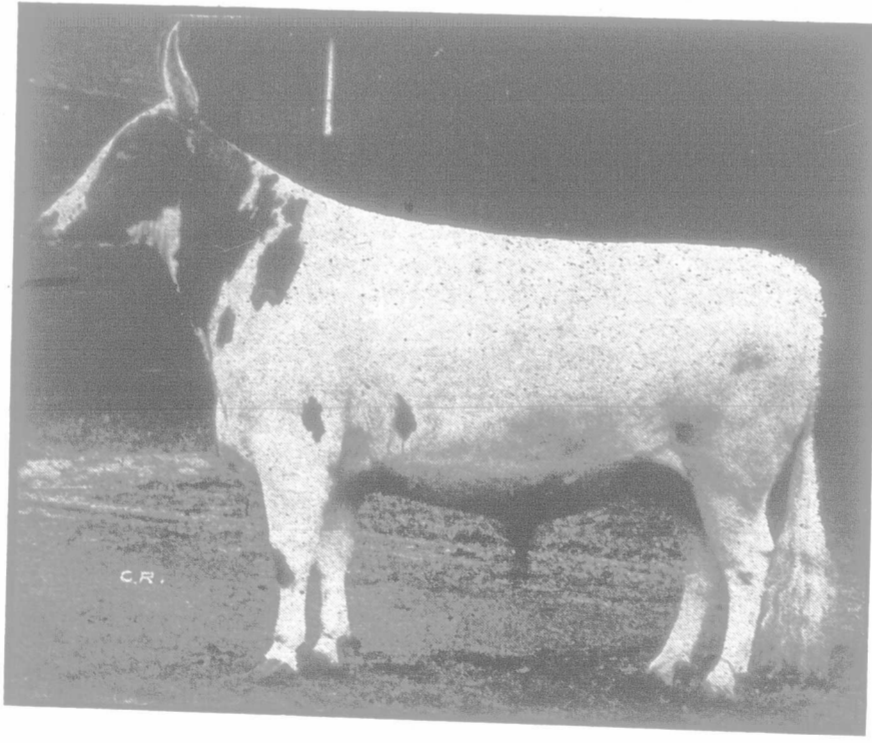
Now that the milk scale and Babcock tester are in common use, and official tests are so common, it is unnecessary to go outside the realm of known facts when purchasing a young bull. The truth of the matter is, dairy bulls with good backing, suitable conformation, and other commendable qualifications are comparatively cheap, and the majority of dairymen cannot afford to pass them by if they intend to continue in the business and go on improving their herds.

One cannot tell altogether by the appearance of a dairy bull whether he is going to transmit milking qualities to his offspring. However, if he is known to be full of blood from high-testing dams, and tracing closely to sires whose daughters have already proven themselves good, there is little doubt but what his impression on a herd will be satisfactory. One can, however, judge by the appearance of a young bull in regard to the type, conformation and quality of the heifers which he will leave, and here again an important matter should not be overlooked. There has been a tendency of late years, particularly noticeable among pure-breds, to emphasize the production end and disregard to a dangerous extent the type, conformation, constitution and other essentials in the animals themselves. The first thing is to get a young bull of the proper type and conformation and then see to it that his immediate lineage is such as to guarantee production. Masculinity is essential for if he be feminine in appearance there is a danger that he will not be as good a worker or as prepotent as he should be. See to it that he has a strong constitution and is rugged in this respect. A weakness here would make him an undesirable sire. It would not pay to use him if you got him as a gift. Look also for that type and conformation peculiar to good dairy sires and study him from the viewpoint as to just how he will mate up with the breeding cows or which he will be used. A progressive dairyman is not only anxious to get his cows in calf so they will freshen in due time, but he is considering the heifers, the future milkers and source of revenue.

There is still another factor which must be considered. Tuberculosis, contagious abortion and other insidious diseases are gaining ground annually, and if the interchange of animals goes on unrestricted these diseases are sure to spread and very seriously affect the dairy industry of this Province. Make sure in the first place that the animal you purchase is coming from a clean herd, and do not introduce a disease that will eventually necessitate the sacrifice of your milking stock or ruin the herd as a breeding and money-making proposition.

Feed for Production.

Dairymen are facing a problem this fall, especially in localities where the corn crop was short and the grain yield away below par. If there was an abundance of feed, and nitrogenous concentrates were not sky high in price, there should be money in dairying this winter with the price of butter-fat and whole milk. However, taking conditions into consideration, the price of milk and fat might well be higher in order that the man behind the cow would receive due remuneration for his investment and labor. If it is decreed that the dairyman is to receive so much and no more for the lactic fluid, then some planning of the ration is necessary in order that there will be money enough in the business to induce men to continue drawing the milk from the bovines, twice a day, three hundred and sixty-five days in the year. The economical production of milk is largely controlled by the adaptability of the cow to consume large quantities of feed and convert it into milk. The individuality and breed characteristics are also factors. The largest amount of milk at the least expense cannot possibly be produced from the four or five-thousand-pound cow. There are too many such individuals in our dairy herds, and they are responsible for low returns. It takes that amount of milk to pay for the maintenance of the cow, without considering labor. The breeders who have been laboring during the past few years to build up a 10,000-lb. herd, testing four per cent. or over, are not complaining so much about the price. They have bred and developed an efficient machine—one which can convert the high-priced feed into a sufficient quantity of milk and fat to leave a substantial margin over the cost of feed and labor. There is really no excuse for a lot of the low-producing herds in the country to-day. Sires of good quality and from high-



Dignity.

Champion Ayrshire bull at Kilmarnock, 1913.

of each of the parents. The second generation will carry three-fourths inheritance from the sire side, and only a quarter from the dam side. This goes on indefinitely until the characteristics on the dam's side are practically eliminated and the bull in reality becomes the whole herd. It can thus be seen that after a breeder has used two or three different sires, one following another, the complexion of his original breeding herd has been practically effaced and the heifers are almost completely the daughters of the sires. Eckles and Warren use the following argument to show the importance of the sire: "The main opportunity for improvement in a native or mediocre herd is by using a good sire. For example, one bull might be the sire of twenty daughters in the herd in one year. If the dams be capable of producing only 200 pounds of fat yearly, and if the sire represents a breed or strain the cows of which are capable of producing 350 pounds of fat per year, it is evident that if the daughters average only half way between there will be an increase of 75 pounds per cow annually. It is not at all uncommon to find even greater differences than this in actual practice. The first cross of improved blood makes the offspring one-half, the second three-fourths, the third seven-eighths of the same blood as the improved breed. The continued use of pure-bred sires of the same breed for ten to fifteen years will change a scrub herd until it will have essentially the same characteristics as the

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It takes a large amount of feed to keep a herd at maximum production, but if there is sufficient profit over the cost of feed and labor, then the feed bill is not of so much consideration. If the cow does not receive the raw material from which to make milk, then she cannot produce it. Too many are not giving their cows a chance. Because feed is high they reduce the ration, or else feed a ration that is not suitable for heavy production. During the summer months it would pay many dairymen to feed grain even at the price it is. At this time of year when the weather is not as congenial as it might be and the pasture is short the cows in heavy production need extra attention. A moderate temperature and succulent feed which forms a balanced ration are factors which tend to make a profitable flow of milk. The problem of winter feeding is to, as far as possible, maintain the conditions of early summer. In order to do this it is necessary to have a light, well-ventilated stable, silage or roots, legume hay, and concentrates to balance the ration and furnish enough nutrients to produce the maximum amount of milk which the individual cow is capable of. With the manufacturing plant, the most economical profit is made when running to full capacity. In the case of the dairy cow, it takes over fifty per cent. of all she consumes to maintain the body. Too many feed little more than a maintenance ration, and then wonder why they do not get more milk and butter-fat. A cow should have all of the right quality feed that she can consume, but, of course, the matter of over-feeding must be avoided. Not only will over-feeding result in sickness at times, but it will also lessen the profit. Some individuals are capable of manufacturing only a certain quantity of milk and surplus feed is stored on the body in the form of fat. It will not do to feed the same quantity of concentrates to all the individuals in the herd, and this makes it important that the feeder study the individuals in his herd. Weighing the milk and feeding concentrates in proportion to the milk given is a good system to follow. The live weight of the cow is also a good index as to whether she is receiving the proper ration or not. The cow in full milk that is losing fast in flesh is seldom on full ration. It is a too-common practice in even our best herds for all animals to be fed the same amount of grain, regardless of the quantity of milk produced. If maximum profits are to be obtained the cows must be fed as individuals and not as a herd.

The cow requires a bulky ration in order to satisfy her; in fact, she should have all the roughage which she will clean up, and then the amount of concentrates governed by the milk production. Eckles, in his book on "Dairy Cattle and Milk Production," gives the following three rules as a general guide for practical feeding: 1, Feed all the roughage the cows will eat up clean at all time; 2, Feed one pound of grain per day for each pound of butter-fat produced per week, or one pound of grain daily for each three pounds of milk; 3, Feed all the cows will take without gaining weight. Silage, roots, and legume hay are ideal roughages for the dairy cow. If the legume hay is not available and timothy hay must be substituted, then it is necessary to add some nitrogenous feed in order to balance the ration, or, in other words, more grain must be fed in proportion to the milk produced. The failure of legumes to catch m kes it more difficult and expensive for some dairymen to feed. If a large crop of corn and clover or alfalfa hay could be grown each year it would greatly simplify the feeding of the cows. As far as possible the feed required should be raised on the farm. The legume hay provides the cheapest source of protein available, and feeding it with corn silage gives a fairly balanced ration, and a ration which in the majority of years can be grown successfully over a large portion of Ontario. If the ration is not balanced then the cow is not able to make the best use of the feed she does consume. She may be given all the carbohydrates that she can handle, but if there is not the right proportion of protein in the ration she is not able to come up to maximum production.

The difficulty of supplying an economical ration is accentuated this year by the failure of the clover crop in many sections. This makes it imperative that more of the high-priced concentrates, such as oil cake and cotton-seed meal, must be fed to balance the ration. These feeds are almost prohibitive in price, consequently in many herds the cows will not be given a chance to do their best, owing to lack of suitable feed. From twenty-five to thirty pounds of corn silage, ten to twelve pounds of clover or alfalfa hay, four pounds of oats and four pounds of wheat bran, makes a very good ration for ordinary production. Some feed much heavier on silage, especially to large-size cows. Oats are not appreciated as much as they should be. As a concentrate they are a balanced ration in themselves, containing a fairly high percentage of ash or mineral matter, and a fairly high percentage of digestible protein and carbohydrates. In energy value they are one-third higher than wheat bran, and compare favorably with linseed meal. With silage and clover hay, oats may form the

bulk of the concentrate ration for ordinary production. When forcing for very heavy production, or when timothy hay is fed, it is necessary to use linseed or cotton-seed meal along with the oats.

The main point to consider in feeding is that if the most economical production is to be made, the various individuals in the herd must be studied and fed according to their size and production. Regularity in the time and manner of feeding and milking is also important. Unless the feeder knows what each cow is producing and how much she is consuming, he is not in a position to know whether he can afford to pay the present price for bran, linseed and cotton seed, with milk and fat at the figure they are to-day.

THE APIARY.

Wintering Bees in Cellar vs. Outside

In all parts of Canada it is necessary to provide some protection for the bees during the long cold winter months in order to obtain the best results from them. This protection can be given in two ways, either by placing the whole apiary in a special repository or cellar, or by packing the bees in cases outside. In the colder parts of Canada such as the prairie provinces and the northern parts of Ontario and Quebec, while it may be possible to winter outside if sufficient packing is given, it would be safer to winter in the cellar. In the warmer regions, outside wintering appears to be equally as good as cellar wintering.

The first essentials for successful wintering inside are that the cellar should be well insulated against the variations in outside temperatures, it should be dark and dry and the temperature should be regulated so as to stand at 48° to 50° F. Very little ventilation is required. The bees should not be disturbed any more than is absolutely necessary during the entire winter. For outside wintering, cases can be used that will hold one or more colonies, one holding four colonies appears to be the most desirable. The cases should be large enough to allow from 3 inches to 6 inches of packing on the bottom and four sides, and about 10 inches on top. For packing, either planer shavings, forest leaves or chaff, can be used. There should also be a windbreak around the apiary. An evergreen hedge or an eight-foot board fence are the best.

Before deciding which method to adopt, the beekeeper should study his conditions and what he has



A Dairy Farm Where Cleanliness and Production are Emphasized.

available. If he has a good cellar meeting the above requirements, it would be advisable for him to use it, especially if he has only a few colonies. Under other conditions it may be easier and cheaper for him to build cases and winter outside. There is more labor attached to packing bees in the fall and unpacking in the spring than there is in carrying the bees into the cellar and out again. On the other hand, bees in the cellar will need more attention during the winter. As a rule, bees packed outside do not need attention from the time they are packed until they are unpacked in the spring, whereas the cellar will need cleaning up and temperature regulated throughout the winter.

Both methods of wintering have been tried for a number of years at the Experimental Farm, Ottawa. The bees wintered inside are placed in the cellar beneath Bee Building, and those wintered outside are placed in quadruple cases with planer shavings used as a packing, and eight foot board fence as a windbreaker. The average loss of bees in the cellar is nil against 5.4 per cent. for outside, while the consumption of store does not show much difference; for the cellar it was 21.3 lbs. against 23.8 lbs. for those in the cases. The average number of combs covered in the spring shows an advantage for those wintered outside, being 5.4 as against 5.0 for the cellar. These figures are taken from October 11, when the bees were packed outside, and April 15 when the bees were removed from the cellar. It has also been found that sealed covers have given better results at Ottawa than upward ventilation, also that 3 inches of packing gives as good results as 6 inches.

In comparing the above figures, it will be found that there is a greater risk of loss from outside wintering, especially during a very cold winter as in 1917-18, when our loss occurred, that the consumption of stores differs but very little in the two methods. Also that the bees wintered outside were somewhat stronger in the spring.—Experimental Farms Note.

POULTRY.

Give the Pullets Special Care.

At this time of year many poultrymen will have housed their early-hatched pullets in a clean, well-disinfected pen. Pullets that have been properly fed throughout the season will soon commence laying. The care which they receive during the latter part of October and early November may considerably influence the egg yield this coming winter. Pullets require extra care and feed, especially as the cold weather comes on. The high price of grain makes it difficult for some to feed their poultry a liberal ration, but it would be better to dispose of the flock rather than keep them through the winter on a maintenance ration. Leaving the pullets in their summer quarters and allowing them to scratch for the major portion of their living will not fit them for heavy egg production. It takes more feed to properly maintain a bird that is exposed than one which is comfortably housed. If possible, have the pullets in separate quarters from the mature hens and have the pen dry, clean, well-ventilated and free from draft. All pullets will not make profitable layers. Those with long, narrow heads, or an anaemic appearance might just as well be put in the fattening crate; those that have crooked breast bones or other deformities should also be consigned to the crate. The strong, healthy birds with lots of vitality are the kind which pay for their keep, and are the only ones worth feeding. It is much better to keep a small flock of healthy, active birds than a large flock containing a lot of culls.

Wheat is the best grain for poultry the year around, but of course there are other grains which may profitably be used along with the wheat. For instance, oats could be used much more largely than they are; buckwheat, barley and corn also can be used to advantage, especially when the cold weather comes on. Wheat should compose about one-half of the ration. Oats may be used as a scratch feed, or may be rolled and fed as a dry mash. Both dry and moist mashes may be fed to advantage. If it is profitable for the large poultry keepers to keep a hopper full of such feeds as bran, shorts, cornmeal, rolled oats, etc., before the birds all the time, then it should pay with the farm flock of from fifty to one hundred birds. Some contend that with these feeds before the birds all the time they will become too fat and lazy. This has not proven to be the case in the large flocks. The whole grain may be advantageously fed in a deep litter of straw, so that the birds must exercise in getting this feed. Lack of green feed and meat feed is the limiting factor of production in many flocks. Mangels, turnips, cabbage or clover leaves can be had on most farms and will furnish the green feed in the ration. Skim-milk, beef scrap, beef heads, hghts, etc., may be used for meat feed. Grit and shell are also essential to production. Feeding heavily on one feed will not make up for lack of another. Hens or pullets will not produce eggs on a one-sided ration. The birds should have fresh water before them all the time, and if possible should be given milk to drink.

Care should be taken that the flock is not unduly excited. A bad scare may set egg-laying back several weeks, especially with pullets. If the poultryman is careful he can soon get on good terms with his birds and can go in the pen without causing any excitement. If keeping poultry, then give them the attention that will produce results. Eggs are a good price and there is no time when they can be so economically produced as in the spring. If commercial poultry plants, where labor must be hired and food purchased, make poultry raising pay the farmers should be good profit on the farm flock if it is given attention.

Fatten Surplus Cockerels and Cull Pullets.

All surplus cockerels and cull pullets should be in the fattening crate. There is a loss to the farmer each year by marketing unfinished cockerels. A number of firms in the Province have agents through the country buying up the cockerels and pullets to be fattened at a central station. By fattening the birds on the farm the middleman's commission and the profit from fattening will be saved to the farmer. A satisfactory fattening crate can be made of lath, with a few light boards for ends and partitions. A crate seven feet long, twenty inches deep and sixteen inches wide may be divided into three parts and will hold twelve birds. The laths in front placed vertically should be about two inches apart so that the birds may eat from the V-shaped trough in front of the crate. Many birds are fattened in a small pen. To some this is more convenient than a crate, and the same precautions in feeding birds in the crate must be followed when fattening in the pen. The crate should be placed in a cool, comfortable place and the birds not unduly disturbed. The birds should be dusted, as if they are affected with lice or mites they will not make profitable gains. The following paragraphs, taken from a bulletin written by M. A. Jull, of Macdonald College, Quebec, give concise information relative to the advantage of fattening the birds and the methods of fattening and killing.

A roaster of the highest quality is one which is young, full grown, plump and well finished. Such a one will roast better than one that has more bones than flesh. A chicken is "ripe" as a choice roaster for only a short time. After a pullet has commenced to lay eggs, her flesh is not of the same quality as it was before she laid an egg. When the spurs of a cockerel begin to harden the flesh begins to get tougher. A good roaster must always be plump and fat; that is, it must be well finished where the fat and lean meat are well intermixed in good proportions. A well finished and good appearing chicken will look well on the table, while the unfinished chicken lacks flavor, and when prepared for eating may present anything but an appetizing appearance.

The majority of farmers take but little trouble in properly preparing their poultry for market. The consumers, or the general public, are so accustomed to purchasing dressed poultry of poor quality that they usually do not recognize the difference between a poor roaster and a well finished one. If the poultry is well fattened, properly killed and dressed, there are few kinds of meat so wholesome and with so much flavor.

A thin bird is not attractive when dressed and is not appetizing when roasted. The flesh appears shrunken and the bones are prominent. When roasted, the meat is dry and tough. A plump, well finished chicken has a rich flavor and an abundance of tender meat of good quality. The fattening of poultry, then, is a finishing process. The object in fattening is to prepare in the best possible way poultry flesh for human consumption.

There is always a demand for dressed poultry. Poorly fattened birds, however, bring low prices, and sometimes no profits are made in selling them. Plump birds are in the greatest demand at highest prices, and birds of high quality always yield the largest profits. Fattening, then, means heavier birds and higher prices. There is usually five cents or more a pound difference in price between thin and plump poultry.

Best results are obtained by feeding all fattening birds on soft mashes. The gain in weight is greater and the quality of the flesh is superior when wet mashes are used than when the chickens are fed whole grain. The ground grains used to make up the mashes are usually oatmeal feed, finely ground buckwheat and cornmeal. Low grade flour and middlings may also be used.

A good fattening ration is composed of equal parts oatmeal feed, finely ground buckwheat and cornmeal. The proportion of oatmeal feed may be increased, for it is one of the best fattening feeds we have. It is a by-product of the oatmeal factory and is much cheaper than oatmeal itself. The actual price of each grain will determine its value as a fattening food. In some cases large profits will be made by feeding a ration largely composed of oatmeal, and at other times, depending upon prices, a varied ration may be more profitable.

These ground grains should be mixed thoroughly, and the mixture moistened with sour-milk. Milk is an excellent food for fattening chickens. It tends to develop the tissues and improves the quality of the meat. The proportion of milk to the mash mixture is about two pounds of milk to one pound of mash by weight. Best results are secured when the food is mixed twelve hours previous to feeding. Give the birds grit once a week during the fattening period.

There are two methods of fattening poultry for the market. The method usually employed on the farm is the pen method, where the birds are confined in a pen or box stall. The other method is crate fattening, and is usually more profitable.

The stock which is to be fattened will consist of cockerels and probably a few pullets which are not suitable for laying or breeding purposes. Whether they are to be pen-fattened or crate-fattened, they should be starved for twenty-four hours. This cleans out the digestive system of the birds and puts them in good shape for the special feeding during the fattening period.

In pen-fattening all the stock is crowded into a small pen so that the birds will be kept quiet and cannot exercise much. If the room is slightly dark all the better, as the birds will not be restless. They are kept there for about three weeks, being fed two or three times daily. If fed properly they will put on flesh quite rapidly.

Great care should be taken not to feed the birds too

much during the first week of the fattening period. Feed very lightly. Give the birds just sufficient wet mash to make them clean it all up and be just a little hungry for more. For the second week feed a little more heavily, and for the third week feed all they can possibly eat.

Where only a few chickens are to be fattened, the pen-fattening method can be employed with good profit. Where a large number of birds are to be fattened the most economical method is to feed them in crates or batteries. The birds will make larger gains and the quality of the meat should be superior to that of pen-fattened birds. Poultry buyers nearly all prefer crate-fattened birds.

Ordinarily a chicken will gain about one pound in weight after three weeks of careful feeding. When the birds are ready to be killed they should be starved from twelve to twenty-four hours. This will clean out the crop and intestines of all feed and the birds will keep longer and will be of better quality. While they are being starved they should be given water to drink, which will wash food particles out of the digestive tract. This is a very important matter—starve before killing.

There are two methods of killing poultry for the market, either of which may be used. The common practice among farmers is to chop off the head. This method is not a good one where fowls are intended for market. It should be abolished and better methods should be adopted.

Dislocating the neck is a simple and effective way of killing. The neck is simply broken or dislocated. The legs and wings are grasped in the left hand and the bird is held head downwards. The head of the bird is grasped between the thumb and forefinger of the right hand. By putting pressure on the right hand the neck of the bird is stretched, and at the same time the head is bent straight back. When the neck is stretched practically as far as it will go, a quick jerk backwards on the head breaks the neck close to the skull. The bird bleeds freely, the blood collecting in the neck. This method is simple, easy to perform, and clean. For ordinary commercial purposes where the birds are to be consumed shortly after being killed, dislocation of the neck is quite satisfactory.

Where the birds are to be kept for some time before consumption, the sticking and bleeding method should be used, since the neck is usually the first part of the bird to become discolored when kept for a long time.

The bleeding of a fowl affects its keeping qualities and appearance. The carcass will have a much better and cleaner appearance when well bled. The best method of killing poultry is by "sticking." The birds are bled in the roof of the mouth. In this operation, when the fowls are to be dry picked, the birds are cut to bleed and are also stuck through the brain to paralyze the feather muscles.

The blood vessels run down each side of the neck and just at the base of the chicken's skull they are joined, and this is where they should be severed. It requires practice to locate the proper place to cut, and many pickers sever each artery separately by running the knife along the throat past the junction. Care should be taken to avoid closing the arteries after they have been severed. Pressure of the thumb on one side of the base of the skull and of the forefinger on the other side at the same place results in the chicken's mouth opening and remaining open while the operator makes the cut to bleed. When held in this way there is nothing to constrict the blood vessels. Hook a small can into the beak to catch the blood. After the bird has been bled it should be brained in order to make the feathers come off easily. The usual method is to turn a knife about half way down the roof of the chicken's mouth and thrust it up until the knife reaches the top of the skull. The point of the knife should then be moved backward and forward a little so that enough brain may be destroyed to paralyze the bird. It takes good practice for anyone to acquire the knack of sticking so that the feathers will loosen and be easily removed. A poor "stick" will set the feathers, and the bird will be difficult to pluck, and will most likely result in torn skin. It is understood, of course, that for killing in this way the fowl is held head down, or suspended from the ceiling by a cord.

Instead of piercing the brain through the mouth, it may be pierced under the eye. When one becomes practiced in sticking birds, this method is probably more effective.

The blade of the knife should be about two inches long and one-quarter inch wide, and should be of a heavy piece of steel. The back of the blade should be about one-eighth of an inch thick. It should be ground to a sharp point, with a straight cutting edge, the slope for the point being taken from the back rather than from the front edge.

As soon as the bird has been killed the feathers should be plucked. They come out much easier while the bird is still warm. The birds are plucked dry; dry plucking is more satisfactory, as it gives a better result than scalding.

Many pluckers suspend the bird by a cord from the ceiling or roof of the room. The bird hangs at about the height of the shoulder, and plucking is an easy matter. The tail feathers should be pulled first, then the large wing feathers, followed by the feathers on the breast sides, legs, abdomen, hips, back and neck.

Birds which have been scalded are usually not finished satisfactorily and do not appear well on the market.

In dry picking, roasters are picked clean except for a few feathers around the neck at the base of the head. Capons should be dressed in capon style, that is, the feathers are left on the upper part of the

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s been killed the feathers come out much easier while e birds are plucked dry; ctory, as it gives a better

the bird by a cord from the The bird hangs at about plucking is an easy matter pulled first, then the large he feathers on the breast ck and neck.

scalded are usually not do not appear well on the

e picked clean except for a neck at the base of the dressed in capon style, on the upper part of the

neck, of the upper part of the last two joints of the wing, on the thigh about two or three inches from the joint, on the back about three inches from the tail, including the main tail feathers.

After the bird is dressed, the feet and head should be washed, using a stiff brush, and the vent should be well squeezed to remove any dung. If this is not done the chicken will probably develop a green butt.

If any food remains in the crop after the bird is dressed, an opening should be made at the extreme side and just above the wing or shoulder joint, and the food taken out.

It is absolutely necessary that the animal heat be allowed to pass out of a dressed bird as soon as possible after it is killed. The numerous bacteria that are always present begin to develop very rapidly as soon as the bird is dead, unless it is cooled. Cold retards the developments of bacteria; when the temperature of the bird is near freezing the development is very slow, and when frozen it is practically suspended. A dressed bird, however, should not be placed at once where the temperature is too low, for in that case the bird will not cool properly. If the bird is placed immediately in too cold a temperature, the heat is held within long enough to give the putrefactive bacteria a chance to develop to a sufficient extent to give the bird an offensive flavor when cooked. The birds should be cooled for about twelve hours in a temperature of about 30 to 35 degrees before being packed.

FARM BULLETIN.

Strong Breed Exhibits at the Thirteenth National Dairy Show.

After three years of wandering, the National Dairy Show, held annually in the United States, has found its way back to Chicago, where it was held for the first nine years of its existence. The thirteenth show was held in the International Amphitheater, Union Stock Yards, Chicago, during all of last week, and was a signal success from first to last. The National Dairy Show is under the management of the National Dairy Association of the United States, and provides one big dairy week of the year for all interested in dairying from whatever aspect the industry may be viewed. Certainly it is one of the best educators for breeders and admirers of any of the dairy breeds. Nowhere in North America will the dairy cow appear to such perfection as at the National. The ring there is the recognized battle ground for the best that each breed can do, and right royally is the fight waged. No entry is barred, but quality and dairy type is the only combination with a chance to win. All breeds have their millionaire admirers in the United States, and the first place they ride their hobbies is into the show-ring. There they frequently get much less than the worth of their money but the best in the world is shown. Occasionally these wealthy breeders get more than they actually deserve, because of the very high fit in which the entries are brought out. Canadian breeders who are looking for utility values and feel that high condition often hides a multitude of defects, sometimes suffer in the ring because they do not follow suit. Of course, the judge must take the animals as he sees them, but we believe that nothing is to be gained for the industry by showing dairy individuals excessively fat. It should be considered quite proper for a judge at a show like the National, where the pace is set for all other shows, to score an animal if, in his opinion, excessive fitting has endangered its future usefulness. The successful principles upon which the breeding industry is based are not those that aim merely for ornament. Utility determines the basic value of a dairy matron or herd sire, and utility should, therefore, be strongly stressed; sometimes popular opinion leads good judges astray on this point.

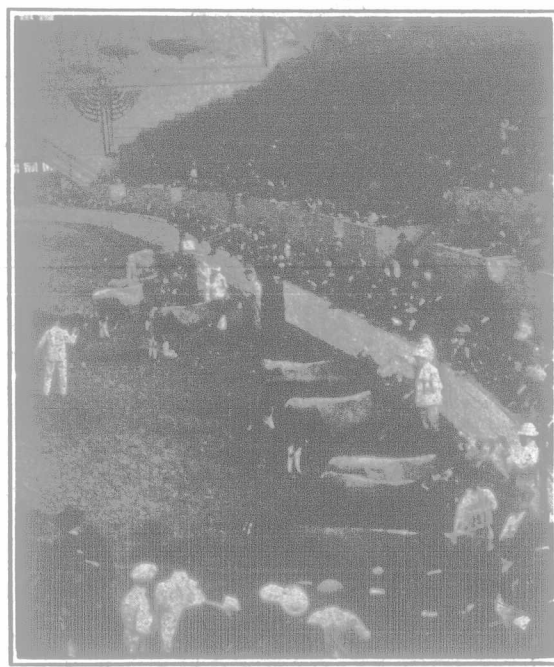
Of the separate classes we shall say more later, but of the show itself, apart from the cattle exhibits, space scarcely permits us to touch upon its many excellent features. Everything seems to have been planned with a view to its educational value. The United States

Department of Agriculture led in this good work and made the dairy cow loom up with surprising interest before the eyes of all visitors. Everybody connected with the industry exhibits at the National, and there is no little detail about any branch of the industry one cannot find out about somewhere in the big show.

The crowds were entirely satisfactory, which was quite a change from last year at Columbus, Ohio, when influenza played such an unfortunate part in the show. The weather was fine, rather too warm than too cool on each day until Friday. It was noteworthy that many more Canadians visited the 1919 National than was the case last year.

Holsteins.

Holsteins were well represented this year with 179 entries in the single classes. Exclusive of performance classes 142 individuals actually turned out from 29 herds, which was more than twice as many exhibited in any other breed. Judge W. S. Moscrip again showed his good system in judging, and gave general satisfac-



Judging Senior Yearling Jersey Bulls at the National Dairy Show.

tion. Three Canadian herds showed, namely, Haley & Lee, Springfield, Ontario; A. E. Hulet, Norwich, Ont., and L. H. Lipsit, Springfield, Ont., although the latter only showed one or two individuals. The Canadian entries were undeniably of good quality and type but were shown in poorer condition than their competitors, and were not prepared for the ring with such detailed care. This undeniably affected their placings all through, but it is strikingly evident that exhibitors from the United States are wealthier all through and are able to afford much more labor in fitting their herds.

Ten aged bulls constituted the first class, led by Iowana Sir Ollie, owned by N. Dickinson & Son, Lake Geneva, Wisconsin. This is a bull of splendid clean-cut appearance, with plenty of individuality, strength and dairy type. He defeated Iowana Mercedes Homestead for first, while Paul Calamo Korndyke, past grand champion, stood third. Bonerges Hartog, grand champion for the past two years at the Canadian National Exhibition, Toronto, for Haley & Lee, was given fourth position. He was consigned to the Holstein National sale, held during the show, and sold for \$375, although immediately afterwards the purchaser was offered \$500 for his bargain. Hulet had the only entry in the three-year-olds in Major Sylvius Colantha, and also secured second with Count Paul C. Posch among three two-year-olds. Johanna Glenda Lad acquired first here.

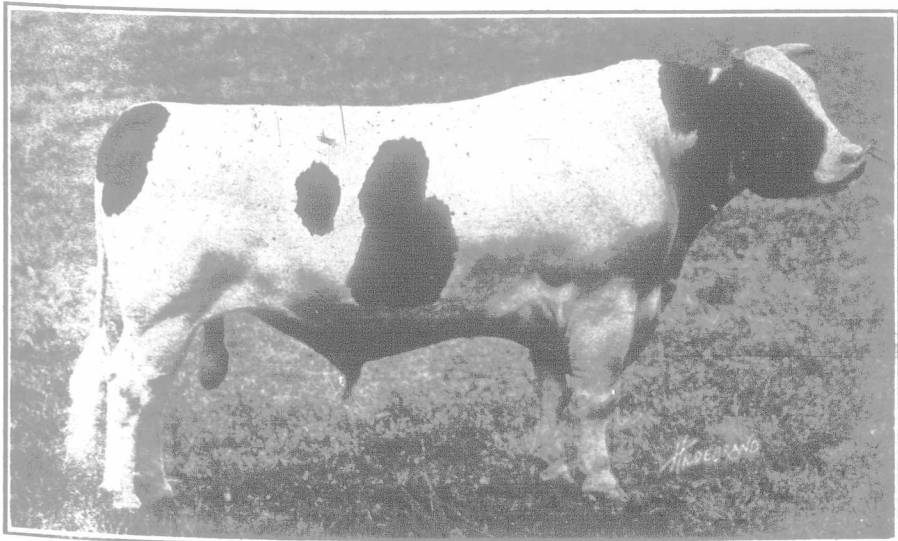
Sir Walter Segis Homestead, owned by A. J. Lashbrook, Northfield, Minnesota, was the better of two senior yearlings, while Haeger's Paul Minerva Korndyke out of Minerva Beets, six times grand champion cow

at the National, and by Paul Calamo Korndyke, also past grand champion bull, stood second. Out of eight junior yearlings, a rather small bull, King P. Fayne Ormsby, a fine, breedy-looking individual with good quality, was chosen to head the class. The second bull, Ondine Homestead Posie, was a stronger bull, well fitted and with plenty of constitution, but not showing as much quality and breediness. Neither Haley & Lee's Calamity Sylvius nor Hulet's King Paul Pontiac Echo got in the money. They hardly showed smoothly enough in the ring. Nine senior calves brought out a winner and junior champion in Walcowis Ollie Netherland, a big, smooth calf with plenty of heart girth. He was four months older than his nearest competitor. Eight junior calves developed a winner for Maxwell Farms in Lunde Pietje Korndyke Prince, while King Besse Abbekerk Pontiac Segis stood second for J. M. Hackney, St. Paul, Minnesota.

A splendid class of eleven cows five years old or over brought out some very fine individuals. Minerva Beets, the fourteen-year-old veteran show cow in the herd of R. E. Haeger, Algonquin, Illinois, again led and walked up for senior and grand champion honors. The old cow is marvelously preserved, a condition that has been helped, no doubt, by a minimum of work. She has nevertheless great capacity and a fine milk udder that milked out well, as well as excellent dairy type. Second went to Lady Glen Artis Ormsby, an eight-year-old in very high fit, but showing only a moderately good udder. Homestead Susie Colantha, Haley & Lee's entry, is a nine-year-old with marvellous capacity and dairy character, but lacking in finish. She is a worker with a two-year-old record of 15,389 pounds milk and 627.5 pounds butter. Under the hair she was undoubtedly the best cow in the class, and around the stables excited more comment than almost any other Holstein individual. Then, too, she had been injured since arriving at the show, and partly as a result of this she was placed in third position. Haley & Lee had two other entries, and Hulet one entry in this class.

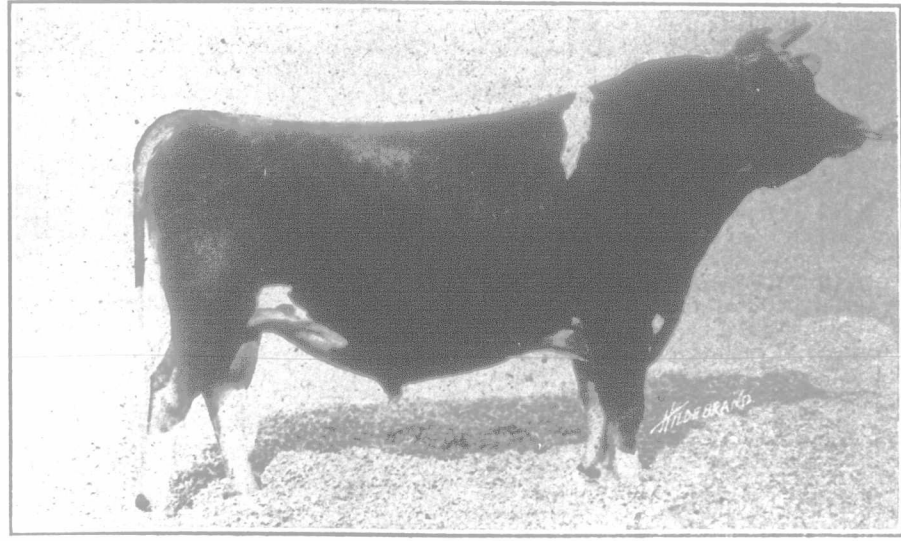
Walcowis Pontiac Inka, a strong-topped individual in good fit, won from six other four-year-olds. This was a uniform class, the three top ones being particularly nice. Four three-year-olds were led by Jessie Tritomia De Kol 4th, that showed fitting, a good udder, size and capacity. Shadelawn Mercedes Queen, Haley & Lee's entry, was fourth. Seventeen two-year-old heifers made a splendid showing, led by a black heifer, Belle Hazeltine Ormsby, that was in the most perfect fit for the ring, and shown with very great skill. She is a long, clean-cut dairy heifer with a straight top and a well-balanced udder. The second placing was difficult to see. K. S. P. Plush Butter Boy was a smaller heifer of no particular character. She was placed over Belle Abbekerk 2nd from the herd of Haley & Lee. Change-ling Gem Segis, from the herd of L. H. Lipsit, was awarded fifth place.

The senior yearlings were sixteen in number, and proved to be about the strongest and most uniform class shown. Walcowis Ollie Posch led off for Dickinson, and she did so on the basis of size and strength. Nettie Ormsby Burke was of finer quality perhaps and extra well conditioned. Lassie Echo Abbekerk, a deep, strong heifer with a good udder, scored third for Hulet, while Nettie FINDERNE Ormsby took fifth for Haley & Lee. There were nine junior yearling heifers led by a Maxwell Farms entry, Queen Ormsby Pietertje Fayne, a very sweet, typey individual. The largest class of the breed was the senior calf class, where twenty-two good ones turned out. Here was found Queen Ormsby Netherland Parthena, a sweet, typey heifer of outstanding quality that was soon afterward awarded junior championship honors. She was a Maxwell entry. The junior heifer calves numbered fifteen and were led by Hulet's Faforit Colantha Posch, followed by Clothilde Ormsby Skylark. The awards for the performance classes were not definitely made when we left, but in the class for records begun under five years, Haley & Lee's aged cow, Homestead Susie Colantha, will stand second or third. In the herd classes Haley & Lee took fourth in exhibitors' herd and breeders' calf herd, fifth in young herd, fifth and sixth in produce of cow (Nettie Fayne 2nd and Nettie Abbekerk), sixth in get of sire (May Sylvia Pontiac Cornucopia), second in cow and two progeny (Nettie Fayne 2nd), and second



Iowana Sir Ollie.

Champion Holstein bull at the National Dairy Show for N. Dickinson, Lake Geneva, Wis.



Leda's Raleigh.

Champion Jersey bull at the National Dairy Show for Brookwood Farm, Barryville, N. Y.

in dairy herd. Hulet was awarded fourth in young herd, and fifth in exhibitors' herd. He showed 14 individuals, and Messrs. Haley & Lee about 25.

Jerseys.

Jerseys are a great attraction at the National, where the best individuals of the breed are out in large numbers. This year Jersey breeders outdid themselves with a total of 330 entries and put up a grand exhibition. The number of herds competing was smaller, however, than for the last two years, there being only thirteen herds, as compared with fifteen in 1918, and twenty-four in 1917 and the same number in 1916. All told, 181 individuals actually lined up in the individual classes. It was truly a great showing. Eleven was the smallest number in any of the eight female classes, and the average was fifteen. Fifty-five males were exhibited in seven classes, including eight aged bulls, ten senior yearlings, nine senior calves and ten junior calves. Jerseys at the National always show marked uniformity, but it would be strange if they did not, because of the thirteen exhibitors showing this year only one, that we know of, is a Jersey breeder depending upon the breed for a living. We refer to the only Canadian exhibitors there, B. H. Bull & Sons, Brampton, Ont. The remainder were very wealthy men or women who follow cattle breeding merely as a fad or a hobby. This is much more true with Jerseys apparently than with Holsteins or Ayrshires, and the result is that while wonderfully fine cattle are brought out and the showing is something to marvel at, it is nevertheless not the real breeders of the country who make it. The smaller men, in fact, seem to be crowded out and must have rare courage to venture forth. This may explain in part why the number of herds competing has decreased from 24 in 1917 to 13 in 1919, although there may be other causes. Jerseys are excellent cattle, beautiful, healthy, economical producers and uniform in type, but if live-stock exhibitions are to fulfil their true functions, they must be more than a mere splash-day for millionaire breed-fanciers.

Notwithstanding any thoughts such as the above, it is certain that the eight aged bulls made a grand class. Fauvie's Prince, a seven-year-old from the herd of Col. A. V. Barnes, New Canaan, Con., and by Imp. Golden Maid's Prince, was first. This bull shows a strong combination of quality, depth and dairy character. He won out over Peerless Jolly Fern by Imp. Golden Fern's Noble and owned by Brookwood Farms, the Proctor estate. This bull is only four years old and has some show-ring ancestors to his credit, but he lacked sufficient smoothness and dairy character to win. Third was finally occupied by Raleigh's Ackland, that was some lighter behind the front legs and showed a tendency to roughness at the tail-head. Brampton Radiator, Bull & Sons' entry, stood fourth. He would have stayed farther up had he carried more size, but Tom Dempsey, Westerville, Ohio, who handled the classes, was very evidently looking for this important character, and with only one or two exceptions stressed this point very strongly. Brampton Radiator has plenty of quality, and last year was good enough to win as a three-year-old; and at the Canadian National Exhibition this year was grand champion.

The senior and grand champion Jersey bull was discovered among the six three-year-olds. He was Leda's Raleigh, a Proctor bull by Raleigh's Fairy Boy, and winner of twenty-eight first prizes and championships in 1917-18. Of good size, he showed masculinity and was particularly strong in heart girth. Poet's Whiteheart, a Longview Farm entry, sold later at auction for \$5,100 and winner of the two-year-old class last year, was placed second. Third was occupied by Golden Fern of Riverbank 2nd, a bull that lacked somewhat in finish, but showed plenty of strength. Six two-year-olds gave Chief Raleigh the honors, with Dahlias Noble Fern second, and Bright Lord third. The latter was a Bull entry, showing good depth but lacking somewhat in size. The winner was a very symmetrical, deep, well-fitted bull, stronger and larger than his two followers. Uniformly good quality gave Fashionable Fern Lad, another Longview entry, the premier position among ten good senior yearlings. He was followed by a slightly coarser bull, Esther's Falfurias Oxford, and in fourth place by Brampton Bright, a smaller bull of fine quality, but a trifle tender at the heart. Bulls were forced to be content with fifth place in a class of six junior yearlings, with Brampton Secord Garcon, first-prize bull at Toronto this year. Norma's Perfect Raleigh, a good-sized, well-ribbed and well-fitted bull was first, and later junior champion. He was two months older than Flower's Golden Boy, a somewhat deeper bull, but shorter.

There were nine senior bull calves out, headed by Agatha's Oxford Raleigh by Poet's Whiteheart. It was a little difficult to see this placing, as Brampton Bright Leader, the Bull entry standing second, appeared easily the better calf being larger and stronger. A Proctor calf, May Belle's Financier, led a string of ten juniors, followed by Brampton Radiator Star by Brampton Radiator, and a first prize winner at Toronto this year.

The aged-cow class was not so strong as last year. There were only eighteen out as compared with twenty-one last year, nineteen in 1917, and thirty in 1916. Nevertheless, it was a remarkable line-up of dairy matrons, and even these animals that did not win a placing were of enviable calibre. Constance of Falfurias, the Lassier entry that took third place last year as a four-year-old, was on top last week in the aged class, and later climbed to the grand championship. Brampton Serena, the Bull entry that won second last year and closely crowded Oxford Majesty's Gipsy, the grand champion cow, was placed fourth. Constance of Falfurias is a very refined-looking cow,

with strong heart and top line, a fine udder and teats of only fair length. She is smaller than Warde's Fern Blossom, the Proctor entry that stood second. The latter is a cow of great capacity. She might have a straight and stronger top line, but her spread of rib and depth leave little to be desired, while her veining is superior to that of the winner. Her teats are large and her udder attached high up behind, although none too far forward.

Four-year-old cows numbered twelve and were led by Brampton Ina Oxford, a grand, deep matron with a strong top line and an exceptionally well-attached udder. The Canadian winner was followed by Eminent Lad's Golden Fancy, a somewhat larger individual lacking the same quality and udder excellence. Among eleven three-year-olds Brampton Sonata appeared an outstanding winner, and undoubtedly would have been so had she not showed an inflated udder that gave her the appearance of being extremely short teated. She is full, deep-bodied and carried a fine udder, but in the ring she could not get a place. First place went to Majesty's Gamboge Bonne, a milkier cow than Raleigh's Golden Kittie that stood second. The latter is possessed of a stronger top and was a strong cow, but did not show nearly as much dairy character. A wonderfully strong, square-bodied little cow, Fannie Nic Nac, led fifteen good two-year-olds. She carries plenty of quality, a well-attached udder and good veining. A Canadian entry, Brampton Viola, a daughter of Viola's Bright Prince, was given fifth place here, while another Canadian entry, Brampton Sybil Gamboge, a daughter of Sybil's Gamboge, the \$65,000 bull at the Butler sale, was second among fifteen uniform senior yearlings. She carries a strong body, a good top and heart and is very typey, although not carrying as much flesh as the winner, Raleigh's Red Feather, that was very sweet besides being well ribbed, strong and rugged. In the three remaining classes there were twenty junior yearlings, twenty-three senior calves and twelve junior calves. Golden Princess Gipsy, Toronto's junior champion female this year, secured a fifth for Bull's in the senior calf class. There were no Canadian entries in the official yearly record class for records begun at 5 years or over. This was won by a nine-year-old Proctor entry, Imported Whitie, with a record of 12,517 pounds milk and 876.49 pounds butter at seven years and five months. In the class for cows with records begun under five years, Beauty Maid, the well-known Canadian cow, with a four-year-old record of 14,852 pounds milk and 872 pounds fat will come well up. She was scored 93 for conformation as against 98½ for Constance of Falfurias, the grand champion cow. Beauty Maid was first-prize dry cow at Toronto 1918 and 1919. She was first-prize cow with official record last year at the National Dairy Show, and she was sold at the Jersey sale last week for \$1,600. Other winnings of the Canadian herd were fifth for exhibitor's herd, fourth for breeder's calf herd, fifth for get of Viola's Bright Prince and fifth for dairy herd (five cows in milk). The junior champion female was Raleigh's Royal Fairy, a Longview entry, winner of the junior-calf class.

Ayrshires.

No Canadian Ayrshires competed for honors at the National this year, but there were some exceptionally good individuals shown that had been purchased from Canadian breeders. As regards numbers, there were about 100 head shown in the individual classes, or a few more than for the last two years. Six was the largest line-up in any of the bull classes, and eleven the largest in any female class. Adam Seitz, Waukesha, Wisconsin, and Wendover Farm, Bernardville, New Jersey, were the two strongest exhibitors, and both brought their animals out in splendid condition.

John A. Ness, Auburn, Maine, won the aged-bull class with a six-year-old, Strathglass Gold Chink, Wendover Farm's Foulton Ambassador, in second was a bigger bull and more inclined to coarseness. The winner was later made senior champion over Imp. Friendlesshead Victor, winner of the two-year-old class, and the only other competitor for senior championship honors. The senior yearling class brought forth the junior and grand champion bull in Admiral Beatty of Wendover. He is a dark and very handsome bull, full of quality and character. Strathglass Bondman was the only junior yearling out, but all the prize money was taken up in the senior bull calf class, where Seitz won with Cavalier's Model Champion, followed by Wendover's Ambassador, by the second-prize aged bull. Seitz also won the junior bull-calf class with Otterkill Jerry, a February calf.

The aged Ayrshire cow class always brings out a lot of good ones, and there were eleven very fine cows out this year. Seitz won with Imp. Champanton Nell 3rd, a beautiful eight-year-old dry cow purchased last spring at the Springfield sale for \$1,100 from R. R. Ness, Howick, Quebec. She has an abundance of dairy quality and character to back up her winning. Second was annexed by a twelve-year-old, White Heather of Torr, a Wendover entry and a right good cow. Highland Polly, a grand cow with a splendid udder, but somewhat lacking in smoothness, came third. It was very difficult to understand how Maple Leaf Jean, grand champion at Toronto this year for Hunter Bros., Freeman, Ont., was placed sixth, unless it was because she was shown poorly and had not been owned in the United States long enough to remove all doubt as to the exhibitors right to show. When well shown she should belong several places higher. Netherton Yellow Kate 4th was declared the best of seven four-year-olds. She was very fat, with a strong top, good body and well-sprung ribs, but only a moderately good udder. Next came White Heather of Highland, a well-conditioned cow with a medium-sized udder and good

veining, but none too strong on top. A smaller cow in high condition and showing plenty of quality was third. She was Netherton Brown Canary 5th, another Wendover entry. Five three-year-olds gave first place to Picken's Best, shown by Middlesex Meadows Farm. She had a strong body and was in high fit. The second and third winners showed less strength and poorer udders. Cavalier's Kilford Bell 3rd was picked out of seven two-year-old heifers for the senior and grand championship. Her great advantage was in size and constitution, coupled with dairy type.

The junior champion emerged from the next class, where Strathglass Orange Blossom won from eight other senior yearlings for H. J. Chisholm, Port Chester, New York. She was the youngest thing in her class, but was too good to go anywhere but first. Among the junior yearlings Cavalier's Lilian Walker won for Seitz in a class of seven. She was exceedingly well fitted, and showed lots of quality besides promising plenty of milk. Cavalier's Lady Dorothy, from the same herd, was a very fine little heifer with a very clean cut head and neck. She was placed second. Seitz also scored first in both calf classes with Cavalier's Lady Rosebloom and Cavalier's Lady Walker. There were eleven senior calves out. White Heather of Torr scored first in the class for official records begun at five years or over. She scored 90 for conformation and 15.2 for production. Imp. Champanton Nell 3rd secured 3 more points for conformation, but had only 2.1 points for production. In the class for cows with records begun under five years Maple Leaf Jean scored 87+7.4 points, giving first place to Highland Polly (89.5+15.6) and second to Willowmoor Gleshire Queen (88.5+6.2). Seitz won first in exhibitor's herd, young herd, breeder's calf herd and for get of Cavalier's Lord Roseberry, while Wendover Farm won first on dairy herd, produce of Nether Craig Lass and on Netherton Brown Canary 5th with two of her progeny. Professor H. H. Kildee, Iowa State College, Ames, Iowa, made the awards.

Guernseys.

Guernseys made an exceptionally fine showing. Twelve herds made a total of 81 entries, some better than last year, although still considerably below 1917, when about 150 animals were shown by twenty exhibitors. The aged-bull class was exceptionally fine, seven excellent individuals being shown with Lady-smith's Cherub, grand champion in 1916, 1917 and 1918, finally leading for Shorewood Farm, Crystal Bay, Minnesota. The two-year-old class produced the senior champion however, in Cherub's Prince, owned by W. W. Marsh, Waterloo, Iowa. He was later beaten for the grand championship by Dauntless of Edgemoor, exhibited by W. H. Dupe, Santee, California. This exhibitor also won the aged-cow class with Imp. Chemiante XI, a nine-year-old cow with a record of 12,109.75 pounds milk and 564.77 pounds fat. Other firsts for Dupe were on Itchen Queen of Edgemoor in the senior yearlings, and Victorine of Edgemoor in the junior yearlings. Marsh won the two-year-old class with Imp. Prospect's Rose des Houards, and the senior calf class with Honey Bloom of the Prairie.

Brown Swiss.

There were seventy-four entries of Brown Swiss from four exhibitors. L. S. Marshall & Sons, Leslie, Michigan, again won the aged-bull class with Stasis Boy of Sedgely, a seven-year-old. This bull is a son of a 19,000-pound cow, and was grand champion in 1917 and 1918, but was defeated this year by Hull Bros.' Gallatin Browney. The junior championship was won by W. O. Bohart, Bozeman, Montana, with Jura M's King. The aged cow class contained some good individuals, but was not a particularly uniform class. Reuben's Ruth, a six-year-old individual with good dairy conformation, a good udder and well-placed teats won out, but was defeated for the senior championship by Bower's entry, Betty of Lakeview, winner in the three-year-old class. This cow was also made grand champion over Minnie M. Bravura, Marshall's first-prize senior calf. The Brown Swiss are not a popular breed and rarely excite much ringside enthusiasm, but they are big, strong animals, excellently suited for combined meat and milk production. They are not notable for their beauty, as are Jerseys and Ayrshires or Shorthorns or Angus, since they lack the fine quality and nervous temperament of the dairy breeds and the straight lines and sappiness of the beef breeds. Nevertheless, they are admirably suited to certain parts of the country, and have been introduced in a small way into Canada.

Third National Holstein Sale.

Wednesday and Thursday at the National witnessed the holding of the Third National Holstein Sale. The sale, although held in connection with the National Dairy Show, was a separate affair, and so far as the show management was concerned was merely an exhibition feature. The E. M. Hastings Co. were the sale managers, and 112 head of all ages were disposed of for \$100,630. The high price of the sale was \$6,000, secured for Victory Topsy Echo Sylvia Johanna, a son of King Echo Sylvia Johanna, sire of Carnation King Sylvia, the \$106,000 bull. The twenty-five individual sales for \$1,000 or over follow:

MALES.

Victory Topsy Echo Sylvia Johanna, O. A. Stubbs, Lewisville, Ind.	\$6,000
Otsego Hengerveld Johanna Ormsby, E. V. Maltby, Chicago, Ill.	5,000
King Valdessa Pontiac Cynthia, Small & Gooding, Tiffin, Ohio	3,600

King Pontiac Diona Jolie Ona, A. P. Warner, Elizabeth, Pa.	2,000
Lisle King Fayne, H. A. & Geo. R. McQuillan	2,000
Peldara Koo Pontiac K. K. S. V., W. G. Davidson, Philadelphia, Pa.	1,600
Pietertje Maid Ormsby, Carnation Stock Farms, Oconomawac, Wis.	1,150
King Veeman Rag Apple Colantha, H. B. Utley & Son, Dawner's Grove, Ill.	1,000

FEMALES.

Bess Segis Ormsby Banastine, Gustave Pabst, Dausman, Wis.	3,400
Ruth Pontiac Segis, Minnesota Holstein Co., Austin, Minn.	2,900
H. P. Fayne Johanna, E. M. Detweiler, Polo, Ill.	2,250
Queen Pauline Inka Pontiac, Minnesota Holstein Co.	2,050
King Korndyke Pontiac Lass Ina, Mrs. E. P. Miller, Northfield, Minn.	2,000
Fairfield Inka De Kol Korndyke, I. De Munck, Plymouth, Wis.	2,000
King Korndyke Pontiac Lass Johanna, Mrs. Anderson F. Hurd, Hope, Pa.	1,800
Lady Gracia Hengerveld, E. N. Murphy, Green Bay, Wis.	1,750
Beauty Baker, Mrs. Anderson P. Hurd	1,600
Eureka Walker Segis Pontiac, E. N. Murphy	1,250
K. P. M. V. Bessie, Bert Irwin, Mount Carroll, Ind.	1,225
Iowana Fayne Minnie, Pabst Stock Farm, Oconomawac, Wis.	1,100
Fairmost Korndyke Pietertje, C. H. Bennett, Plymouth, Mich.	1,100
Alathe Josephine De Kol, E. C. Schroeder, Moorhead, Minn.	1,100
Johanna Alathe Bonheur, E. C. Schroeder	1,100
K. K. S. V. Hazlet Gem Beets, W. C. Leitsch, Columbus, Wis.	1,050
Lynden Pledge Acme, Robert Wall, Sturgeon Bay, Wis.	1,025
Haley & Lee, Springfield, Ont., consigned four animals, which sold as follows:	
Echo Colantha Johanna, Wm. McGill, Avoca, Wis.	\$600
Bonerges Hartog, Archie Reid, Janesville, Wis.	375
Nettie Fayne 2nd, Frank Barshrop, Sturgeon Bay, Wis.	710
Bessie Bell Banks, D. L. Hildebrand, Belvidere, Ill.	900

Jersey Sale.

Following the Jersey judging on Wednesday and Thursday, an auction sale of fifty head of selected bulls and females took place on Friday afternoon. B. H. Bull & Sons, Brampton, Ont., consigned seven head to this sale, among which was Beauty Maid of Woodstock, the eight-year-old cow holding the four-year-old record for both fat and butter, and the first prize dry cow at the Canadian National Exhibition 1918 and 1919. She sold for \$1,600 to W. A. Brewerton, Libertyville, Ill. Poet's Whiteheart, second-prize three-year-old bull this year at the National and first-prize two-year-old last year, sold to C. H. Harrison, Texas, for \$5,100. He was consigned by Longview Farm, Lee's Summit, Mo. Majesty's Gamboge Buttercup, consigned by E. S. George, Pontiac, Michigan, went to C. S. Sturham, Hartford, Conn., for \$3,000. The following are the individual sales for the Bull consignment:

Brampton You'll Do Queen, T. S. Cooper, Coopersville, Pa.	\$1,000
Brampton Gamboge Sybil, (imp.), E. C. Lasater, Falfurrias, Texas	800
Brampton Sybil Gamboge (imp.), L. V. Walkeley, Southington, Conn.	1,550
Beauty Maid of Woodstock, W. A. Brewerton, Libertyville, Ill.	1,600
Brampton's Sonata (imp.), L. V. Walkeley	2,500
Brampton Irma Oxford (imp.), Hugh Ridendor, Columbus, Ohio.	1,025
Brampton Oxford Lucy, E. C. Lasater, Falfurrias, Texas	875

A Complicated Election.

The stage is all set for the most complicated and, in fact, the most interesting election in the history of Ontario politics. There are 111 seats in the Legislative Assembly, and almost 300 candidates declared themselves on Monday last as aspirants for provincial honors. The Government has 100 candidates in the field; the Liberals have in the neighborhood of 70, while the United Farmers of Ontario have 64 straight candidates and eight or ten more who are depending on the support of both agriculture and labor. The Independent Labor party have 19 straight party candidates whose names will appear on the ballot, but in addition some were nominated on a Soldier-Labor ticket, and others, as previously mentioned, are appealing to agriculture and labor. The Socialist party has two candidates in the contest, and the Grand Army of Canada have set up one representative in Hamilton. Two candidates are independent Liberals, and four independent Conservatives. There are in the neighborhood of a dozen who class themselves out-and-out Independents, including prohibitionists and anti-prohibitionists.

Four of the nominees are already assured of a seat in the Legislature by virtue of the fact that they have no opposition. Three of these are former members, namely, Hon. Brigadier-General A. E. Ross, Kingston, Hon. H. J. Cody, Minister of Education, Northeast

top. A smaller cow in plenty of quality was third. Mary 5th, another Wendolds gave first place to Middlesex Meadows Farm. s in high fit. The second less strength and poorer well 3rd was picked out for the senior and grand advantage was in size and type.

ged from the next class, lossom won from eight Chisholm, Port Chester, ngest thing in her class, where but first. Among s Lilian Walker won for he was exceedingly well quality besides promising lady Dorothy, from the e heifer with a very clean as placed second. Seitz classes with Cavalier's s Lady Walker. There White Heather of Torr cial records begun at five 0 for conformation and Chapmanon Nell 3rd formation, but had only the class for cows with Maple Leaf Jean scored lace to Highland Polly lowmoor Gleshire Queen exhibitor's herd, young or get of Cavalier's Lord arm won first on dairy Lass and on Netherton her progeny. Professor lege, A nes, Iowa,made.

ys. tionally fine showing 81 entries, some better considerably below 1917, e shown by twenty ex- was exceptionally fine, eing shown with Lady- yon in 1916, 1917 and wood Farm, Crystal Bay, class produced the senior s Prince, owned by He was later beaten Dauntless of Edgemoor, antee, California. This 1-cow class with Imp. d cow with a record of 4.77 pounds fat. Other en Queen of Edgemoor victorine of Edgemoor in won the two-year-old es des Houards, and the oom of the Prairie.

iss. entries of Brown Swiss Marshall & Sons, Leslie, d-bull class with Stasis d. This bull is a son of grand champion in 1917 his year by Hull Bros.' championship was won ontana, with Jura M's ontained some good in- ticularly uniform class. l individual with good udder and well-placed for the senior cham- ty of Lakeview, winner his cow was also made M. Bravura, Marshall's Brown Swiss are not a cite much ringside en- ong animals, excellently milk production. They ty, as are Jerseys and gus, since they lack the perament of the dairy nd sappiness of the beef e admirably suited to d have been introduced

Holstein Sale.

the National witnessed al Holstein Sale. The ion with the National air, and so far as the ed was merely an ex- Hastings Co. were the all ages were disposed of the sale was \$6,000, Sylvia Johanna, a son sire of Carnation King twenty-five individual

na, O. A. Stubbs,	\$6,000
by, E. V. Maltby,	5,000
Small & Gooding,	3,600

Toronto, and W. D. Black, Addington. The new man to go in by acclamation is J. R. Cook, of North Hastings. These four are all Government supporters.

Three and four-cornered fights are common, but in North Waterloo the electors will have their choice of no fewer than six candidates running on the following tickets: Conservative, Liberal, U. F. O., Labor, Independent Liberal and Socialist. This is one of the extreme complications of the forthcoming election. In all there are about a dozen different parties designated, and it will take some time after election day to find out who is who in the Legislature of Ontario.

Board of Commerce Ease up on Hogs.

The order of the Board of Commerce made on September 27, in regard to the wholesale price of bacon and hog products, and which has exerted a disastrous influence on the hog industry of this country, has been given a hoist for fifteen days. On September 27, after a very hasty and apparently superficial enquiry into the packing business, the Board of Commerce ruled thus: "It is ordered and declared that on, from and after the 15th day of October, 1919, pork and the products of hogs shall be sold by the owners or operators of packing houses at prices substantially the same as those which prevailed on the 10th day of March, 1919, and it is declared that on and after the said 15th day of October, 1919, any such firm or corporation within Canada being an owner or operator, as aforesaid, who sells any such pork or product of hogs for consumption within Canada at a price greater than those of said 10th day of March, 1919, shall be deemed to have sold same at a price which is unreasonable and unjust and at an excessive profit."

While the action of the Board of Commerce to reduce the cost of living by cutting out excess profits is commendable indeed, yet in this case they failed to take all circumstances into consideration and made a ruling, the injurious effect of which on the hog industry of this country cannot be estimated. The underlying facts of the case were so plain and so important that the Board can hardly be vindicated for the very unwise action they took at that time.

It is an understood fact that the curing and smoking of bacon is a matter of about six weeks' time. Therefore, many of the bacon products on sale at around March 10 were obtained from hogs which sold during the last week in January and the first week in February. Just at that time live-stock markets, particularly in regard to hogs, were very unsettled and farmers were getting the lowest prices for hogs received this year. During those two weeks hogs were quoted and selling at \$16 to \$16.50, fed and watered, on the Union Stock Yards, Toronto. Allowing for a differential of one dollar between f.o.b. and fed and watered prices, farmers were receiving in the neighborhood of \$15 to \$15.50 per cwt., and many were getting even less. Added to this was the disturbance in the Old Country, which forced packers to place product on the Canadian markets at a very small margin. It can easily then be seen that a fall price for hogs and hog products similar to those current in the spring and late winter would be disastrous in the extreme. It has proved so, just as one would expect. Confidence has been destroyed; light, unfinished pigs are going to market, and brood sows have been disposed of at an alarming rate.

At a special session held in Toronto last Saturday, packers were given a hearing, and the members of the Board sitting decided to grant an eleventh-hour reprieve of fifteen days, promising to give further regard to the order and make an announcement before the first day of November. In the meantime, Mr. O'Connor, who took part in the previous ruling, will have an opportunity to consider the latest appeal and give it further consideration. He was absent from the meeting last Saturday.

At the recent hearing the packers submitted a price chart, showing that at the price fixed by the Board the packers would be compelled to sell at an actual loss. Mr. McLean, of the Harris Abattoir Company, related to the Board how the curing and processing of bacon required about six weeks, and to prove that the prices of March 10 were by no means the standard, he explained that prior to the Armistice, and up until the middle of January, 1919, the British Ministry of Food had made huge monthly purchases, upon which the prices had been fixed. Product was being prepared to meet these orders, but late in January the British Ministry of Food cancelled its orders and refused to allow bacon to be shipped to English markets. This, explained Mr. McLean, threw a vast quantity of meat upon the home market so that prices ran away down.

There is no little uneasiness felt in Government circles throughout Canada, in regard to the hog situation at the present time. This reprieve of fifteen days should permit time for strong representations to be made to the Dominion Government, and for the Federal Agricultural Department to get busy and show wherein the Board of Commerce is having such a disastrous effect on agricultural production in Canada.

More Cheese Wanted.

As presaged in a recent issue of "The Farmer's Advocate," the British Ministry of Food desire more Canadian cheese over and above the 20,000 tons which they purchased at a fixed price. A cable was received last week by the Department of Agriculture, Ottawa, announcing that the British Treasury had sanctioned the continuance of the present scheme of purchase to

cover the entire exportable surplus of Canadian cheese for 1919.

Government Will Acquire Grand Trunk.

One of the most momentous problems of the present session came before the House of Commons on October 10 of last week in the form of a resolution embodying terms and conditions under which the Government shall acquire the Grand Trunk Railway system with its rolling stock and equipment. Negotiations have been carried on for some time with the Grand Trunk Board of Directors, and this is the first real announcement made regarding the deal. The resolution provides for the acquisition of the entire capital stock, except the four per cent. guaranteed, amounting to 12,500,000 pounds sterling. The present capital stock of the road aggregates 49,573,492 pounds sterling, and the outstanding debenture stock amounts to 31,926,125 pounds sterling. A board of three arbitrators are suggested in the resolution to determine the value of the first, second and third preference stocks, and the common or ordinary stock. One of the arbitrators is to be appointed by the Railway Company, the second by the Government, and the third by the other two, or, failing agreement, by judges. A committee of management is to be formed consisting of five persons to operate the road, and in the words of Hon. Arthur Meighen, who introduced the resolution, "to insure the operation of the Grand Trunk system (in so far as it is possible so to do) in harmony with the Canadian National Railway, the two systems being treated in the public interest as nearly as possible as one system. The Government will be authorized to lend to the committee of management such sum as may be necessary for the carrying on of the railroad. New guaranteed stock will be issued in exchange for preference and common stock which is to be transferred to or vested in the Government.

This resolution will, no doubt, be the subject of much debate in the House of Commons. When the Grand Trunk is finally merged with other Government roads it will make a national system embracing 20,000 miles of steel owned and operated by the Government of Canada.

OLEOMARGARINE AGAIN.

On October 7 the Government proposal was brought in to permit the manufacture and importation of oleomargarine until August 31, 1920, and its sale until March 1, 1921. Manufacture, importation and sale of margarine has been permitted under an Order-in-Council passed under the authority of the War Measures Act. Now that the war is over an effort is being made to continue the permission by statute. Members from rural ridings objected to the continuation of the right to manufacture, import and sell the butter substitute, on the ground that it would be a serious blow to the dairy industry. Urban representatives, on the other hand, urged the Government to further the production of oleomargarine in Canada in order to keep down the price of butter.

A TEMPERANCE MOVE.

Prospective legislation which caused some stir at Ottawa last week was proposed by Hon. Mr. Doherty, and it affords the Provinces an opportunity to prevent the manufacture and importation of alcoholic liquors. When introducing the Bill Mr. Doherty said: "This Bill is to extend the provisions of the Canadian Temperance Act so as to make it possible that if upon a plebiscite vote of the electors of an entire Province, which plebiscite would be taken upon a petition based on a resolution of the Legislative Assembly, the majority of the electors declare that they desire that the importation of liquor into that Province or the manufacture of liquor in that Province, or both, should be absolutely prohibited, then under the provisions of this Bill such manufacture or such importation, or both, would be prohibited by a proclamation, which would be issued in accordance with the proceedings provided for in the Canada Temperance Act."

It was explained in regard to this measure that the Legislative Assembly of any province must make the request, and then a plebiscite would be taken in that Province under Dominion Government auspices.

The Charters sale of Shorthorns, held recently at Seaforth, was a decided success. Animals of excellent breeding were offered to the public, and the prices were correspondingly good. We have not the names of the animals sold, and consequently can only mention some of the prices received. George Kerr, of Henfryn, paid \$800 for one cow, and E. Robson, of Denfield, purchased a pair of cows for \$900, and a year-old heifer at \$350. E. Templeman, of Staffa, paid \$330 for a cow, and O. Turnbull, of Brussels, paid \$560 for a cow and calf. R. Peck, of Varna, secured an eight-months-old calf for \$345, and Jas. Scott, of Seaforth, paid \$300 for a ten-months heifer calf. Other cows sold at from \$175 to \$275, and a number of bull calves brought \$100 and upwards, according to their age and breeding.

Government statements issued emphasize the need of volume of live-stock products in order that Canada may maintain connection with the Old Country market, and yet O'Connor's actions have sent thousands of brood sows to the slaughter-house already this fall. Instead of discouraging hog production it should be encouraged so that Canada will be in a position to meet a part at least of 8,000 tons a week demand of bacon in England.

Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending October 9.

Receipts and Market Tops.

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

Table with columns for Receipts and Market Tops for CATTLE, CALVES, HOGS, and SHEEP. It includes sub-sections for Top Price Good Steers, Top Price Good Calves, Top Price Selects, and Top Price Good Lambs. Data is provided for Toronto, Montreal, Winnipeg, Calgary, and Edmonton for the week ending Oct. 9, 1918, compared to the same week in 1917.

Market Comments.

Toronto (Union Stock Yards).

A heavy offering of cattle was on sale on Monday, over six thousand head being in the pens. Further heavy receipts brought the total for the week up to ten thousand. The quality of the stock was inferior to that of a week ago, very few choice cattle being included in the shipments. Trading was a trifle slow on Monday and a decline of twenty-five to fifty cents per hundred was made on all grades of cattle, common stock taking the heavy end of the decline. On Tuesday the market developed more activity, while on Wednesday and Thursday sales showed a higher range and effaced the Monday decline. Local abattoirs were liberal buyers, as also were shippers, and heavy consignments were made on speculation to the United States where the beef trade has been developing strength. Very few heavy steers were offered and none were of really choice quality. The best of the heavy grades sold from \$12.25 to \$12.75 per hundred, and those of medium quality from \$11.50 to \$12 per hundred. Steers between the weights of ten hundred and twelve hundred pounds were represented by a limited number of car loads; a few head within these weights sold at \$12.50 per hundred, a good load averaging eleven hundred and twenty pounds was weighed up at \$12.40, twenty-two head averaging ten hundred and seventy pounds at \$12.25, seventeen head of eleven hundred pounds at \$12, and sixteen head of eleven hundred pounds at \$12.75. Medium quality stock moved from \$10 to \$11, and common steers from \$9 to \$9.75. Handy-weight steers and heifers under a ten hundred pounds sold generally under \$11.50 per hundred, but a few head were weighed at \$12, \$11.75 and \$11.60 per hundred, according to quality. Twelve head of handy-weights averaging nine hundred and eighty pounds changed hands at \$11.35, twenty-three head of nine hundred and ninety pounds at \$10.85, and most of the good quality stock within these weights from \$10 to \$10.75 per hundred; medium steers and heifers sold from \$8.50 to \$9.50, and common eastern stock from \$6 to \$8. Cows and bulls moved in sympathy with other grades of cattle, choice heavy bulls selling up to \$10.75 per hundred, and the best quality of cows at equal value up to \$10.75 per hundred, and the best quality of cow at equal values; medium cows moved from \$7 to \$8, and common grades from \$6 to \$7. Bologna bulls found a ready outlet from \$6 to \$7.50. An active inquiry existed for canner-cutter stock, and prices were advanced slightly, this class of cattle realizing from \$5 to \$6 per hundred. The local demand for stockers and feeders continued very dull and shipments to date have barely reached fifty per cent. The volume of those of the last two years; as a consequence, this class of stock must find an outlet across the border or go to the shambles; quotations were slightly easier. Calves were barely steady although a few veal calves sold early in the week at \$22, but toward the close \$19 to \$20 took the best quality. A few decks were shipped to the Buffalo market.

The main lamb crop is now being marketed, and receipts are far in excess

Table with columns for Market Comments and Market Tops for TORONTO and MONTREAL (Pt. St. Charles). It includes sub-sections for STEERS, HEIFERS, COWS, BULLS, CANNERS & CUTTERS, OXEN, CALVES, STOCKERS, FEEDERS, HOGS, LAMBS, and SHEEP. Data is provided for classification, number of animals, average price, price range, and top price.

of those of the same period of last year. Nearly sixteen thousand lambs were on sale, but, notwithstanding, the market held fairly steady, and satisfactory prices were realized. On Monday, the best decks sold from \$13.75 to \$14, on Wednesday \$14.50 was paid for several loads, but on Thursday the market failed to hold and \$14 was the highest price realized on top quality. Sheep were in steady demand from \$7.50 to \$9.50 per hundred, with culls at \$5 to \$7. A number of ewes went to the killing pens that could have been usefully employed for breeding purposes. Hog receipts were exceptionally light and the market was a shade stronger. Most of the hogs sold at \$18 per hundred, but one or two decks were weighed to local butchers at \$18.25 and \$18.50 per hundred. Of the disposition from the Yards for the week ending Oct. 2, Canadian packing houses and local butchers purchased 214 calves, 4,919 butcher cattle, 6,518 hogs and 11,253 lambs. Local butchers purchased 514 calves, 419 butcher cattle, 523 hogs and 1,793 lambs. Canadian shipments were made up of 38 calves, 334 stockers, 137 feeders, 31 hogs, 148 sheep and 29 lambs. Shipments to United States points consisted of 289 calves, 16 bulls, 820 butcher

cattle, 625 stockers, 626 feeders and 321 lambs.

The total receipts from January 1 to October 2, inclusive, were: 284,029 cattle, 53,629 calves, 279,379 hogs and 131,105 sheep; compared with 207,394 cattle, 47,238 calves, 254,624 hogs and 71,796 sheep, received during the corresponding period of 1918.

Montreal.

Receipts at the two yards for the week amounted to fifteen thousand two hundred sheep, thirty-one hundred and seventy-five hogs, sixty-eight hundred cattle and thirty-five hundred calves. The stock has been coming out in a fairly well regulated manner during the present Autumn, and so far there have been none of those gluts that so seriously affect prices. The market could be still further steadied by the better distribution of shipments during the week, instead of making Monday the market for the majority, and, so packers state, prices about ten cents per hundred more would then be paid for canners, bulls and common cattle arriving on Wednesday or Thursday, than for those arriving on Monday. Added to the local demand there were a number of buyers from outside points, and shipments outward were as follows: to Quebec, thirty-one

cattle and forty-nine sheep; to Harrison, New Jersey, two hundred and twenty sheep; to New York, thirty cattle, thirty-seven hundred and fifty-five sheep and two hundred and fifty-four calves to Boston, thirty-six hundred and sixty-three sheep, and five hundred and sixty-eight calves; to Province, Rhode Island one hundred and thirty-one calves; to Lancaster, Pennsylvania, thirty-three cattle; to Buffalo, New York, three hundred and forty-four cattle, and to Toronto, four hundred and forty-five cattle, one hundred and sixty-three hogs, and ninety-two lambs. There were very few good cattle offered and the highest price was paid \$12 per hundred for a load averaging about eleven hundred and twenty-five pounds. A couple of fairly good loads of steers averaging from ten hundred to ten hundred and fifty pounds were sold for \$10.35 and \$11.25 respectively. Some lighter steers of fair quality were sold down to \$9.50 per hundred. Common light cattle were in poor demand and changed hands at slightly lower prices than similar stock during the previous week, and many sales were made between \$7 and \$8 per hundred. A few good heifers were weighed up with steers and fat cows at \$9.50 per hundred. Nearly all the heifers offered were light and of common

Markets

Department of Agriculture, Live Markets Intelligence Division

Top Price Good Calves

Table with columns: Same Week, Ending, 1918, Oct. 2, 1919, Oct. 2. Rows show price fluctuations for calves.

Top Price Good Lambs

Table with columns: Same Week, Ending, 1918, Oct. 2, 1919, Oct. 2. Rows show price fluctuations for lambs.

TREAL (Charles) Price Range Bulk Sales

Table showing price ranges for bulk sales in Treal, with columns for price ranges and top prices.

Table with price ranges and top prices.

Table with price ranges and top prices.

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Table with price ranges and top prices.

Table with price ranges and top prices.

quality from \$6 to \$7.50. A few good cows were sold at prices ranging from \$8 to \$9.50. Medium cows were sold around the \$7 market and common cows from \$6 to \$6.50.

A couple of loads of good lambs were sold for \$13.75 per hundred, and the balance of the offering of good stuff sold from \$13 to \$13.50, while from \$11.50 to \$12 was paid for most of the lot.

Select hogs were sold at \$18 per hundred weighed off cars. A number of lots containing different percentages of lights sold at \$17.75, off cars. One straight car load averaging one hundred and thirty-eight pounds also sold at \$17.75.

PT. ST. CHARLES.—Of the disposition from the Yards for the week ending October 2, Canadian packing houses and local butchers purchased 2,103 calves, 811 bulls, 1,247 butcher cattle, 1,458 hogs and 4,461 lambs.

The total receipts from January 1 to October 2, inclusive, were: 36,688 cattle, 62,494 calves, 63,292 hogs and 52,595 sheep; compared with 37,144 cattle, 56,667 calves, 54,293 hogs and 34,983 sheep, received during the corresponding period of 1918.

EAST END.—Of the disposition from the Yards for the week ending October 2, Canadian packing houses and local butchers purchased 960 calves, 2,118 butcher cattle, 909 hogs and 1,747 lambs.

The total receipts from January 1 to October 2, inclusive, were 40,971 cattle, 46,342 calves, 43,900 hogs and 39,366 sheep; compared with 35,852 cattle, 42,883 calves, 34,970 hogs and 27,192 sheep, received during the corresponding period of 1918.

Buffalo.

Cattle.—Cattle market started off last week considerably higher than for the preceding week, prices on shipping steers—which were mainly Canadians—being from a half to a dollar above the previous week, while a good strong to quarter higher market was had on butchering cattle generally.

Shipping Steers, Natives.—Very choice heavy, \$17 to \$17.50; best heavy, over 1,300, \$16 to \$16.50; fair, over 1,300, \$14 to \$14.50; best, 1,200 to 1,300, \$16 to \$16.50; good, 1,200 to 1,300, \$14.50 to \$15.50; good, 1,100 to 1,200, \$14.25 to \$15; plain, \$11.50 to \$12.

Shipping Steers, Canadians.—Best heavy, \$13.75 to \$14.75; fair to good, \$13 to \$13.50; medium weight, \$13 to \$14; common and plain, \$11 to \$11.50.

Butchering Steers.—Yearlings, fair to prime, \$14 to \$15.50; choice heavy, \$14 to \$14.50; best handy, \$13.50 to \$14; fair to good, \$11 to \$12; light and common, \$9 to \$10.

Cows and Heifers.—Best heavy heifers, \$11.75 to \$12; good butcher heifers, \$11 to \$11.50; fair butchering heifers, \$9.50 to \$10.25; light, common, \$6 to \$7; very fancy fat cows, \$10.25 to \$10.75; best heavy fat cows, \$9.50 to \$10; medium to good, \$7.50 to \$9; cutters, \$6 to \$6.50; canners, \$4.50 to \$5.50.

Bulls.—Best heavy, \$10.75 to \$11;

good butchering, \$10 to \$10.50; sausage, \$8 to \$9.50; light bulls, \$7 to \$8.50.

Stockers and Feeders.—Best feeders, \$9.75 to \$11; common to fair, \$8.50 to \$9.50; best stockers, \$8 to \$9.

Hogs.—Market was erratic last week. Monday, under liberal receipts, prices were lower, bulk of the good hogs selling at \$16.50, with pigs going at \$16.25. Tuesday prices were a quarter higher, and another advance was had Wednesday.

The middle day of the week top was \$17.10, bulk sold at \$17, and pigs moved at \$16.50. Thursday prices dropped 90 cents to a dollar, bulk of the good hogs selling at \$16.10, with pigs \$16, and Friday the better weight grades landed mostly at \$16, with pigs going at \$15.75.

The latter part of the week showed good roughs selling at \$13, and stags ranged from \$11.50 down. Receipts for the past week were 28,400 head, as compared with 20,678 head for the week before, and 24,400 head for the same week a year ago.

Sheep and Lambs.—Lamb market, as a result of liberal receipts, was dull all of last week, and while prices were on the decline, several loads had to be carried over from day to day. Monday the best lambs sold at \$16.25, with culls going from \$13.50 down, and by Friday buyers got top lambs down to \$15, and few culls sold above \$12.

Calves.—Last week opened with top veals selling at \$23; Tuesday's top was \$22.50; Wednesday the best ranged from \$22 to \$23, and the next two days the bulk moved at \$22.50. Cull grades ranged from \$18 down. Heavy fat calves sold good the fore part of the week, but by the end of the week they were from \$2 to \$3 lower.

Receipts of live stock at the Union Stock Yards, West Toronto, on Monday, October 13, numbered 319 cars, 6,068 cattle, 710 calves, 1,601 hogs, 6,279 sheep and lambs. Slow market, good steers and heifers, steady; others 25 cents lower.

Toronto Produce.

Receipts of live stock at the Union Stock Yards, West Toronto, on Monday, October 13, numbered 319 cars, 6,068 cattle, 710 calves, 1,601 hogs, 6,279 sheep and lambs.

Breadstuffs and Feeds.

Wheat.—Ontario (f.o.b. shipping points, according to freights)—No. 1 winter, per car lot, \$2 to \$2.06; No. 2 winter, per car lot, \$1.97 to \$2.03; No. 3 winter, per car lot, \$1.93 to \$1.99; No. 1 spring, per car lot, \$2.02 to \$2.08; No. 2 spring, per car lot, \$1.99 to \$2.05; No. 3 spring, per car lot, \$1.95 to \$2.01.

Barley.—Manitoba, (in store, Fort William), No. 3, C. W., \$1.33½; No. 4, C. W., \$1.25½; rejected, \$1.14½; feed, \$1.14½.

Oats.—Manitoba (in store, Fort William)—No. 2, C. W., 80½c.; No. 3, C. W., 77½c.; extra No. 1 feed, 78½c.; No. 1 feed, 76½c.; No. 2 feed, 74½c.

Oats.—Ontario (according to freights outside)—No. 3 white, 84c. to 86c.

Barley (according to freights outside)—Malt, \$1.29 to \$1.32.

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

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

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

Flour.—Manitoba (Toronto)—Government standard, \$11; Ontario (prompt shipment, in jute bags). Government standard, \$9.40 to \$9.60, Montreal and Toronto.

Millfeed.—Car lots delivered, Montreal freight, (bags included)—Bran, per ton, \$45; shorts, per ton, \$55; good feed flour, \$3.50.

Hay.—(Track, Toronto)—No. 1, per ton, \$24 to \$25; mixed, per ton, \$18 to \$21.

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

Hides and Wool.

Prices delivered in Toronto: City Hides.—City butcher hides, green, 35c., flat; calf skins, green flats, 65c.; veal kip, 45c.; horse hides, city take-off, \$11 to \$13; sheep, \$2.50 to \$3.50; spring lamb skins, \$2 to \$3.

Country Markets.—Beef hides, flat cured, 35c.; part cured, 33c.; deacon bob calf, \$2.50 to \$3; horse hides, country take-off, No. 1, \$17; No. 2, \$15; No. 1 sheep skins, \$2.50 to \$3.50; horse hair, farmer's stock, 35c. to 40c.

Tallow.—City rendered, solids, in barrels, 9c. to 10c.; country solids, in barrels, No. 1, 7c. to 8c.; cakes, No. 1, 11c. to 12c.

Wool, unwashed, coarse, 42c.; medium coarse, 50c.; fine, 59c.

Wool, washed, coarse, 65c.; medium, 70c.; fine, 75c.

Farm Produce.

Butter.—The butter market kept firm at practically unchanged prices during the week, selling as follows, wholesale: Creamery, fresh-made pound squares, 57c. to 58c. per lb.; solids at 54c. to 55c. per lb.; choice dairy, 50c. to 53c. per lb.

Eggs.—Eggs kept stationary in price with a firming tendency, selling as follows, wholesale: New-laid, 65c. per doz.; No. 1's, 58c. per dozen.

Cheese.—Kept steady in price at 31c. per lb. for June make, and 28c. to 29c. per lb. for new (wholesale).

Honey.—There is very little honey being offered, selling at 25c. to 26c. per lb. for strained, and \$5 to \$6 per doz. for No. 1 comb, wholesale.

Poultry.—Receipts have been heavy and trade active at almost stationary prices. Geese at last began to come in fairly freely. Latest quotations for live birds delivered in Toronto were as follows: Spring chickens, 20c. to 23c. per lb.; hens under 5 lbs., 18c. per lb.; hens over 5 lbs., 25c. per lb.; roosters, 18c. per lb.; ducklings, 22c. per lb.; old ducks, 15c. per lb.; geese, 18c. per lb.; turkeys, 35c. per lb.

Wholesale Fruits and Vegetables.

Receipts of home-grown fruits, with the exception of apples and grapes are gradually declining, trade being fairly active for any good quality offerings at firm prices.

Potatoes have been very weak at lower levels, selling at \$1.90 to \$2 per bag; a few bringing \$2.10 per bag.

Apples.—Domestic, 25c. to 75c. per 11 qts.; \$4 to \$7 per bbl.

Crab Apples.—75c. to \$1 per 11 qts.

Grapes.—40c. to 50c. per 6-qt. flats; 50c. to 60c. per 6-qt. lenos.

Peaches.—40c. to \$1 per 6 qts.; 75c. to \$1.50 per 11 qts.

Pears.—20c. to 60c. per 6 qts.; 20c. to \$1 per 11 qts.

Plums.—\$1.50 to \$1.60 per case.

Tomatoes.—30c. to 40c. per 11-qt. flats; 40c. to 50c. per 11-qt. lenos; 20c. to 30c. per 6 qts.

Tomatoes.—Green, 20c. per 11-qt. basket.

Beans.—35c. to 60c. per 11 qts.

Beets.—\$1.25 to \$1.50 per bag.

Cabbage.—75c. to \$1 per dozen.

Carrots.—\$1.25 per bag.

Cauliflower.—50c. to \$1.50 per dozen.

Corn.—10c. to 20c. per doz.; choice Evergreen, 25c. per dozen.

Celery.—40c. to 75c. per dozen.

Cucumbers.—Large, 25c. to 40c. per 11 qts.; choice slicers at 50c. to 75c. per 11 qts.; (pickling), 50c. to \$1.25 per 6-qt. basket; 75c. to \$1.75 per 11-qt. basket.

Egg Plant.—60c. to 75c. per 11 qts.; 85c. to \$1 per 16 qts.

Lettuce.—Leaf, 50c. to 75c. per case; Canadian Head, \$1 to \$1.25 per case.

Onions.—Imported, \$5 per 100 lbs.; Domestic, No. 1's, \$5 per 100 lbs.; No. 2's, \$4.50 per 100 lbs.; Spanish, \$6 per case.

Potatoes.—Ontario, \$1.90 to \$2.10 per bag; New Brunswick Delawares, \$1.90 to \$2.10 per bag.

Cheese Markets.

Montreal, finest Easterns, 25c.; Cornwall, white, 26-16c.; colored, 27½c.; St. Hyacinthe, 25½c.; Watertown, 28½c.; New York, flats, specials, 30½c. to 31½c.; average run, 30c. to 30½c.; twins, specials, 30c. to 30½c.; average run, 29½c. to 29¾c.

Montreal.

Horses.—Dealers reported a fair enquiry from lumbermen for horses for the woods and a few animals were being taken for fall ploughing in the country. The demand from carters was light. Prices showed no change, being \$250 to \$300 each for heavy draft, weighing 1,500 to 1,600 lbs., \$200 to \$250 each for light draft, weighing 1,400 to 1,500 lbs.; \$125 to \$175 for light horses; \$50 to \$75 for culls and \$150 to \$250 each for saddle and carriage animals.

Dressed Hogs and Provisions.—The market for live hogs having been steady during the week, the price of dressed showed no change, being from 25½c. to 26c. per lb. for abattoir dressed. Smoked and dressed meats were unchanged, being 35c. to 36c. per lb. for light hams, 33c. to 34c. for mediums, weighing 12 to 15 lbs. and 32c. for heavies. Breakfast bacon showed no change, being 44c. to 45c. per lb.; Windsor selects were 46c. to 48c. and boneless 50c. Lard was steady at 31½c. to 32½c. per lb. for pure and 30c. to 30½c. for compound.

Butter.—Production continues good for the time of year and prices were quite strong, being 57c. to 57½c. per lb. for pasteurized creamery; 60½c. to 57c. for finest creamery, one cent less for fine and 52c. to 53c. for finest dairy. These prices are about 2c. more than a week ago.

Cheese.—Prices were steady, the Commission quoting 25c. per lb. for No. 1; 24½c. for No. 2 and 24c. for No. 3, grades.

Grain.—The market for oats showed a decline this week. No. 2 Canadian Western oats were 95c. per bushel; No. 3 C. W. and extra No. 1 feed were 94c.; No. 2 feed, 92c.; sample, 93c. Barley was firmer, being \$1.45 per bushel for No. 3 Canadian western, \$1.42 for No. 4 and \$1.33 for feed grades.

Flour.—The market holds steady from week to week and Manitoba spring wheat standard grade was \$11 per bbl., in bags, Montreal freights and to city bakers, with 10c. off for spot cash. Ontario winter wheat flour was steady at \$10.50 to \$10.60 per bbl., in new cotton bags. White corn flour was \$10.90 per bbl., and rye flour \$8.25 to \$8.50 per bbl., in jute.

Millfeed.—There is said to be an excellent demand for all kinds of millfeed, at steady prices. Sales of car lots of bran are reported at \$45 and of shorts at \$55 per ton, including bags ex-track, with broken lots of bran selling at \$46 to \$46.75 and of shorts at a similar advance on car lot prices. These prices being subject to a discount of 25c. per ton, for spot cash.

Hay.—Dealers are quoting around \$20 to \$22 per ton for baled hay, ex-track, for No. 2 timothy.

Hides and Skins.—There was very little change in the market this week. Steer and cow hides declined 4c. per lb., being 35c. per lb., while bull hides were 27c. per lb. Veal skins were 75c. per lb., and kips 50c. per lb. Lamb skins were selling at \$2.50 each and clipped lambs at \$1.25 to \$1.50 each, horse hides \$12.50 each.

Gossip.

Sale Dates.

Oct. 22, 1919.—Adam A. Armstrong, Fergus.—Oxfords.

Oct. 22, 1919.—Robt. Mitchell, Ilderton.—Shorthorns and Clydesdales.

Oct. 28, 1919.—Jacob Schieb, Rodney, Ont.—Holsteins.

Oct. 30, 1919.—Niagara Peninsula Holstein-Friesian Association, Dunnville, Ont.

Oct. 31, 1919.—John Patterson, R. 3, Ilderton, Ont.—Shorthorns.

Nov. 4, 1919.—Western Ontario Consignment Sale, London.—Shorthorns.

Nov. 5, 1919.—Elgin Breeders' Short-horn Sale, St. Thomas, Ont.

Nov. 6, 1919.—J. C. Bricker, Elmira.—Shorthorns.

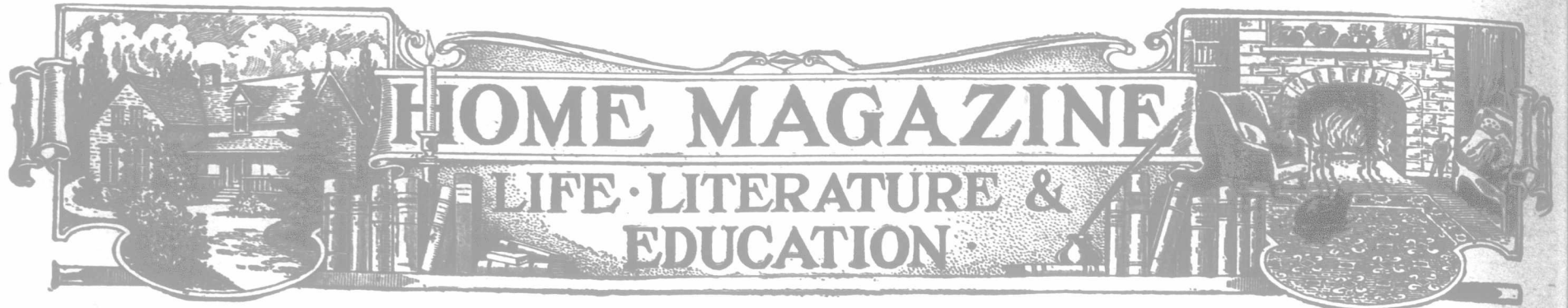
Nov. 12, 1919.—Estate T. C. Hodgkinson, Beaverton.—Percherons, Shorthorns and Shropshires.

Dec. 2, 1919.—David Caughell, R. 8, St. Thomas.—Holsteins, farm stock, etc.

Dec. 3, 1919.—Niagara Peninsula Holstein-Friesian Association, Dunnville, Ont.

Dec. 17, 1919.—Oxford Holstein Breeders' Club will hold their semi-annual sale at Woodstock, Ont.

Dec. 18, 1919.—Brant District Holstein Breeders, Brantford, Ont.



A Nation's Builders.

Not gold, but only men can make
A people great and strong—
Men who, for truth and honor's sake
Stand fast and suffer long.

Brave men, who work while others sleep,
Who dare while others fly—
They build a nation's pillars deep
And lift them to the sky.

—RALPH WALDO EMERSON

Winter Protection of Plants.

BY W. S. BLAIR, EXF. FARM, KENTVILLE
N. S.

ALTERNATE freezing and thawing may be the cause of plants winter-killing, or the winterkilling may result from continued cold drying out the wood. This latter killing is noticeable in the case of raspberries and roses. The more mature the canes or wood the less the liability to injury. Conditions favorable for late fall growth may produce wood that will not stand the temperature if more mature, as degree of maturity in the wood will lessen the injury due to a low temperature. To protect raspberry canes they are bent over along the row and covered with soil. Care is necessary not to break the canes. The canes are bent over and the tips covered and soil filled under the parts that do not touch the ground moulding up until the whole plant is covered. This covering is removed gradually early in the spring. Climbing Roses may be taken down and covered as indicated for raspberries, and the bush roses mounded up cone shaped to a depth of eight or ten inches around the plant. The branches above this may be killed but the necessary buds will be kept alive below the covering and all the dead branches can be cut out to good buds the next spring. Over this mound around the rose plants a mulch of three or four inches of straw manure should be placed. This should be done just before continuous cold weather sets in, and removed as soon as the sap begins to flow in the spring. In mounding avoid leaving deep holes for water to lodge in near the roots of the plants.

Perennials are the better of a light mulch about two inches deep. However, care should be exercised in not making it too deep to cause rotting of the crown. This is particularly liable to happen with the biennials such as digitalis or foxglove, campanula, pansies, sweet william and hollyhock, for which a light covering of straw just sufficient so that the plants can be seen through the straw is, we find, the best, or just sufficient to prevent excessive freezing and thawing but not enough to hold the crown wet during a continued mild spell.

Literary Prophets Who Foresaw Our Day.

Literary antiquarians are finding all kinds of prophecies covering events of to-day, and some of them are enough to awaken the spirit of marvel in view of the remote contingency as to the day of fulfilment. For example, what could have put it into the head of George Sand seventy-two years ago that American forces would ever occupy French soil? Mr. J. S. N. Davis sends to the New York Times this literary find:

"George Sand, in her novel 'Mauprat,' written in 1846, puts into the mouth of Bernard Mauprat, in about the middle of the fifteenth chapter, the following words: 'In his (Marcasse's) dreams he used to see an army of victorious Americans disembarking from numberless ships, and bringing the olive-branch of peace and

the horn of plenty to the French nation,' etc.

"Mauprat in his old age is telling the story of his life and was here giving an account of himself and friends, their doings and thinkings, while in America with Lafayette fighting for American freedom.

"It would be hard to find a more literal fulfilment of any written expression." Tennyson's "Locksley Hall" places its author as a safer guesser in view of the declared determination of science to conquer the physical universe; but The Catholic Citizen (Milwaukee) thinks his vision of seventy years ago an "almost uncanny forecast" not only of "the recent world-upheaval, but even the instruments of warfare developed in its course, and the result to follow Armageddon." It quotes this passage:

For I dipt into the future, far as human eye could see,
Saw the vision of the world, and all the wonder that would be;
Saw the heavens fill with commerce, argosies of magic sails,
Pilots of the purple twilight, dropping down with costly bales;
Heard the heavens fill with shouting, and there rain'd a ghastly dew
From the nation's airy navies grappling in the central blue;
Far along the world-wide whisper of the south wind rushing warm,
With the standards of the peoples plunging through the thunder-storm;
Till the war-drum throbb'd no longer, and the battle-flags were furled
In the parliament of man, the Federation of the World.

The cue being given, another deliver, a writer to the New York Sun, finds that in 1849 Victor Hugo, addressing the Peace Congress in Paris, foreshadowed the "United States of Europe." Mr. Isaac Markens comments before quoting the French poet that "Germany's subsequent role in the history of nations, more especially the theft of Alsace-Lorraine in 1871 and her Draconian policy in late years, leave no doubt of Hugo's attitude with respect to Germany's representation in the proposed confederation, were he living to-day." Hugo then said:

"A day will come when you, France, you, Russia, you, Italy, you, England, you, Germany, all you nations of the Continent, shall, without losing your distinctive qualities and your glorious individuality, blend in a higher unity, and form a European fraternity, even as Normandy, Brittany, Burgundy, Lorraine, Alsace, all the French provinces, blended into France.

"A day will come when war will seem as impossible between Paris and London, between Petersburg and Berlin, as between Rouen and Amiens, between Boston and Philadelphia.

"A day will come when bullets and bombs shall be replaced by ballots, by the universal suffrages of the people, by the sacred arbitrament of a great Sovereign Senate, which shall be in Europe what the Parliament is to England, what the Diet is to Germany, what the Legislative Assembly is to France.

"A day will come when a cannon shall be exhibited in our museums as an instrument of torture is now, and men shall marvel that such things could be.

"A day will come when we shall see those immense groups, the United States of America and the United States of Europe, in face of each other, extending hand to hand over the ocean, exchanging their products, their commerce, their industry, their art; their genius clearing the colonizing deserts, and ameliorating creation under the eye of the Creator.

"And to you I appeal, French, English, Germans, Russians, Slavs, Europeans, Americans, what have we to do to hasten the coming of that great day? Love one

another. To love one another, in this immense work of pacification, is the best way of aiding God. For God wills that this sublime will should be accomplished." —Literary Digest.

Book Notes.

AMONG the books of fiction which Canadian publishers are stressing this fall are: "Golden Dicky," by Marshall Saunders, the author of the famous story "Beautiful Joe"; "Joan of Halfway," a novel of Nova Scotian life, by Grace McLeod Rogers; and a new L. M. Montgomery book, "Rainbow Valley." These are all published by McClelland & Stewart, 215 Victoria St., Toronto.

The Musson Book Co., Toronto, have brought forward "Christopher and Columbus" by the author of "Elizabeth and Her German Garden," "Foes" by Mary Johnston, and "The Haunted Bookshop," by Christopher Morley.

In non-fiction we find "Industry and Humanity," by W. L. MacKenzie King (Allens, Toronto); "International Ideals" by Woodrow Wilson (Musson); "The Candle of Vision," by A. E. (MacMillan's).

From the American publishing houses comes a great stream of literature, suiting every taste and every necessity. Among the list are noted: "Mare Nostrum" (Our Sea), by Vicente Blasco Ibanez, the famous author of "The Four Horsemen of the Apocalypse," which was the best selling book in America last year. (E. P. Dutton & Co., 681 Fifth Ave., New York. Price \$1.90, postage extra.)

"If books came steaming from the griddles of all the Child's restaurants, flip-flop into the hands of hungry crowds pressing against the front windows," says Grant Overton, literary editor of the N. Y. Sun, "and if all the pancake artists from Boston to San Francisco were kept at work in three shifts, 'The Re-Creation of Brian Kent' could not be supplied fast enough to the readers of Harold Bell Wright."

"The Arrow of Gold," is by Joseph Conrad, the English novelist who is considered by many of the leading critics the best living writer of fiction. It is published by Doubleday, Page & Co., Long Island, New York.

Among books other than fiction are Brand Whitlock's "Belgium"; "The League of Nations," by a number of eminent men, but edited by Stephen Duggan (Atlantic Monthly Press, N. Y. Price \$2.50); Cortes Holliday's "Walking-Stick papers," a collection of essays; "Joyce Kilmer; Poems, Essays and Letters"; a volume by Cardinal Mercier, whose name is yet to be chosen; and that other best seller of the past year "The Education of Henry Adams".

A remarkable development of the times is the extraordinary interest in any book that deals with communication with those who have left this world. "There is no hazard of fortunes," says Grant Overton, "in printing a first edition of 25,000 copies of a striking book on this subject. You can sell them." In Canada Dr. Albert D. Watson, who recently published "The Twentieth Plane," is preparing a second volume to conclude the "revelation" begun in his first volume of communications; the second volume will treat of psychic laws and the Philosophy of Immortality, besides a continuation of messages as given in the preceding volume. Another book along the same line is "The Seven Purposes," by Margaret Cameron.

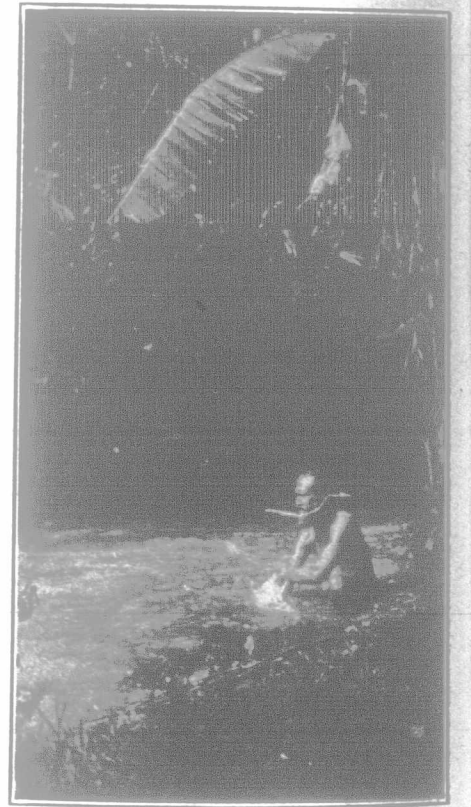
A colored woman beat Mrs. Twickenbury in this: She was telling her qualifications as a lady's maid, and said she had kept house. "Then I suppose you can cook, too?" "Indeed I can, yes'm; and if you'll try my cooking, you'll find it palatial."

Women's Institute Conventions.

The dates for the Women's Institute Conventions in Ontario have been set as follows:

Ottawa—Oct. 22 and 23.
London—Oct. 28 and 29.
Toronto—Nov. 12, 13, 14.

Most interesting programs have been prepared, with especial attention to education and care of health in the Rural Schools, Demonstration-Lecture work, and other subjects of especial interest to rural communities. Among other subjects dealt with will be Home Economics, Community Halls and Community Work, Soldiers' Civil Re-establishment, Betterment of Woman's Position, etc., besides many matters of business interest to institute workers.



The Modern Adam.
Dowling.

High Priest of Strange Religious Order is Dead.

BY FRANCIS DICKIE.

GEORGE Dowling, the modern Adam, the head of the oddest of modern religious societies passed away recently in his south sea Eden high on a mountain side on the island of Tahiti just outside the city of Papeete. Dowling or Adam, as he was more generally known was the founder and high priest of the Adamites, a religious order of very primitive type. He was a native of the state of California, of independent means, a college graduate, very highly read, a clever speaker, and exceedingly pious, though his ideas did not find acceptance.

About twenty years ago the new Adam came into prominence in San Francisco as the founder of the religious order known as the Adamites. The main rules of the society were as follows. That men should not wear clothes; that doctors and medicine were absolutely unnecessary; that philosophic pondering on the answer to the universe was foolish; that socialism was the guarantee of human happiness and that men should confine themselves to a vegetarian diet. He gathered around him a dozen disciples. But though the good people of the city of San Francisco did not object to the Adamites believing what they liked, they did object to having



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naked men parading about their city. So Dowling and his little band had to leave. They went to Honolulu. But Honolulu, though long ago a spot where men went about in primitive garb, was now highly civilized, and would not permit the Adamites to practice their religion. So the colony went on to the island of Raratonga. Here, too, they met with hostility. Once more they moved, this time to the inland of Tahiti. The French colonial authorities were kinder. The French have always been noted for their toleration and politeness. They allowed the Adamites to take up several hundred acres of land on the side of a mountain back of the city of Papeete, making only one stipulation, that Dowling or any of his disciples wherever they entered the city of Papeete should don a pair of trouses.

The new Eden the Adamites obtained from the French authorities required two hours of steep climbing to reach. But they cleared a road, and packed up on their back all their tools, farming implements and household possessions. They established a magnificent plantation on the fairly level stretch of mountain side, planting all kinds of tropical fruits and vegetables. A mountain stream was dammed and diverted to make a wonderful artificial swimming pool, for the Adamites were great believers in cleanliness. Though the Adamites' creed admitted women to membership, none ever joined them, probably for the very good reason that so many womens' lives centres so largely around dress that the Adamites simple life lacked any appeal.

With the exception of one or two, no outsiders ever were guests in the strange modern Eden upon the side of the mountain. Frank Burnett, a Canadian veteran traveller in the south seas, was one of these few, and the only man ever permitted to take photographs. One picture of the high priest himself was obtained while in his artificial pool bathing. The most striking thing about the man, beside his splendid physique, was that he bore a marked resemblance to the Christ as usually portrayed in paintings. The reader can glimpse this himself even from this small and surreptitiously taken photo.

Dowling recently suffered from an attack of influenza which was very bad in the south seas, and later died of the after affects, probably chiefly due to his refusal to have anything to do with medicine and doctors. His passing marks the death of the leader of one of the world's strangest little colonies, a deeply religious one, where men lived quiet simple lives; and while the great world did not agree with their ideas on nudity, there is no one but will admire their general path of life.

The Fashions.

How to Order Patterns.

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

When ordering, please use this form:—
Send the following pattern to:

Name.....
Post Office.....
County.....
Province.....
Number of Pattern.....
Age (child or misses' pattern).....
Measurement—Waist..... Bust.....
Date of issue in which pattern appeared.....

3027-3004. Costume for Home or Business.
Waist 3027 Cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 will require 3 1/2 yards of 27 inch material. Skirt 3004 Cut in 7 Sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 will require 2 1/2 yards of 48-inch material. The width at lower edge, of skirt, with plaits extended is 2 7/8 yards. TWO separate patterns 10 cents FOR EACH pattern.

3029. Girls' Dress.
Cut in 4 Sizes: 8, 10, 12 and 14 years.

Size 10 will require 4 yards of 36-inch material. Price 10 cents.

2672—Ladies' Apron.
Cut in 4 Sizes: Small, 32-34; Medium, 36, 38; Large, 40-42, and Extra Large, 44-46 inches bust measure. Size Medium requires 4 yards of 36-inch material. Price, 10 cents.

2662. Child's Night Drawers.
Cut in 6 sizes: 2, 4, 6, 8, 10 and 12 years. Size 6 will require 3 3/8 yards of 36-inch materi l. Price, 10 cents.

3021. A Smart Coat.
Cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 will require 6 1/2 yards of 52-inch material. Price, 10 cents.

3009. Girls' Dress.
Cut in 4 Sizes: 4, 6, 8 and 10 years. Size 8 will require 2 3/4 yards of 36 inch material. Price 10 cents.

3006. Ladies' House Dress.
Cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 1/2 yards of 36-inch material. Width of skirt at lower edge, is about 1 3/4 yard. Price 10 cents.

3031. Child's Dress.
Cut in 4 Sizes: 2, 4, 6 and 8 years. Size 4 will require 3 yards of 27-inch material. Price 10 cents.

3011. Girls' Dress.
Cut in 4 Sizes: 4, 6, 8 and 10 years. Size 8 requires 3 3/8 yards of 27-inch material. Price 10 cents.

3019-3022. Ladies' Costume.
Waist 3019 Cut in 7 Sizes: 34, 36,

38, 40, 42, 44 and 46 inches bust measure. Skirt 3022 cut in 7 Sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. A medium size will require 7 3/8 yards of 38-inch material. The width of skirt at lower edge, is 2 yards. TWO separate patterns 10 cents FOR EACH pattern.

3012. Girls' Dress.
Cut in 4 Sizes: 8, 10, 12 and 14 years. Size 10 requires 3 1/2 yards of 44-inch material. Price 10 cents.

2686. Ladies' House Dress.
Cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 yards of 36-inch material. Width at lower edge is 2 1/2 yards, with plaits drawn out. Price 10 cents.

3001. Child's Coat and Cap.
Cut in 4 Sizes: 2, 3, 4 and 5 years. Size 2 requires 1 1/2 yard of 54-inch material for the coat, and 1/2 yard of 32-inch material for the cap, width 3/8 yard of lining. Price 10 cents.

3014. A Smart Frock.
Cut in 3 Sizes: 16, 18 and 20 years. Size 18 requires 3 3/8 yards of 54-inch material. Width of skirt at lower edge, is about 1 3/4 yard. Price 10 cents.

3002. Girls' Dress.
Cut in 5 Sizes: 4, 6, 8, 10 and 12 years. Size 8 requires 2 3/8 yards of 44-inch material. Price 10 cents.

3024. Ladies' Under Garment.
Cut in 4 Sizes: Small, 32-34; Medium 36-38; Large, 40-42; and Extra Large, 44-46 inches bust measure. Size Medium requires 3 1/4 yards of 36-inch material. Price 10 cents.

2694. Girls' Dress.
Cut in 4 Sizes: 6, 8, 10 and 12 years. Size 10 will require 3 1/2 yards of 40-inch material. Price 10 cents.

3017. A Pleasing Dress.
Cut in 3 Sizes: 16, 18 and 20 years. Size 18 will require 6 1/4 yards of 38-inch material. Width of skirt at lower edge, is about 1 1/2 yard. Price 10 cents.

3005. Boy's Suit.
Cut in 4 Sizes: 3, 4, 5 and 6 years. Size 4 will require 3 1/2 yards of 27-inch material. Price 10 cents.

3016. Ladies' House Dress.
Cut in 7 Sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. Size 38 requires 5 1/4 yards of 36-inch material. Width of skirt at lower edge, is 2 1/4 yards. Price 10 cents.

3007. Juniors' Dress.
Cut in 3 Sizes: 12, 14 and 16 years. Size 14 will require 3 1/4 yards of 44-inch material. Price 10 cents.

3015. Ladies' Dress.
Cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 6 3/8 yards of 44-inch material. Width of skirt at lower edge, is about 1 5/8 yard. Price 10 cents.

3018. Child's Play Dress.
Cut in 4 Sizes: 2, 3, 4 and 5 years. Size 3 will require 2 3/4 yards of 27-inch material. Price 10 cents.

3023. Ladies' Apron.
Cut in 4 Sizes: Small, 32-34; Medium, 36-38; Large, 40-42; and Extra Large, 44-46 inches bust measure. Size Medium





Really a Delightful Confection

DAINTY Chiclets, tingling with delightful peppermint—a confection delicious and beneficial.

You'll find Chiclets welcome everywhere. Why? The dainty size and shape; the delightful candy-coating of peppermint; the wholesome goodness of the gum inside.

Chiclets are sold everywhere—ten for 5c.—and in the dollar box of 20 packets.



—an Adams product, particularly prepared

MADE IN CANADA

ADAMS Chiclets

CANDY COATED GUM

Canadian Chewing Gum Co., Limited, Toronto, Winnipeg, Vancouver.

requires $4\frac{3}{4}$ yards of 36-inch material. Price 10 cents.

3013. Ladies' Dress. Cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 6 yards of 44-inch material. The dress measures about $2\frac{1}{8}$ yards at the foot. Price 10 cents.

2660. Girls' Dress. Cut in 4 Sizes: 8, 10, 12 and 14 years. Size 12 requires $4\frac{1}{8}$ yards of 40-inch material. Price, 10 cents.

3010. Ladies' Apron. Cut in 4 Sizes: Small, 32-34; Medium, 36-38; Large, 40-42; Extra Large, 44-46; inches bust measure. Size Medium requires $3\frac{1}{4}$ yards of 36-inch material. Price 10 cents.

3026. Girls' Gymnasium Suit. Cut in 5 Sizes: 8, 10, 12, 14 and 16 years. It requires $3\frac{3}{4}$ yards of 27-inch material for the blouse, and $3\frac{3}{8}$ yards for the bloomers, for a 12 year size. Price 10 cents.

3025-3008. An Attractive Costume. Waist 3025 Cut in 6 Sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 3008 cut in 7 Sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. To make this attractive style for a medium size will require $5\frac{3}{4}$ yards of 44-inch material. Width of skirt at lower edge is about $1\frac{3}{4}$ yard. TWO separate patterns 10 cents FOR EACH pattern.

3030. Girls' Dress. Cut in 4 Sizes: 6, 8, 10 and 12 years. Size 10 requires $3\frac{3}{4}$ yards of 40-inch material. Price 10 cents.



2675. Ladies' House Dress. Cut in 7 Sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires $6\frac{1}{8}$ yards of 36-inch material. Width at lower edge is about $2\frac{1}{8}$ yards. Price 10 cents.

3028. Girls' Coat. Cut in 3 Sizes: 10, 12 and 14 years. Size 14 requires $3\frac{1}{2}$ yard of 44-inch material. Price 10 cents.

Hope's Quiet Hour.

Be Glad and Rejoice.

Fear not, O land, be glad and rejoice; for the LORD hath done great things. —Joel 2 : 21 (R. V.)

Joy is the grace we say to God,
There is a rest remaining. Art tired?
There is a sacrifice. Lift up thy head!
This lovely world, and the over-world
alike,
Ring with a word Divine, a happy song,
"THY FATHER LOVES THEE."
—JEAN INGELOW.

Our text—as it is in the R. V.—is a call to National Thanksgiving on the ground that the Lord "hath done" great things. In the A. V. the translation is rather different, for the land is called to rejoice because the Lord "will do" great things. We have reason to rejoice because the Lord hath done for us great things in the past, and because He will do great things for our nation and the world in the future. Every day should be a true Thanksgiving Day, as we look back to the great deliverance and victory—which was only a hope last Thanksgiving Day—and look forward in confident hope that the sacrifices made for this splendid country of ours will bring down a rich blessing from Him who has led the way in laying down His life for His friends.

As the harvest of the fields is gathered in, we are reminded of that old saying that "the blood of the martyrs is the seed of the Church"—living seed, sure to bring forth much fruit. God is just, and those who so willingly laid down their lives for their country will not be disappointed when the harvest-home arrives.

We are apt to forget that joy is a duty—a duty impressed upon us by prophet, psalmist, apostle and Christ Himself. How often the call to be glad and rejoice rings out in the pages of the Bible—that great Book of Joy! Moses again and again called his people to rejoice in their households, and we also invited the nations to join in the great thanksgiving of God's people.—Deut. 32 : 43. He solemnly warned Israel of the consequences of ingratitude. Those who neglected to serve God "with joyfulness, and with gladness of heart, for the abundance of all things," he declared, should discover the value of God's good gifts by their loss—by hunger and thirst and nakedness and the oppression of fierce foes.—Deut. 28 : 47-52.

St. Paul wrote with stern frankness about the terrible wickedness of men in his day; and traced the sins to their root, saying that they were caused by unthankfulness to God.—Rom. 1 : 21.

Joy is our everyday duty and privilege, because God's love can never fail us for one moment. When our Leader knew that the Cross must be endured in a few hours, He spoke in serene confidence about abiding in the love of the Father, and told His disciples to abide in His love. The natural result would be fullness of joy—"that My joy might remain in you, and that your joy might be full."—St. John 15 : 9-11. If He could rejoice and give thanks for the eternally abiding love of the Father, though He knew that love would not interfere to save Him from agony, shame and a horrible death, then we must try to trust also when the outlook is dark.

Our Thanksgiving Day was loyally kept during the gloomy years of the War, and the pestilence which attacked the world last year could not crush out of our hearts the joy of knowing that God loves us. Sir Paul was able to rejoice in tribulation, knowing that the heavy blows of the tribulum (or flail) could only separate the good wheat from the

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Quiet Hour.

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R. V.)

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—JEAN INGELOW.

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refuse and chaff of sin in his soul. The prophet Habakkuk said he would rejoice in God even though the harvest should be an utter failure and all his cattle should die. And yet he knew nothing of the revelation of Divine Love in Christ.

"Joy is a duty," so with golden lore The Hebrew rabbis taught in days of yore. And happy human hearts heard in their speech Almost the highest wisdom man can reach.

But one bright peak still rises far above, And there the Master stands whose Name is Love,

Saying to those whom heavy tasks employ "Life is divine when duty is a joy."

To-day I received a letter from a sad-hearted reader of the "Advocate" in Sask.—with two dollars (for the needy) enclosed. Her cross is indeed a very heavy one, and yet she may fling open the door of her heart and let in the sunshine of joy. S. Paul told the Colossians that he "rejoiced" in his sufferings for them, and I have seen many sufferers whose shining faces proved that they were finding soul-rest in the consciousness of God's sustaining love.

Christ never preached stoicism. He did not tell us to live our lives bravely even if we could not be happy. No, He knew that our hearts cry out for happiness as our right, and so He told us how to be "blessed"—which is the kind of happiness which will last, and grow brighter all the way. Some people say they will have "a good time" first, and then become "religious." They make the mistake of thinking that the service of God is a hard and gloomy thing. Look into the faces of real Christians, and you will see far more gladness there than in the faces of men who are living selfishly. How can it be otherwise? An atheist must think that the world is like a great air-ship, crowded with passengers, dashing madly through space with no one to control or guide it—dashing to certain destruction. The Christian feels as safe as a trustful child, knowing that his Father holds the world in the hollow of His hand, that his Elder Brother walks invisibly beside him always, that the Holy Spirit is his Ruler and Guide, and that all things are working together for his eternal good.

Very few atheists have been poets, but one who had lost his faith sang of this world as a "City of Dreadful Night," through which flowed the black "River of the Suicides." The Father loves you!—then welcome each hour as a lovegift from Him. Search through each bundle of duty and each burden of sorrow until you find the priceless jewel—the gift of love—which is most certainly hidden there. If we only had faith to trust more bravely His great tenderness for us," we should go on our way rejoicing. How could we help it?

"If our love were but more simple, We should take Him at His word: And our lives would be all sunshine In the sweetness of our Lord."

DORA FARNCOMB.

The Windrow

A successful aerial expedition from Boston to Labrador was recently accomplished. The object was to explore and map out certain timber lands of that country about to be developed by Boston capital. The flying conditions were extraordinarily trying, as there was only one place where a landing could safely be made, but 15,000 photographs were taken which show exactly the conditions on nearly 2,000,000 acres of timber land.

Gabriele D'Annunzio, the airman and poet, who seized Fiume, because it was internationalized instead of being held for Italy, is still in possession of the city, and continues to defy the Italian Government. There is enough food to stand a three-months' siege, and D'Annunzio declares he will hold out to the end and then blow up the place before he will surrender. The trouble so far has been that troops sent by the Government to arrest him have all gone over to D'Annunzio as soon as they reached Fiume.

The Ku Klux Klan are riding again. Readers of this who have seen the famous movie picture "The Birth of a Nation," will remember the Ku Klux, the men with hoods, masks and long cloaks who rode by night to protect the whites from the emancipated blacks, who were going too far with their liberty secured through the American Civil War. At a later day the Ku Klux was given an evil name through raiders and criminals, not really of the Ku Klux, but who masqueraded as such. Finally the practice died out, but of late, says the New York "Nation", the Ku Klux are riding again, and have burned down, on a single night, as many as 5 negro churches, 2 schools and a lodge hall in Putnam County, Georgia. This adds to the anger of the negroes because the colored troops returned from the War unnoticed while the white troops were welcomed with flag-wavings and great rejoicing.—So the great problem of the United States grows.

The Ingle Nook

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

H. C. of L.

HIGH Cost of Living—it is spelled with capitals these days, and to the man with small salary and children, and the elderly woman trying to struggle along on a limited income, the capitals look huge indeed.

I have a friend who teaches in a kindergarten school on the edge of the poorer district of this city, and she often tells me little incidents that come to her in one way and another that show what real anxiety the poorer folk have in these days of readjustment. For instance, at a Mother's Meeting, recently, she said to a woman whose little boy is in her class.

"I think Willie is looking pale, these days. Is he not well?" "He doesn't seem very strong," was the reply.

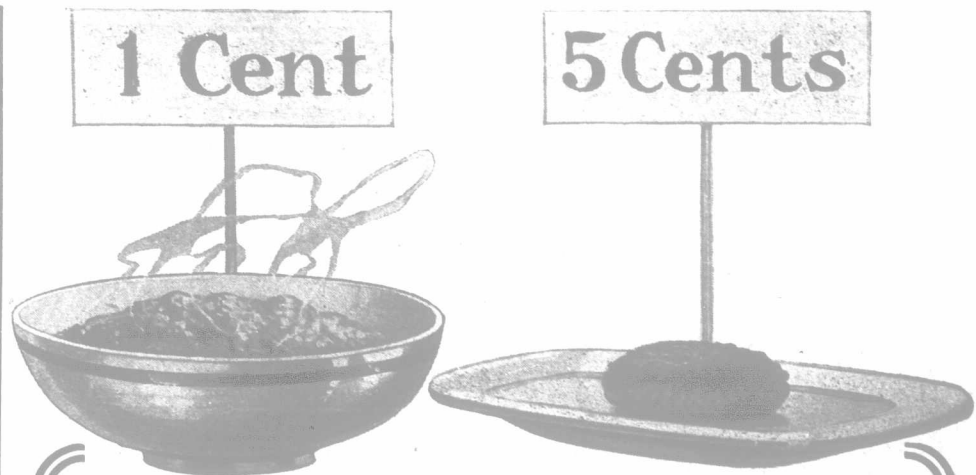
"Sometimes children need to be 'made' eat," said my friend. "Do you see that he eats lots of bread and milk and things like that?"

"To tell you the truth, Miss B., replied the woman, "milk is so dear now that we can't afford to give the children plenty of it. We have five children, you know, and my man's wages can hardly cover the rent, and clothes, and victuals for us all."

"It must be hard to manage," remarked Miss B. "I didn't know you had so many children. It must be very hard in winter when there is so much coal to buy."

"—And boots," added the woman, stressing boots with very good reason, for, while children going to school can make some sort of makeshift with other clothes in winter, they must have boots, and should have boots that fit fairly well, although some of them come with very "queer" ones. For instance last winter in this same kindergarten, a little lad of six came for weeks with a pair large enough for his father. They were old fancy ones, trimmed with red, evidently cast-off house-shoes that had once belonged to some rich man, but the little lad shuffled along in them, apparently glad and proud to have something to cover his feet so well.

Now in what I have said, I want it to be clear that I am not faulting anything but the "system." I am not hitting at the milk-dealers any more than anyone else—the illustration about the little boy just happened to be the one most recently under notice. The "system", however, seems to have gone all awry—and now not all of the blame can be put upon the War. I know the farmers are not getting too much for their milk, at present prices of everything concerned with the production of it. They raise the calves, grow the fodder (with the consequent wear and tear on machinery), house the cattle, and have all the labor of feeding them and cleaning the stables—all this from the calf-hood to the milking-age of the cows; moreover there is the expense of buying dairy utensils, and the work of milking the cows and delivering



One Costs You Five Times the Other

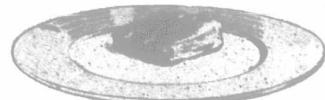
Quaker Oats costs kindly one cent per large dish.

A cake of Hamburger Steak costs five times that. So does a small serving of any meat or fish.

In Quaker Oats you get the finest grade of the greatest food that grows. It is noted as a vim-producer and a food for growth.

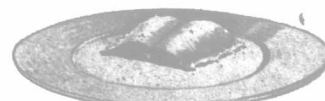
It is almost a complete food—nearly the ideal food. A food which every modern mother wants her child to get.

35 Cents Buys 6221 Calories



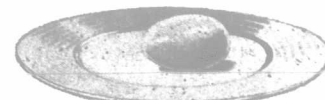
4 ozs. Meat

will cost 8 cents, or 8 times the dish of oats.



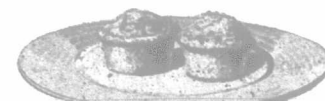
White Fish

or mackerel costs some 8 cents per serving—8 times the dish of oats.



One Egg

costs 4 cents, or 4 times the Quaker Oats.



Two Muffins

cost 2 cents, or 2 times the oat dish.



Bacon

costs about a cent a slice—same as a dish of Quaker Oats.



Custard

costs 4 cents per serving, or 4 times the Quaker Oats.

The 35-cent package of Quaker Oats contains 6221 calories. That's the energy unit used to measure food values.

Compare that cost with other necessary foods. These are the figures at this writing:

Cost of 6221 Calories	
In Quaker Oats	- - 35c.
In Average Meats	- - \$2.89
In Average Fish	- - 2.80
In Hen's Eggs	- - - 3.75
In Vegetables	- 68c. to 4.70

Meat, eggs, fish and fowl, on this basis, cost nine times Quaker Oats for the same calory value.

Each large package served in place of meat saves about \$2.80.

Save that in your breakfasts. Everybody should eat oats once daily. Then the saving will help pay for costlier foods at dinner.

Quaker Oats

With That Extra Flavor

Get Quaker Oats to make the dish doubly inviting.

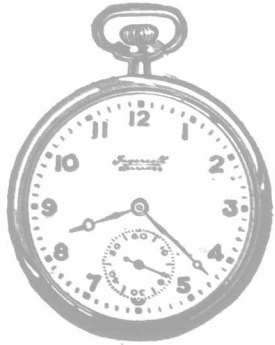
They are flaked from queen grains only—just the rich, plump, flavory oats. All the little grains are discarded, so we get but ten pounds from a bushel.

When such oats cost no extra price it is due to yourself that you get them.

35c. and 15c. per Package

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Many seasonable fabrics. Many styles and all sizes in Men's, Women's and Children's garments.

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UNDERWEAR
THE WATSON MANUFACTURING CO., LIMITED
BRANTFORD, ONTARIO

the milk. At time of writing the farmer gets 7 cents a quart for his milk in this place: it retails for 13 and 14 cents a quart on the streets. The city milk-dealer, on the other hand, cites the price of his machinery, the cost of upkeep of his horses or motor-trucks, the high rent or taxes, and the high wages he has to pay his men; and, every time the farmer advances the price a cent on the quart, considers himself justified in advancing another cent on his price to the consumer.

Probably similar stories are told and similar excuses made in regard to every commodity for which, at the present time, an exorbitant price is charged—and what is there, nowadays, for which an exorbitant price is not charged?—Bacon, for instance, a most nutritious food. Peter McArthur in an article in The Globe last week, tells of having bought a piece of the home-cured variety for 35 cents a pound, the farmer from whom he bought it assuring him that he was making a very fair profit.—Yet bacon in this the nearest city, was at the same time retailing for from 52 to 60 cents a pound.

The farms, as you well know, have to dance to the tune of high prices just as much as the cities. Farm machinery costs "out of sight." So does every detail needed about the place. Not only do boots cost anywhere from \$6.50 to \$11 a pair, just for good, plain, strong ones that promise to give any kind of wear, but everything else is placed at proportionately outrageous figures,—sugar and other groceries, every yard of cloth, every other article used in a house. A cotton spool costs 10 cents; a bunch of tape used to contain several yards,—now a string of it just about long enough to go round one's waist is wound on a bit of wood and sold for the same price;—there is no article so small or insignificant that it has not been either raised in price, or, if sold at the same price, reduced in quantity.

You know all this as well as I. You know, also, that many people say, "Oh the farmers are making heaps of money nowadays, and the city workmen are getting higher wages than ever they got." And you also know, as do I, that few farmers are making fortunes (as city folk consider fortunes) and that those who are more comfortable than they used to be have not a single comfort more than they deserve, considering

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

GEORGE H. PURVIS.

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

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

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their long hours and hard work. As for the city laborers, it is true that many of them are demanding, and getting, high wages; but it is also true that many of them do not receive wages that have ascended in anything like the same ratio as the scale of prices of living-necessities. These men and their families are suffering and the larger the family the greater the suffering. Also, as already remarked, elderly women and old folk living on small means are suffering, salaried people on small incomes, some of the teachers and girls in stores and offices who are not fortunate enough to belong to homes where they pay nothing, or very little, for board. Many among these, while apparently comfortable (and forced to keep up an appearance, since it is well understood that no firm wishes to have shabby employees about) are spending every cent on present living, leaving nothing at all for the "rainy day" or the future,—a calamitous state of affairs!

Assuredly the H. C. of L. and the inadequacy of wages or other income to keep up with the pace is at the bottom of the industrial unrest with which the world is seething, and that it is recognized as being so is evident from the fact that in almost every country, including Canada and the United States, Commissions have been working on the question, with what success does not yet appear. The whole matter seems in a hopeless muddle, yet something must be done, somehow, if the world is ever to reach the contented well-being of all which is the only guarantee of stability and progress. The system must be improved somehow. Possibly some way can yet be devised to bring producer and consumer closer together, to the profit of both,—something similar to the long street markets held in Chicago, of which a friend, on returning from that city last year, told me, with great approbation.

At first sight it seems as though we women can do nothing at all but wait. Yet we must never forget that the War was won by individual soldiers working, concertedly. Women's organizations are, in these days, a powerful force, more powerful than readily appears—because it is so impossible to get a clear vision of the whole body of work they succeed in doing; we see, at best, but a part at a time. Yet Women's organizations are

made up of individual women. They constitute, do they not? a great army, working concertedly with the steady purpose of making the world a better place to live in. In so far as they—I mean all the different organizations—work together, they will accomplish, in so far as they pull against each other, so will they fail of accomplishing the full quota that might otherwise have been attained.

However, to return to the individual, the pertinent thing for each of us is surely to be prepared for any suggestion for improvement that may chance to come our way, so that, should we approve, we shall be ready to put our shoulder to the wheel. As the old maxim has it: "Be sure you are right then go ahead."

And now to come "down to the concrete: a few moments ago Mrs. Boomer, President of the Local Council of Women in this place (who used to write for us over the signature "H. A. B.") came into our office with a request which I leave with you for your consideration.

The request is that the Presidents of Women's Institutes, United Farm Women, and other organizations, after ascertaining the opinion of their various branches, shall write to her in regard to the proposals, which have been drawn up by the Council and submitted to the Government, the idea being to hurry action in the matter by a substantial "backing". The proposals are:

1. That all speculation in foodstuffs for excessive profit shall be made a criminal offence.
2. That the retaining of perishable foodstuffs in order to inflate prices shall be made a criminal offence.
3. That the National Council of Women indorse the principle of supervision by license of all such principal and necessary stockyards, storehouses, cold storage plants, etc., as are necessary to provide facilities for the competitive marketing and storage of food products in the principal centres of distribution and consumption, and that they further urge the enforcement of the law.
4. That the Government proceed to establish where needed at the terminals and all principal points of distribution and consumption, central wholesale markets and storage plants, with facilities open to all upon payment of just and fair charges.
5. That, following the example of England, France, Italy, Germany and Austria, the Federal Government of Canada enact a measure of restriction on the exportation of certain of our natural resources, meaning thereby all such food productions as are necessities, and also on such raw materials as enter into the manufacture of clothing, boots and shoes, etc., in order that sufficient may be retained at a reasonable cost for the needs of our own consuming public and for the benefit of our own nation generally.
6. That, as in Calgary, all cold storage products exposed for sale, shall be labelled cold storage, preferably by means of an enamel sign on a steel shank, so that such label shall be at all times plainly visible to the consuming public.
7. That, immediate action be taken by Government to appoint a permanent commission on the same lines as the railroad commission, absolutely non-partisan, composed of men and women, the functions of which shall be to regulate profits in food and clothing, to investigate and correct methods of storage and distribution, and to regulate, in the interests of our people, such errors in trade relations as seem to contribute to the high cost of living in Canada.
8. That, the National Council of Women call upon the women of the country to arouse and organize public opinion to demand that the Federated Government so legislate that no business handling necessities of life shall be permitted to make more than 10 per cent. per annum on its paid-up capital.
9. That this National Council of Women prepare a monster petition for the circulation among the Local Councils of Women and nationally-organized societies, for signatures by all the citizens in each locality, urging the Federal Government to hasten in carrying out these resolutions covering high cost of living, passed here this afternoon.

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Men are now awaiting an opportunity to gain experience during the winter months. Will you help them? If so, write the Soldier Settlement Board.

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10 Cents
WORTH OF COMMON ORDINARY KEROSENE or Coal Oil will keep this lamp in operation for 50 HOURS and will produce **300 CANDLE POWER**

No Wicks to Trim
No Smoke
No Smell

of the purest, whitest and best light known to science. Nothing to wear out or get out of order. Simple. Safe. Absolute satisfaction guaranteed. Send for catalog showing lamps for every purpose; also special introductory offer and agency proposition. Write today.

KNIGHT LIGHT & SODA FOUNTAIN COMPANY, 484 Knight Bldg. Chicago



BEAR IN MIND 1920 prices higher than ever.

WHAT 80c WILL BRING YOU MR. TRAPPER

ONE BOTTLE OF SPANNERS ANIMAL LURE. Enough in one bottle to bait 50 traps. One Skin will pay you 10 times over.

SEND TO-DAY 1 BOTTLE 80c. 2 BOTTLES \$1.50 6 BOTTLES \$4.00

FREE TRAPPERS FREE TO CATALOGUE OF TRAPPERS. 60 PAGES of the BEST SUPPLIES. TRAPPING TRICKS information on Trapping.

Oliver Spanner & Co.

Dept. F, 26 Elm Street, TORONTO

We Supply Your Wants

We Buy Your Fur

TAXIDERMIST'S SUPPLIES ILLUSTRATED CATALOGUE—FREE

It was also moved that the National Council of Women, recognizing the necessity for an organization of consumers from coast to coast, as a great protective force, urge every local council to establish a cost of living committee, whose labors shall be devoted to organizing consumers.

Now I have given you the proposals, and I leave it with you to consider them thoughtfully, then to communicate—or not, as you choose—with Mrs. Boomer.

No communication she will consider as an affirmative. Her address is 393 William St., London, Ont.

Someone has sent me a very kind message saying that she approves my stand on prohibition and that she hopes I will tell the women who read this department their duty in the matter. In reply I may say that I cannot do that very well; how anyone shall vote must depend upon his or her conscience in

the matter. As for myself, I have already explained the reasons for my views, and will only add to them that I intend to vote "No" on all four questions.

—JUNIA.

Worth Thinking Over.

"We don't want to be selfish. . . I believe that if farmers get the power other industries will benefit.—J. W. Widdifield.

"Any man," said he, "with health and a pair of hands, could get on well in this country if it were not for the drink; that ruins hundreds."—From Mrs. Jameson's Diary, written at Toronto in 1837.

"There is no group or class in this Dominion, be it farming, labor, manufacturing, commercial or financial interest, which is competent to possess a monopoly of control of government, or should be entrusted with it.—Hon. W. L. Mackenzie King.

Cheese Coloring.

For "Subscriber," Burnt River, Ont. Annatto is often used for coloring cheese, a teaspoonful to 10 gals. of milk. The annatto is dissolved in a little water and added to the milk before the rennet is put in. Ordinary butter color is, however, even more extensively used. Perhaps you did not put in enough to give the color you like.

Apple Butter.

"M. R. M." kindly sends another recipe for apple butter. Take freshly made cider, boil down two-thirds, then put in apples to thicken (quartered and cored), and boil till all are mashed. This will keep for a year, and requires no sugar, especially if sweet apples are used for thickening. Use granite or porcelain for boiling, as the cider "eats" iron and tastes of it.

Hallowe'en Costumes.

For "R. W." You might, for a Hallowe'en masquerade party, dress as a sunflower, with long pointed petals of yellow crinkle paper down the skirt, and a sunflower made of the same on your head; as a rosy apple with green waist and bouffant skirt of red; as a gipsy girl with white waist, laced over-bodice, short skirt, flowing hair, and heaps of beads and bangles; as "autumn" with a dress covered with garlands of autumn leaves; as a witch, with pointed hat, long cloak, and carrying a broom. There are hundreds of other suggestions that might be "thought out," and probably you will enjoy the fun better if you do think out one for yourself.

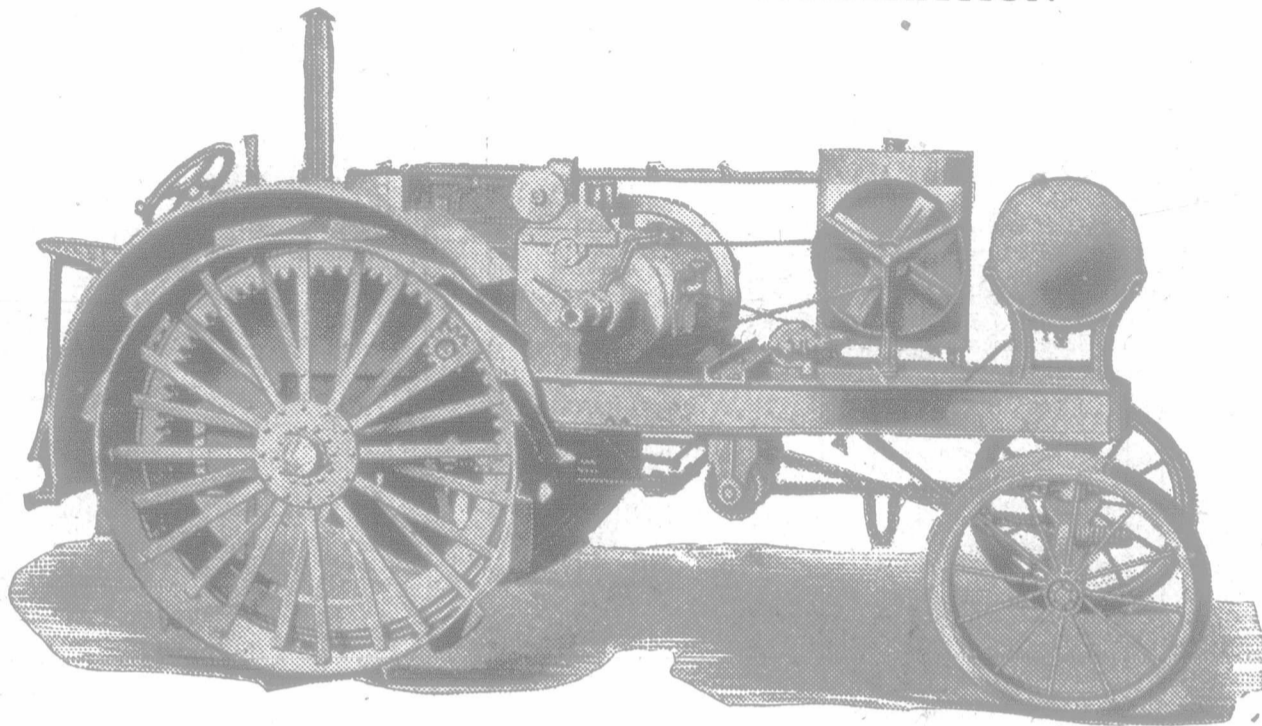
Fall Cookery.

Cauliflower With Cheese.—Let the cauliflower stand, head downward, in a dish of cold water, to which a tablespoonful of salt has been added, for an hour or longer, to draw out the insects that may be concealed inside. Cook 15 to 25 minutes (or until tender) in boiling salted water. Melt 2 tablespoons butter and cook in it 2 tablespoons flour and ¼ teaspoon each of salt and pepper 'till 1 cup rich milk, stirring all the time until the sauce boils, then remove from the fire and stir in 2 or 3 tablespoons grated cheese. Separate the cauliflower into bits and place in a well-buttered dish, or in separate ramekin dishes. Pour the sauce over, sprinkle with cracker crumbs mixed with melted butter and bake until browned.

Indian Chutney.—Two quarts tart apples, 1½ lbs. raisins, 3 cups brown sugar, 1 teaspoon cayenne pepper, 2 qts. green tomatoes, 1 small onion, ½ cup salt, 1 cup sliced green ginger root or 1 tablespoon ground ginger, 3 cups vinegar. Put the fruit and vegetables through a food-chopper, mix with the other ingredients and set away in an earthen jar over night. In the morning set the jar in a kettle of cold water. Let the water heat slowly, boil 6 hours, stirring often. Pour into sterilized sealers and seal.

Grape Cobbler.—Use very ripe grapes, —the black ones are the nicest. Wash well first on the bunches, then after picking. Line a deep pie-plate with a rather thick sheet of pastry, and put in the grapes, with plenty of sugar. Heap the fruit a little in the middle. Put on a top crust with slits cut across in the middle and turn the corners back to leave an open square. Set the dish in a quick oven, and while it is baking make a sauce, using ¼ lb. butter, ¼ lb. sugar, and 1 tablespoon boiling water. Stir well over hot water, and flavor with lemon juice or grated nutmeg. When the pie is nearly done take it out, pour in the sauce through the opening, and return

**Watch the Waterloo Boy 12-25 and the Imperial 15-30
AT THE CHATHAM DEMONSTRATION**



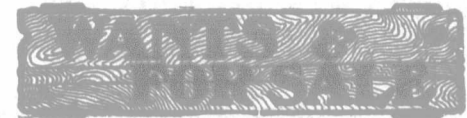
In the scientific construction of the Waterloo Boy and Imperial, the operator has an assurance of the minimum in repairs and the greatest of economy in fuel consumption. In their construction you cannot but note the extreme simplicity and clean cut appearance. Freedom from cumbersome and unsightly appliances and fixtures. A large, roomy, substantial platform with levers in easy reach are arranged for the convenience of the operator.

Do not fail to see these Tractors also our individual Thresher, at the Demonstration.
Our Representative will be pleased to give you full information.

THE ROBT. BELL ENGINE & THRESHER CO., LTD.

Head Office: Seaforth, Ont.

Branch Offices: Winnipeg, Man. and Regina, Sask.



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

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

DAIRYMEN WANTED, MUST BE GOOD milkers, returned soldiers preferred. Apply to Dept. of Soldiers' Civil Re-Establishment, Speedwell Hospital, Guelph, Ontario.

FOR SALE—PURE BRED BARRED ROCK cockerels from pedigree and bred-to-lay stock. \$2.50 each for delivery before November 1st. Gus Langelier, Supt., Experimental Farm, Cap Rouge, Que.

ONE HUNDRED ACRES, COUNTY OF Perth, Township Northeast Hope. Lot twelve, Concession three. Seventy-five acres, clear and under cultivation, eighteen acres hardwood bush, eight acres stump land, bank barn, stone dwelling excellent land. Farm may be purchased with or without season's crop, stock and implements. For particulars apply on farm or to A. W. Hamilton, Lucknow, Ont.

TURKEYS FOR SALE. WELL-BRED Mammoth Bronze Turkeys, good healthy stock, fine specimens. C. Lorne Liddle, R. R. No. 2, Leamington, Ont.

WANTED—LARGE FARM TO RENT, WITH view to purchasing; must have modern buildings and clay soil. Apply, stating full particulars. Keith F. Johnson, Leville P.O., Ont.

WANTED NEW FEATHERS BUTTER, EGGS, and all kinds farm Produce. Crawford, 144 Avenue Rd. Toronto.

Crate Fattened Poultry

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

HENRY GATEHOUSE & SON
Fish, Oysters, Game, Poultry, Eggs and Vegetables.

344-350 West Dorchester Street, Montreal

FOR SALE

1-21 H.P. Fairbanks-Morse Gas Engine with compressed air starter, also equipped with a 35 H.P. Gas Producer. All in first class condition.

For particulars apply—
A. WORD, - Enisdale P.O., Ont.

said he, "with health hands, could get on untry if it were not ruins hundreds."—
son's Diary, written at

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Cookery.

Cheese.—Let the caulif- ad downward, in a to which a tablespoon- added, for an hour or t the insects that may ide. Cook 15 to 25 (ender) in boiling salted ablespoons butter and espoons flour and ¼ salt and pepper' add rring all the time until hen remove from the r 3 tablespoons grated the cauliflower into well-buttered dish, or in dishes. Pour the e with cracker crumbs butter and bake until

—Two quarts tart raisins, 3 cups brown a cayenne pepper, 2 es, 1 small onion, ¼ ced green ginger root round ginger, 3 cups fruit and vegetables opper, mix with the ts and set away in an ight. In the morning le of cold water. Let lowly, boil 6 hours, r into sterilized sealers

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to the oven to keep it hot until ready to serve.

Stewed Chicken With Cauliflower.—Cut a chicken in pieces, wash, cover with boiling water, let come to boiling point. After 5 minutes boiling let simmer until tender. Separate a cauliflower into bits, cover with salty boiling water and let cook until tender. Also cook about a dozen slices of carrot separately. Put the chicken on a hot platter, arrange the cauliflower and carrots around and pour over all a sauce made as follows:—Skim from the broiler about ¼ cup of fat. In it cook ¼ cup flour and ½ teaspoon each of salt and black pepper, then add ½ cup cream and 1 ½ cups of the chicken broth, and stir until boiling. Pour over the chicken and vegetables boiling hot and serve at once.

Potato Puffs.—Beat 3 eggs very light, gradually beat in 2 cups mashed potato (hot or cold) and, finally, 1 cup sifted flour sifted again with 2 level teaspoons baking powder and 1 teaspoon salt. Drop by the teaspoonful into deep hot fat and let cook to a golden brown color, turning often. Drain on soft paper and serve at once with or without meat

or fish. Deep fat should be smoking hot when anything is put in it. It may be used over and over.

Boned Leg of Lamb With Stuffed Tomatoes.—Stuff the cavity from which the bone is taken with a good bread dressing and roast as usual, basting frequently. Serve on a hot platter with stuffed tomatoes around. To make the stuffed tomatoes: Remove seeds and pulp to leave a cavity. Chop the pulp. Put into a saucepan 4 tablespoons butter and cook in it half an onion chopped fine; add the pulp, also some chopped mushrooms if you have them, ½ cup stale bread crumbs and ½ cup chopped lean ham, also some herbs to season, and salt and pepper. Fill the tomatoes with this, sprinkle the tops with grated cheese and buttered crumbs and bake ½ hour in a moderate oven.

If Ever.—"What do you think of the League of Nations?"

"It's something like the new house we have been building. We are confident that if we can ever get it finished it will be worth all the trouble and expense."—
Washington Star.

Current Events

The Government is planning to take over the G. T. R.

Pitchblende, from which radium is extracted, has been discovered in the Nipissing District, Ont.

A bill has been introduced into Parliament at Ottawa by which any Province will be enabled to take steps that will make it bone dry.

The entire exportable surplus of the Canadian cheese crop of 1919 is to be purchased by the British ministry of Food.

Immediate action to regulate clothing prices was forecast at the Board of Commerce investigation into clothing prices in Toronto on Oct. 8th. "Too much profit" it was declared, had been made by some of the clothing houses whose affairs had been investigated. At time of going to press the investigation into the shoe business is being conducted.

King Albert and Queen Elizabeth of Belgium visited Niagara Falls on Oct. 6. The King expressed great appreciation of the work of Canadian soldiers in Flanders.

President Wilson's condition has improved considerably.

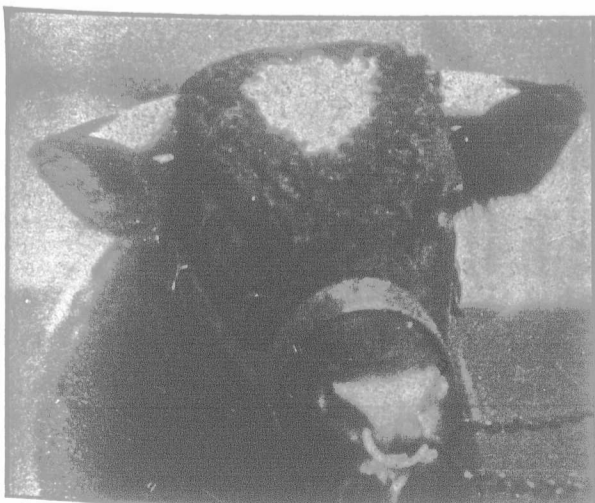
Mrs. Seymour Cox, flew in an airplane from Houston, Texas, to New York, with her nine-year-old son who has been placed in a school there.

Norway has passed a law prohibiting whiskey, brandy and other strong liquors, while permitting wine and beer.

As a result of the recent railway strike and general Labor situation in Great Britain, strong efforts are again being made to organize a tribunal empowered to arbitrate all industrial disputes.

An organized prohibition campaign was begun in Great Britain on Oct. 6, beginning at Liverpool.

The Petrograd Soviet has included



Elgin Breeders' Shorthorns (Scotch and Scotch-Topped)

AT AUCTION

Wednesday, November 5th, 1919

At McGuire's Stables, Elgin St., St. Thomas, Ont. Commencing at 1 o'clock sharp

In this great sale will be representatives of such noted families as: Golden Drop, Marr Maud, Nonpareil, Stamford, Strathallan, Mysie, Matchless, Lustre, Roan Lady and Mina, and the get of such sires as Gainford Eclipse, Trout Creek Wonder, Royal Rights, Proud Champion (An Augusta-bred bull) and General Rosedale (a Clementina).

40 FEMALES 20 MALES.

practically all young animals (a few cows with calves at foot which will be sold together). The bulls range in age from eight to eighteen months, and are a grand lot, including much show material, and all are prospective herd headers.

St. Thomas is on M. C. R. and Wabash, and only half hour's ride from London by electric line (London & Port Stanley car every hour).

Visitors to the Western Ontario Consignment Sale, to be held in London on November 4th, can reach St. Thomas by electric car for Elgin Breeders' Sale on November 5th.

Auctioneers:
Capt. T. E. Robson, London.
Locke & McLachlin, St. Thomas.

W. A. Galbraith,
Iona Station, Ont.
Sales Manager.

Duncan Brown, Pres. Elgin
Breeders' Association,
Shedden, Ont.

Jas. Page, Secretary,
Wallacetown, Ont.

Let—

Ontario's Golden Era Continue

PROGRESS—PERFORMANCE—PROMISE

IF we have given worthy service during the trying time of war, may we not be relied upon to serve the nation faithfully and well in hastening the time of still greater prosperity and happiness? As we have begun, so we will continue; fearless in the discharge of duty and ever alert in the service to the people. Conscious of our shortcomings, and grateful for the opportunities we have had to serve our Province, we submit our record with confidence to the electors for their consideration and approval, and ask from a united people a mandatè to carry on the Government of this Province.

WAR WORK

Ontario gave in men 232,895; in contributions \$54,532,188; to Victory loans \$540,465,550. Ontario provided 50 per cent. of Canada's war effort. The Ontario Government spent in war work over \$10,000,000; maintained in England the most efficient military hospital in Europe; furnished club houses for the soldiers in London and Paris; made gifts of food and guns to the Mother Country; made large grants to the British Red Cross, Belgium, Serbian relief and other worthy patriotic objects. Ontario's war effort has made the name of Ontario resound in every corner of the world.

EDUCATION

Ontario's educational system is designed to provide the most efficient training possible for the boys and girls who are to become the future citizens of the state. Under the leadership of the Minister of Education no expenditure has been denied to improve this purpose. For four years have been made for agricultural, technical and vocational training; returned soldiers are encouraged to enter the teaching profession; teachers' salaries have been raised and a superannuation scheme inaugurated. This year nearly \$4,000,000 will be spent on education in Ontario.

HYDRO-ELECTRIC

Hydro is to-day the most extensive public-ownership enterprise of its kind in the world. Since its inception Hydro-Electric has saved to the consumers of electric power in Ontario over fifty millions of dollars. Hydro displaces annually 2,000,000 tons of coal. It develops and distributes 350,000 horse power to over 1,000,000 consumers, 175,000 domestic consumers and 600,000 customers for power. The Queenston-Chippewa undertaking will provide an economical development of 400,000 horse power, and the prospective ultimate development in the whole Province is over 1,000,000 horse power.

AGRICULTURE

The agricultural industry in Ontario is in a prosperous and thriving condition. Appropriations in 1904 amounted to \$475,000; in 1919, \$1,675,000. Last year the value of the farm products of Ontario was \$550,000,000, and the value of the combined farm assets was one and a half billion dollars. Within the last three years ten thousand farm mortgages have been paid off. Encouragement has been extended to every branch of the industry, education has been fostered, and social conditions have been improved. Agriculture has received the "earnest and unremitting attention" of the Government.

FINANCE

In 1904 the income of Ontario was \$4,464,000; in 1913 it was \$11,188,302; in 1918 it was \$19,270,123. This has been accomplished without resorting to direct taxation—apart from the war tax, which has been repealed. Out of this revenue the Government has returned to the people in larger grants, \$3,807,000 for Education; \$1,676,235 for Agriculture. The public services have been enlarged and ample grants have enabled important public duties to be undertaken.

HIGHWAYS

Good roads add wealth and comfort to rural life. The highway improvement programme of the Ontario Government is applied to both urban and rural districts. A complete system of roads, including provincial roads, provincial county roads, county roads and township roads with a mileage of 12,500 miles, has been worked out and will be constructed. The entire motor license revenue, with a large amount added, will be spent annually on this work.

LABOR

Ontario's industrial leadership in Canada has been maintained by broad and effective labor laws. Under the Workmen's Compensation Act \$10,000,000 has been paid out in awards. Special safeguards have been provided for female and child labor. A minimum wage in Ontario is assured, and a direct representative of Labor will sit in the Cabinet. Free employment agencies have been established, and technical education has been encouraged.

HEALTH

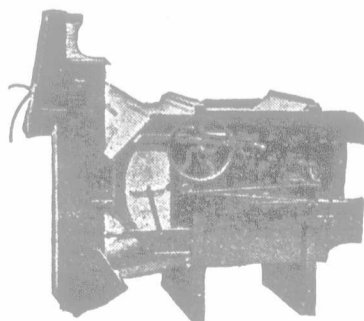
Ontario's public health service is not excelled on the continent. Public health education, child welfare, sanitary engineering service, and the free distribution of anti-toxins and serums have conserved life and prevented epidemic. A scheme of pensions for mothers is to be established. The Provincial Board of Health supplied all the typhoid vaccine used by the Canadian troops in the war. This feature of the work has brought about a saving of over \$100,000 a year to the people of the Province.

As a war measure the Ontario Temperance Act was so passed, suspending for the duration of the war the retail sale of liquor. The promise was given that as soon as the war was over the whole question of the character of the liquor legislation of Ontario would be submitted to the people by Referendum, and the will of the people would prevail. *This promise is now being fulfilled.*

PROMISE

Greatest possible assistance to Agriculture—Faithful enforcement of the Referendum—Support of Hydro-Electric; cheap light and power for the farmer—Convert railway branch lines into Hydro radials—Good roads in every part of Ontario—State pension fund for mothers—Direct representation of Labor in the Cabinet—A minimum wage—Housing accommodation—Legislation implementing the findings of the National Industrial Conference—Consideration to returned soldiers with Cabinet representation—Educational progress, technical and agricultural instruction—Improved transportation in Northern Ontario—Timber conservation—Encouragement in mining development—Enlargement of Ontario's free public health service.

W. H. HEARST.



The World's Champion Fanning Mill. The only mill made that weighs each Kernel when cleaning, and grades, will separate all wild oats from the grain. Power attachment. Write for particulars. Kline Fanning Mill Co., Beeton, Ont.

SHROPSHIRE

Ten choice pure-bred ewes and one ram. All two years old and in good condition. PHILIP ROSS ROSS - Lancaster, Ontario

HELP WANTED

We have just the right class of work for men who have finished the season's work on the farm. Steady work all the year around. Will furnish house on the plant. Low rent.

Milton Pressed Brick Co., Limited
MILTON, ONT.

AGENTS WANTED

To sell PETER McARTHUR'S most interesting books "The Red Cow" and "Life of Sir Wilfrid Laurier." Liberal terms. Splendid opportunity to make big Christmas money. Address: Imperial Publishing Co., Toronto, Ont.

When writing advertisers please mention Advocate

in its system of military instruction orders that all illiterates shall be taught to read and write in the course of 6 months.

Gen. Denikine, who is fighting against the Bolsheviki in Southern Russia, recently defeated them at Voronezh, taking 15,000 prisoners. Kolchak's troops have taken the Siberian city of Tobolsk.

The Prince of Wales has bought a ranch in Southern Alberta.

Lieut.-Col. Robert Leckie, D. S. O., M. C., D. F. C., has been appointed Superintendent of Flying in Canada.

Hon. H. J. Cody has been elected by acclamation in Northern Toronto.

Allied warships are helping the Letts to defend Riga against Bolsheviki and German troops. The German Government has officially denied any responsibility for the action of German troops in that district.

Live-Stock Notes.

BY DOMINION LIVE-STOCK COMMISSIONER.
A strong, financial group in Montreal is organizing to actively engage in the exportation of Canadian live stock to Great Britain. The Branch has been in consultation with gentlemen connected with this organization for some time but matters have now taken a definite turn as the result of an interview which has just been held between representatives of the Company and the Deputy Minister and the Live-Stock Commissioner, representing the Department. It has been clearly demonstrated that Canada has been making very slow progress as compared with the United States in developing this trade and the reason is to be found not only in the disparity of rates between Canadian and American ports but as well in the lack of centralization in the management of the business in Canada. Competing firms in the Canadian boot and shoe trade early adopted the plan of pooling their interests in their effort to secure foreign contracts and experience has justified the plan. The Department is convinced that similar methods must be employed, under present circumstances, amongst live-stock shippers, if our export trade is to become a success.

The inherent difficulties of the business are driving certain firms from the field and have discouraged others from making a start. Further, competition for contracts becomes in the end an expensive affair and competition for space has resulted in the raising of rates to an almost prohibitive level. It is now recognized as sound tactics that operations must be on a comparatively large scale, if contracts are to be secured at all, if losses are to be reduced to a minimum, if space is to be obtained at reasonable rates and if competent management is to be introduced into all phases of the business including buying, feeding, shipping, selling, etc., and into the very important arrangements as pertaining to finance, veterinary service and inspection. The centralization of the trade and its systematic organization on this basis now seems to be imperative if Canada is to secure her fair share of European business.

To this end, a movement is now on foot to draw together the various interests such that operations may be undertaken in accordance with a concerted plan. Letters are being addressed to the various farmers' organizations, including the United Grain Growers Limited, and the United Farmers of Alberta and of Ontario, together with other firms who have been engaged or may be interested in the movement. There is good reason to believe that by next spring considerable business will offer and unless practical preparations are gotten well under way now, Canada will not be able to take advantage of it.

A letter has recently been received from the Secretary of Agriculture for Greece, whom the writer met in Paris, requesting quotations on young, medium weight cows and on a few stallions of the lighter breeds. These have been furnished to the Secretary and to the Commissioner for Greece in Canada, who is arranging for the purchase of wheat and other products from the Dominion. It is recognized that live stock can be satisfactorily carried on the Greek wheat ships.

WHY? ANOTHER VICTORY LOAN

WHEN, on the morning of November 11th, 1918, the guns were hushed and glad tidings flashed across the world, there followed with the National Prayer of Thanksgiving, one yearning query, which found echo in the faster-beating hearts of wives, mothers, fathers, brothers, sisters and sweethearts.

THAT query was, "How soon will our boy be home?"

AND, from France and Flanders, from Italy and Egypt, from Palestine and from the off Siberia, there came an answering echo, "How soon, how soon, may we see him?"

CANADA caught the spirit of the hour, and she once resolved to satisfy them.

IT was an appalling task. Shipping was tragically scarce. The composition of the Army of Occupation had not yet been settled. And other parts of the Empire as well as Canada were looking for the speedy return of their men.

THE problem was this. The half-million men that Canada had overseas had taken more than four years to transport to the field of battle.

TO bring them home in a few months was a gigantic undertaking—one to tax all Canada's ingenuity and resources.

CANADA solved the problem, but it meant crowding into a few short months, an expense for demobilization which it was impossible to foresee.

THEN, too, besides the sentimental aspect of the necessity for bringing the men home quickly, the economic side could not be overlooked.

THAT was, to transform efficiently and speedily the nation's army of fighters into a national army of workers.

NEED DIVIDES ITSELF IN TWO PARTS.

The answer to the question "Why does Canada need another Victory Loan?" divides itself into two parts.

(a) To finish paying the expenses of demobilization, and the obligations we still owe to our soldiers.

(b) To provide national working capital.

OBLIGATIONS TO SOLDIERS.

The obligations to soldiers include:

That already incurred cost of bringing home troops from overseas.

The payment of all soldiers still undemobilized. This includes more than 20,000 sick and wounded who are still in hospital, and who, of course, remain on the Army payroll till discharged.

The upkeep of hospitals, and their medical and nursing staffs, until the need for them is ended.

These three items alone will use up at least \$200,000,000 of the Victory Loan 1919.

GRATUITIES.

There is also the gratuity which has been authorized, and has been and is being paid to assist soldiers to tide over the period between discharge and their re-adjustment to civil life. For this purpose alone, \$61,000,000 must be provided out of the Victory Loan 1919, in addition to the \$59,000,000 already paid out of the proceeds of the Victory Loan 1918.

LAND SETTLEMENT.

Furthermore, soldiers who desire to become farmers may, under the Soldiers' Land Settlement Act, be loaned money by Canada with which to purchase land, stock and implements. The money so advanced will be paid back; meantime each loan is secured by a first mortgage. Up to August 15th, 29,495 soldiers had applied for land under the terms of this Act; and 22,281 applications had been investigated, and the qualifications of the applicant approved. For this purpose Canada this year requires \$24,000,000.

VOCATIONAL TRAINING.

For this work which, with the Vocational Training and Soldiers' Service Departments, embraces the major activities of the Department of Soldiers' Civil Re-establishment, an appropriation of \$57,000,000 is necessary.

These national expenditures are war expenses. They will be accepted readily by every citizen who gives thought to the task which Canada faced following the Armistice, and to the success with which she has met it.

NATIONAL WORKING CAPITAL.

Canada needs national working capital, so that she may be able to sell on credit to Great Britain and our Allies the products of our farms, forests, fisheries, mines and factories.

You may ask, "Why sell to them if they can't pay cash?" The answer is, "Their orders are absolutely essential to the continuance of our agricultural and industrial prosperity."

The magnitude of these orders and the amount of employment thus created, will depend upon the success of the Victory Loan 1919.

THE "WHY" OF CREDIT LOANS.

Farmers and manufacturers (and that includes the workers on these orders) must be paid cash for their products. Therefore, Canada must borrow money from her citizens to give credit, temporarily, to Great Britain and our Allies. Actually, no money will pass out of Canada.

If Canada does not give credit, other countries will; and they will get the trade, and have the employment that should be ours, to distribute amongst their workers. And remember, we absolutely need these orders to maintain employment. If we don't finance them business will feel the depression, employment will not be as plentiful, and conditions everywhere will be adversely affected.

FOR TRANSPORTATION.

Money must also be available to carry on the nation's shipbuilding programme, and other transportation development work.

For loans to Provincial Housing Commissions who are building moderate priced houses.

These, then, are some of the things for which Canada needs national working capital. She is in the position of a great trading company, and her citizens who buy Victory Bonds are the shareholders.

Those who give thought to our outstanding obligations to soldiers, and to our need for national working capital, cannot fail to be impressed with the absolute necessity for the

Victory Loan 1919

"Every Dollar Spent in Canada"

Issued by Canada's Victory Loan Committee
in co-operation with the Minister of
Finance of the Dominion of Canada.

The Moose

All Canada is the natural home of the "King" of Canada's big game, but New Brunswick, Quebec, Ontario and Manitoba afford the best moose hunting.

There are two methods followed in moose hunting—"calling" and "still hunting." During the rutting season the first method is the one usually followed, but there is more satisfaction in tracking. Absolute silence is the one great essential in still hunting and stalking must be done "up wind."

The tracks of a bull moose can be readily distinguished from those of the cow. The former are rounded and blunt—the cow's long and pointed.

During the winter, moose gather on the hardwood ridges between cedar and spruce swamps, through which they make beaten lanes. A "yard" sometimes contains twenty to forty animals.

Opinions differ as to the most suitable cartridge for moose hunting. Choose one with shocking power back of it and be sure the big "D" trade-mark is on the box.

DOMINION Ammunition

is always dependable for moose and other big game. Users of 30-30 rifles should look for the yellow label on the back of the box—it insures more speed, flatter trajectory and greater shocking power.

Dominion Cartridge Co.
Limited
Montreal, Canada



Agricultural Notes From England.

Our annual agricultural statistics for England and Wales are built up from enquiries made in June each year. The total acreage under crops and grass in the two countries at that part of this year amounted to 26,750,000 acres of which 12,310,000 were arable land, and 14,440,000 permanent grass. The former proves a decrease of 90,000, and the latter one of 147,000 acres on the year. In 1919 there were 2,221,000 acres under wheat in England and Wales against 2,556,660 in 1918, a fall of 13 per cent. on the year. Barley shows an increase of 9,530 acres or one of 0.6 per cent., and oats a decrease of 217,090 acres, or a matter of 7.8 per cent.

According to their official return horses number 1,386,810 as against 1,375,830 in 1918. The rise in horses on the farm is some 10,000 on the year. Cattle number 6,194,590 head as against 6,200,490 in 1918. Cows in milk are more numerous this year than in 1918 by 85,000 head or 4½ per cent. The total 1,944,000 is the largest on record. Cows and heifers in calf show a material fall. There is a loss of 1,350,000 head in sheep on the year or 8 per cent. Breeding ewes have declined by over 700,000 head, and lambs by over a million. The total of all pigs is 1,800,000 or 6 per cent. more than 1918. Sows kept for breeding show a decline of some 13 per cent.

Palmer's Shoe Packs

THE IDEAL WINTER WEAR

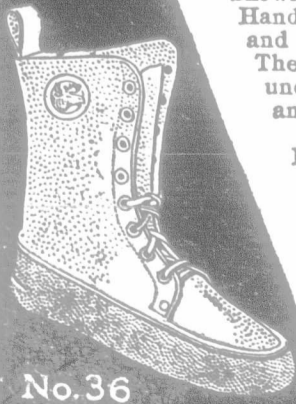
These Packs appeal especially to woodsmen, ranchers, farmers, sportsmen and others, who want heavy, strong, easy-fitting footwear—and dry feet.

Made from Palmer's famous Showhegan Waterproof leather. Hand-sewed. Lasts comfortable and roomy, with natural tread. The result is a reliable shoe pack, unequalled as to quality, comfort and durability.

Our special Non-Rip Pack, Draw String sewed, has no equal.

Get a pair of our footwear from your dealer. Be sure they are marked "MOOSE HEAD BRAND" or write us for catalogue and price list. Remember, you can't get anything anywhere as good as Palmer's "Moose Head Brand" Shoe Packs.

John Palmer Co., Limited
Fredericton, N.B., Canada
Established 40 Years.



No. 36



Lord Lonsdale sold some of his Percherons at Tattersall's, London, on Sept. 21st. Quasquette, a grey mare by Lyonaise H. Rustque, made 300 guineas; Qualamite, a grey mare by Lyonaise-Montre fetched 350 guineas; Malaria, a grey mare by Megal out of Jaseuse h.c. at the Cardiff Royal Show fetched 620 guineas. Lagor, the grey stallion by Huchoir H. Goguette, a winner at Nogent-le-Rotrou in 1914, fetched 500 guineas from the nod of Henry Overman. Twelve head all told realized 3,376 guineas or £295 5s. 6d. apiece. General Winner's young grey stallion, Pergole's realized 300 guineas.

£200 an acre were paid for small farm holdings at Rossett in North Wales. A holding of 74 acres made £3,200; another of 49 acres realized the same figure; one of 11½ acres made the extraordinary figure of £2,000 and another of 9 acres, £1,700. Cottages made £390 down to £250. In Scotland larger farms on the Rothies Estate, Fife, made £12,000, but they ran to 376 acres in extent.

ALBION.

Gossip.

The O. A. C. Sale.

Attention is directed to the advertisement in this issue of the annual sale of pure-bred stock to be held at the Ontario Agricultural College, Guelph, on Thursday, October 30. There will be sold at that time a choice lot of young breeding stock and three fat steers, the offering comprising as good a selection as any previously made at the College. Five real good young Shorthorn bulls, four by Proud Diamond and one by Kinellar Yet (imp.) include several select herd headers. They are of Augusta, Lancaster and Roan Lady breeding. One is a full brother to the white calf sold last year and afterwards resold for \$2,500.00. Another is a full brother to the \$1,100.00 white heifer sold at the College sale two years ago and afterwards resold at \$1,500.00. They are good reds and roans and are deep, sappy calves with an abundance of Shorthorn character and quality. They are all ready to begin service. A promising Roan Lady heifer, rising two years and by Proud Diamond will prove an attraction. She is the making of a very useful breeding cow. A red Lavender heifer by Kinellar Yet (imp.) and two years old next January is the breedy-kind that buyers are looking for.

One of the best things of the sale is a fashionably bred Hereford bull just over the year old. He is right in breeding and quality, and is a herd header which no one need be ashamed of.

Those in need of a Holstein bull should attend the sale. Four bulls, two ready for service and two younger, are in the offering. They are all by Hillcrest, Rauwerd O. A. C., the College sire, with great record backing, and are out of cows with heavy production behind them.

Two young Ayrshire bull calves with good breeding and individuality will attract Ayrshire breeders.

In sheep there is a select offering of Shropshire ram and ewe lambs, one Shropshire yearling ram (a prize winner), a number of Leicester ram and ewe lambs, and a few Shropshire and Leicester yearling ewes. All these sheep are strong in individuality and are from excellent rams.

About forty sows are in the offering. There are thirteen specially selected year-old Yorkshire sows bred to a first-class boar. The rest of the offering includes a number of choice young sows, both Berkshire and Yorkshire from the spring litters. See the advertisement and write for catalogue, mentioning "The Farmer's Advocate."

Questions and Answers.

Miscellaneous.

Value of Silage.

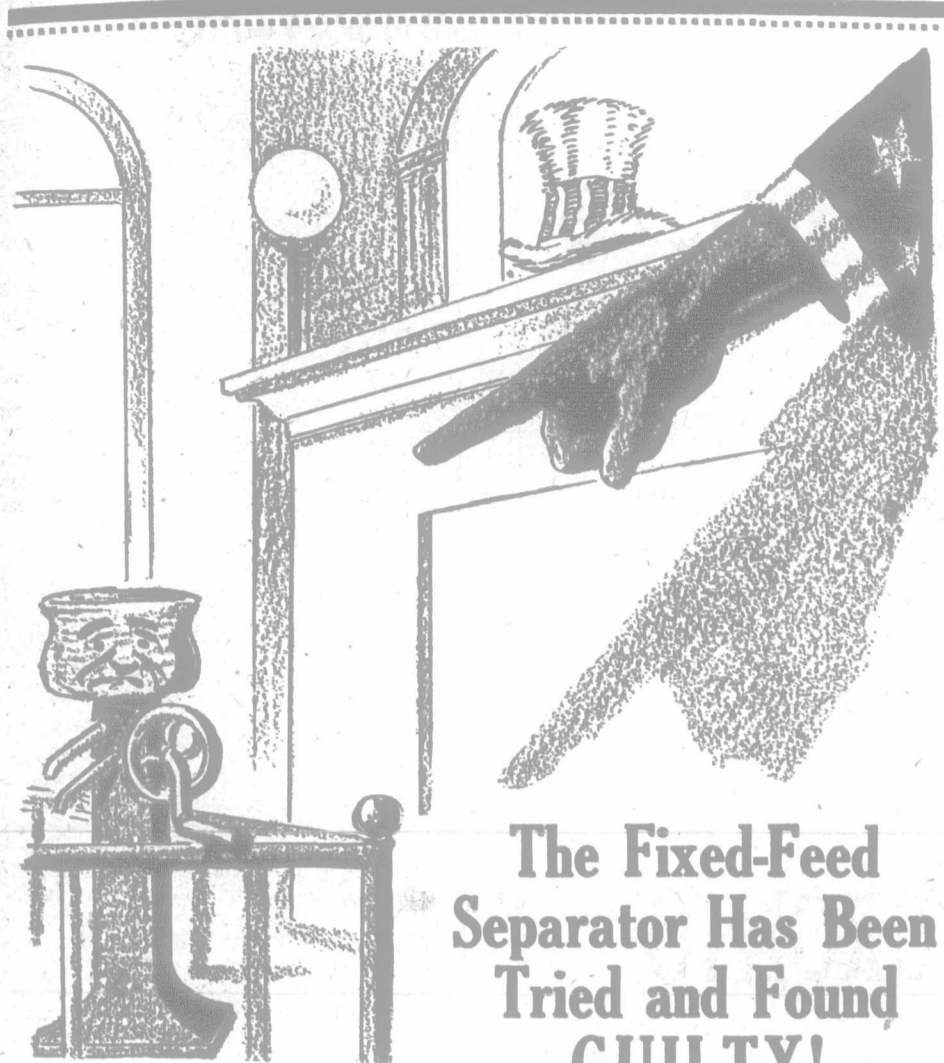
What is silage worth per ton, with hay at from \$25 to \$30 per ton? T. A. C.

Ans.—It depends considerably on the condition of the silage, and also on the class of stock to which it is to be fed. A ton of good silage would be worth approximately \$8 per ton, with hay at \$25. Of course, it must be remembered that silage is a succulent ration and helps to increase the digestibility of roughage mixed with it for feeding.

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The Fixed-Feed Separator Has Been Tried and Found GUILTY!

Every year thousands of dairymen and farmers discover that the fixed-feed separator is wasteful. They refuse to accept the alibis put forth by the fixed-feed separator, such as speedometers, speed bells and other contraptions that merely warn the operator when he turns below speed and do not really prevent butterfat loss.

Suction-feed is the only principle in separator construction that prevents butterfat loss resulting from slow turning and Sharples is the only suction-feed separator. The Sharples skims clean at any speed—something no other separator does and that no other separator dares to claim.

SHARPLES SUCTION-FEED CREAM SEPARATOR
SKIMS CLEAN AT ANY SPEED

Get the evidence. We will send you reports of actual tests made by dairy experts, testing associations, creameries all over North America. These reports show in dollars and cents how wasteful separators are that fail to skim clean all the time.

There is only one way to make a separator fully efficient, and that is to use a Sharples. It is the pioneer North American separator—having behind it the oldest and largest separator factory in North America, with 100% North American ownership.

Write for interesting booklet, addressing nearest branch, Dept. 78

"There are No Substitutes for Dairy Foods"

THE SHARPLES SEPARATOR COMPANY

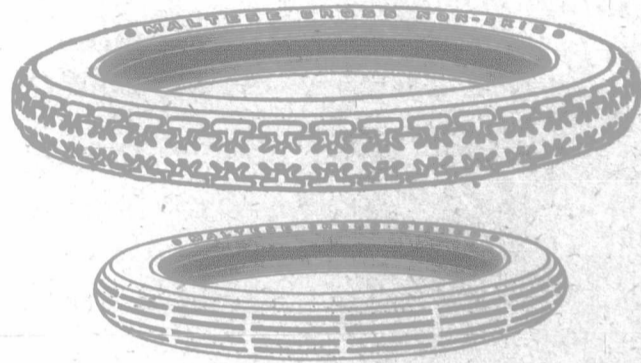
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REGINA, SASK.

Over 2,425,000 Sharples Separators in Daily Use

DC 97

MALTESE CROSS TIRES



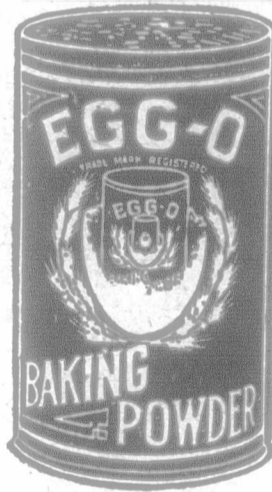
"The Tires That Give Satisfaction"

Speedy motorists who get the hard bumps of country driving, find MALTESE CROSS TIRES are built to give long service and long mileage.

Gutta Percha & Rubber, Limited

Head Offices and Factories: TORONTO

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Take your Time—No need to hurry when you use

EGG-O Baking Powder

Egg-O Baking Powder Co., Limited, Hamilton, Canada

33

When writing advertisers kindly mention Advocate.

Questions and Answers. Miscellaneous.

Milk Fever.

Would it be advisable to keep a sow that had milk fever the last time she farrowed? For a few days after farrowing she had very little milk, but she gradually got better and raised six pigs.

A. S.

Ans.—With judicious feeding and care, the trouble might not occur again, and if she is a valuable sow we would risk breeding her.

Registering Sheep.

How many crosses are necessary before I can register my sheep? To whom should I apply to have them registered? What does it cost per head? What is the membership fee to the Shropshire Breeders' Association?

G. H. D.

Ans.—Sheep cannot be registered by grading up; they must be the product of registered sire and dam. Apply to the Canadian National Live-Stock Records Ottawa, for registration forms. The cost may vary with the different breeds, but it costs \$2.00 to become a member of the Shropshire Breeders' Association, and for the registration of pedigrees of members

50 cents each, if registered before the first of December of the next year. It costs \$1.00 to record animals after this time limit; after three years of age it costs \$2.00, and to non-members double the above fees.

Bindweed.

A weed which some call the bindweed is growing in one of my fields. The roots are small and white, and very hard. I have covered the plants twice with manure, but they have grown up through. I am thinking of trying salt. When is the best time to put it on?

A. R.

Ans.—Bindweed is a very difficult weed to suppress. It spreads by the creeping root stalks and also by seed. If you have but a small patch, it is advisable to dig it out and burn the roots; if the patch is large, then a summer-fallow is necessary, and it may be necessary to summer-fallow two years in succession in order to destroy all the roots. Fresh growth must not be allowed to come above the ground. Salt will possibly kill it, but you would have to put on so much that nothing else would grow for a few years. In cultivating, care should be taken that the roots are not dragged to a non-infested part of the field.

Answers.

Guineas.

Silage.

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Loans to Farmers

NO type of loan is more acceptable to this bank than loans to farmers.

It is our policy to use our funds to promote the national development of the country.

Reliable farmers who need credit to increase production, will find us ready to make advances in any reasonable amount.

THE BANK OF TORONTO

THOMAS F. HOW
General Manager

World's Poultry Congress.

In the early part of September, 1921, there will assemble at The Hague, Holland, the First World's Poultry Congress, on the invitation of the Netherland's Government. Arrangements had previously been made for the holding of this Congress in 1916. Owing, however, to the outbreak of the European War it had necessarily to be postponed. With a renewal of the invitation from the Dutch Government, the project is now going forward.

An Executive Committee has been formed, consisting of representatives nominated by the Dutch Minister of Agriculture and the International Association of Poultry Instructors and Investigators, the latter society having been responsible for the steps leading to this invitation. A meeting of this Committee was held recently at The Hague, under the presidency of Dr. J. H. Louvink, Food Controller to the Netherlands Government, at which there was a full attendance. Proposals were considered as to the arrangements, program, etc. Dr. J. H. Louvink was appointed National President, and Edward Brown, F.L.S., International President. It is intended to hold during the period of the Congress a non-competitive display of breeds of poultry from as many countries as possible, so as to bring together a complete collection for the first time, and of appliances. In October, 1920, there will commence at The Hague a great International Laying Trial extending to September, 1921, at which it is hoped that representative pens of fowls from all the leading countries will be entered.

The Congress will include in its Program all aspects of the poultry industry in every part of the world, embracing scientific and practical questions, instruction and investigation, breeding problems, production of eggs and poultry on distinctive lines and in association with agriculture, the national and international trade in these products, disease, etc. Invitations will, in due course, be issued inviting Ministries and Departments of Agriculture and other public bodies, teaching institutions, experiment stations, poultry and agricultural societies, and trading societies, to appoint delegates to the Congress. Individual members will also be accepted. Further announcements will be made from time to time as arrangements are completed. It is hoped to form Congress Committees in many of the countries interested in this branch of food production, and to secure the presence of and contributions in the way of papers from the most eminent and constructive workers throughout the entire world. The General Secretary is G. S. Van Gink, 10, Koningin Mariastraat, The Hague, Holland, and Mr. Edward Brown, F.L.S. 31, Essex Street, Strand, London, W. C. 2, England, has the International organization in hand.—William A. Lippincott is Secretary International Association of Poultry Instructors and Investigators, Kansas State Agricultural College, Manhattan, Kansas.

1869 — 600 Branches — 1919

The Royal Bank of Canada



Protect your Victory Bonds by Renting a Safety Deposit Box.

Deposit the coupons every six months in a Savings Account and earn interest upon the bond interest at 3% per annum, compounded half-yearly.

If this is done regularly with (say) a 15 year bond, you will accumulate more interest than principal.

CAPITAL AND RESERVES \$33,000,000
TOTAL RESOURCES - \$470,000,000

POULTRY WANTED

We have a big demand for poultry all the year round, which enables us to pay top market prices. Please write for particulars. It will pay you to sell to
C. A. MANN & CO.
78 King Street London, Ontario

Open A Housekeeping Account

with The Merchants Bank, and pay all bills by cheque. By depositing a regular sum in a Savings Account, you know exactly how much is spent on the different branches of housekeeping.

When you settle by cheque, you avoid all disputes as to payment, as the cancelled cheques are receipts and prove the payments.

This business-like method of home finance often prevents paying the same bill twice. Savings Accounts may be opened in sums from \$1 up, on which interest is allowed.



THE MERCHANTS BANK OF CANADA

Head Office: Montreal. Established 1864.
With its 131 Branches in Ontario, 42 Branches in Quebec, 1 Branch in New Brunswick, 2 Branches in Nova Scotia, 30 Branches in Manitoba, 44 Branches in Saskatchewan, 74 Branches in Alberta and 9 Branches in British Columbia, serves rural Canada most effectively.
WRITE OR CALL AT NEAREST BRANCH.

THE VALUE OF SAVING



All successful men began by saving. Later, perhaps, they invested, but they first had to accumulate capital. The first step towards wealth is to open a Savings Account. The second is to save regularly. Come in and ask about our simple, convenient, Savings Accounts. Interest compounded every six months soon amounts up.

Paid-up Capital \$ 9,700,000
Reserve Fund -- 18,000,000
Resources - - - 220,000,000

WE INVITE YOUR ACCOUNT

298 branches. General Office, Toronto.

The Bank of Nova Scotia

The Loan as an Investment.

Honorable George S. Henry, Minister of Agriculture for Ontario, commends the 1919 Victory Loan in the following letter:

"One year ago I had occasion to commend the Victory Loan of 1918 to the farmers of Ontario. The confidence then expressed has been more than justified. The present increased market value of the loan of one year ago is the best evidence of the soundness of the investment.

"Again I have pleasure in commending the Victory Loan 1919. As an investment it is recommended by all the reasons which were recited in favor of the loan of a year ago, and some others as well. Bearing good interest and being simple and safe it is an investment which any individual can look after for himself or herself without any outside assistance. This is an important matter, particularly to small investors.

"While the war is now happily over it should be generally understood that we are still living under war conditions in regard to some economic matters. Canada is an exporting country, particularly in the matter of agricultural products. Our prosperity as farmers depends, to a very large degree, on our exports. On the other hand, many of the countries of Europe which desire to import our produce are so impoverished as a result of the war that they are unable to pay cash. They,

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Railroad Men Must Carry a Real Timepiece

THE FAVORITE watch with railroad men, both in Canada and the United States is the Waltham "Vanguard". It's unflinching reliability has been proved by many years of experience, and is being proved again and again every day on all the leading railroads of the Continent.

The "Vanguard" is a 23 jewel movement, adjusted to temperature, isochronism and 5 or 6 positions, cased in gold, gold filled or nickel with 12 or 24 hour dial as desired. An extra refinement of the "Vanguard" is the winding indicator which prevents the watch running down unawares.

Ask your jeweler to show you the Waltham "Vanguard" and other famous Waltham Watches. He can show you a Waltham suitable to the capacity of every purse.

WALTHAM
 THE WATCH FOR ALL TIME
 WALTHAM WATCH COMPANY LIMITED
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SPECIAL RATES for Registered Cattle and Horses. Short term insurance at low rates for Show Animals, Feeding-Cattle, Animals shipped by rail or water, In-foal mares, In-calf cows, Stallions, etc.

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therefore, must look to countries which can give them credit for the time being. There are such countries as the United States which are in a position to supply produce on credit, and unless Canada is enabled to meet this competition the results must be disastrous to this country. This loan is, therefore, required to some extent, to enable Canada to sell our produce on credit. It is also required to enable the country to discharge its proper obligations to those who have served overseas. Both these considerations are of vital importance to the farmers of this province.

"It is frequently noted that this is the first loan to be offered to the citizens of Canada apart from the stimulus of actual war conditions, and it is feared by some that this fact will mean an absence of patriotic favor which will lessen the popularity of the loan of this year. Such certainly should not be the case. Any lessening of patriotic fervor should be more than offset by a knowledge of the enhanced security. So long as war continued, loans were subject to the possibility of disaster in the field and uncertainty as to the length of time required to assure absolute victory. The loan of 1919 is absolutely free from these possibilities, and the security is, therefore, that much stronger than any in the past.

"The cost of the war can now be at least approximately measured as far as the financial aspect is concerned, and Canada emerges in possibly a stronger financial position than any other country engaged in the conflict for a similar length


THE MOLSONS BANK
 Incorporated in 1855
 Capital and Reserve, \$8,800,000
 Over 100 Branches
 Courtesy To All

Whether your business with us involves many thousands of dollars or is simply a small deposit in a Savings account, you will receive the courteous attention which The Molsons Bank instructs all its employees to render to all its customers.

Savings Departments at Every Branch

"NEVER PUT OFF UNTIL TO-MORROW"
 Is a good motto when your insurance affairs are concerned. Act to-day. To-morrow may be too late.

Excelsior Life Insurance Co.
 Head Office Toronto, Ontario



Get Your Money's Worth

Hearing The New Edison for the first time is like opening the blinds to the sunlight.

You expect to hear the familiar "talking machine tone".

Instead—there pours forth the voice or the music of the instrument, in all its natural beauty—pure and full, and indistinguishable from the living artist.

When you choose an Edison RE-CREATION, you receive the actual voice of the artist or his masterly instrumental performance—nothing more, nothing less.

We know that when you select an Edison RE-CREATION, you are getting your full money's worth because we have proof.

Two thousand musical critics have endorsed our claim that

The NEW EDISON
 "The Phonograph with a Soul"

RE-CREATES the human voice and the music of human played instruments without the slightest deviation from the original.

"What the Critics Say", tells the story completely. May we send you a copy, with our beautiful new book "Edison and Music"? 241

THOS. A. EDISON, INC., - ORANGE, N. J.



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If We Send You This Phonograph

at the lowest factory price will you show it to a few friends and tell them the low retail price. To the first in each locality who writes we will make a very attractive offer. A post card will bring free particulars, illustration and description. Write today.

International Phonograph Co.
 43 Scott St., Dept 7 Toronto, Ont.



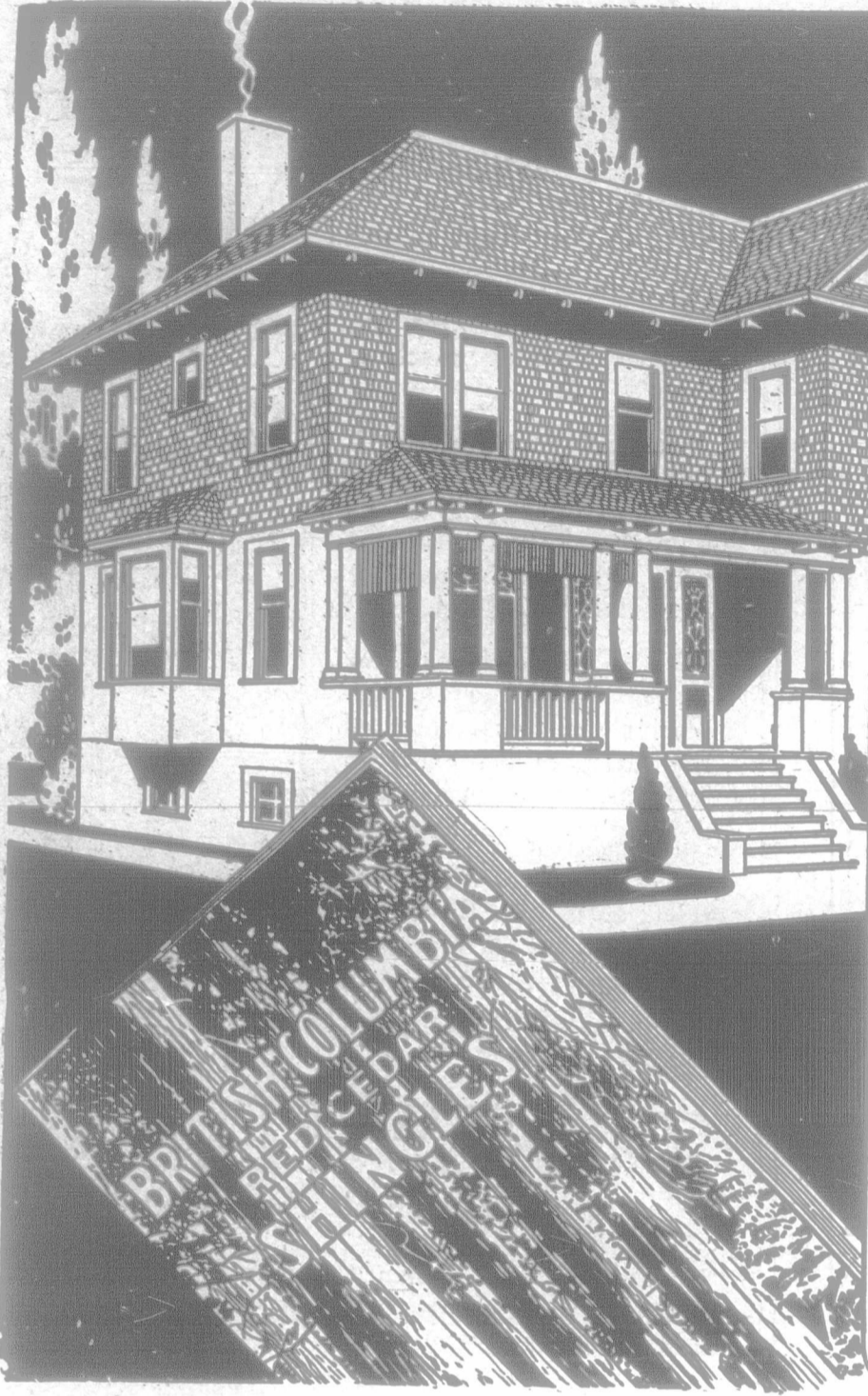
When writing please mention Advocate.

of time. In Germany the mark has depreciated to about one-sixth of its pre-war value. The Canadian dollar has depreciated only a few cents even in foreign countries, and this will be readily adjusted by the maintenance of production. This contrast is not only an indication of the soundness of Canada's financial position at the present time, but is one standard by which the difference between defeat and victory can be measured.

"I, therefore, commend this loan as a sound, safe and profitable investment, and as a means of showing appreciation of the splendid victory which has brought security and freedom to the homes and property of the present and succeeding generations in this favored country."

Breeders contemplating exhibiting at the international Live Stock Exposition, Union Stock Yards, Chicago, November 29 to December 6, should bear in mind that entries close on November 1. It is important that entries be made as early as possible for this the twentieth anniversary Exposition.

"Life" contained a clever picture the other day: A valiant woman had rushed into the street to protest against a driver's abuse of his horse, declaring the poor animal to be half dead. The driver replied: "He's not as dead as that bird on your bonnet!"



Your Home

—its term of life depends largely upon the character of its exterior covering.

**BRITISH COLUMBIA
RED CEDAR
SHINGLES**

*Are unequalled for
Roofing and Siding*

Maximum protection—minimum
maintenance—unexcelled artistic
effect—highest degree of comfort
under any weather conditions.

**LONGEST LIFE AT
LOWEST COST**

Agriculture as a Profession.

EDITOR "THE FARMER'S ADVOCATE":

The word agriculture, derived from the Latin ager—a field plus culture, cultivation, meaning literally the cultivation of a field, the art or science of cultivating the ground, has gradually come to represent a great deal more than the original meaning was intended to convey. In Roman times, when class distinction played such a prominent part, the land was all owned by the patricians or upper class, while the actual labor of tilling the soil and its attendant duties was performed by the plebeians or lower class together with the helots or slaves. The land-owner was known as the farmer and was always respected, even looked up to, but, of course, he was never supposed to perform any manual labor. Such would have been beneath his dignity, but was quite proper for his inferiors.

From such standards, it can be readily surmised that farming at that date meant nothing more than a necessary means of sustaining life, and incidentally of providing labor for the uneducated and undisciplined population. From this fact we may also infer that practically nothing of scientific methods in agriculture was then in vogue. Somewhat similar conditions, we are told, existed in England and France during the Middle Ages (5th to 15th century). Agriculture has yet to receive a place among the leading industries. Manufacturing occupied the main attention of all classes. In most cases, there, a farmer was a tenant who was compelled to give a proportion (usually half) of his income to his landlord. Gradually, however, the common people got freer control of the land and began to take a more intelligent interest in its development. Jethro Tull and Dr. Townsend were two of the pioneers in this respect; the latter following so successfully the cultivation of the turnip as to merit his title of "turnip

Townsend." It was about the same time that it was accidentally discovered that it was the potato tuber and not the vine which was intended for use. From then on this plant increased in popularity by leaps and bounds.

Now let us compare with these conditions our modern Canadian agriculture with all it entails. To us farming is not merely the growing of a certain crop. No person to-day would attempt to operate a mixed farm permanently without live stock forming his main basis. Should he do so, his methods are certain to spell failure in large letters. What has been the reason or list of reasons for such drastic changes in ideas and methods? To me it appears that a great many influences have been at work. I am speaking more particularly of Canada, because in it we believe is represented probably the highest standard of general farming anywhere to be found. It has already been named "The Granary of the World," a tribute to the quality of its grain, particularly wheat. It has been largely in the British colonies and in the western European countries that scientific and intensive farming has been carried on. The pioneers found on landing in Canada a new country, sparsely populated, totally uncivilized and entirely undeveloped. The first requirement was to get something to eat. By the way, it seems that eating has been a habit practiced as far back as history goes. Well, the old English, Irish and Scotch emigrants were in for a job, but as time has shown, they were equal to the task. Eastern Canada, which naturally was first encountered, was chiefly forest. Thus began the long-drawn-out contract of land-clearing. Naturally lumbering became an important industry, and building followed in turn. Once cleared, the land proved most productive, and the arduous labor of clearing had the after effect of influencing the settler to make the most use of his small clearance by

thorough cultivation, harvesting, etc. Difficulty in obtaining foundation stock and seed led ultimately to the development of individual herds and varieties. Moreover, the fact that the individual himself was compelled to work his own land and not merely own it, proved a great factor in the uplift of the standard of the industry generally. Probably this latter effect was the most notable as well as most important. The farmer's entire interest was centred in his farm, its development and its ability to produce the necessary livelihood. Thus interest gradually became affiliated with experiment; experiment grew into comparison; and comparison into wider and more united and insistent investigation. The final outcome was the recognition by the Governments of the importance of scientific agriculture, and in consequence the establishment in time of experimental stations and agricultural colleges. As yet, these are practically in their infancy. This is evidenced by the fact that comparatively few farmers in our Dominion have learned to take advantage of them, while some even try to ridicule them. So far, farming has failed to be considered as anything but an honest occupation, which is necessary in order that all classes may have food; that factory workers may have work; that manufacturers may be supplied with certain raw materials and assured of a market for machinery, etc.; and that the railroads may be very materially benefited.

However, without the remotest shadow of a doubt, the word "farming" is coming to be far more comprehensive, and it is to be hoped that the day will soon dawn when agriculture is given its rightful allotment as a profession. Perhaps before many years men will find it necessary to qualify as professionals in order to keep pace with the development of the industry. To many people in our urban centres, the word "farmer" is very commonplace and is very lightly spoken of,

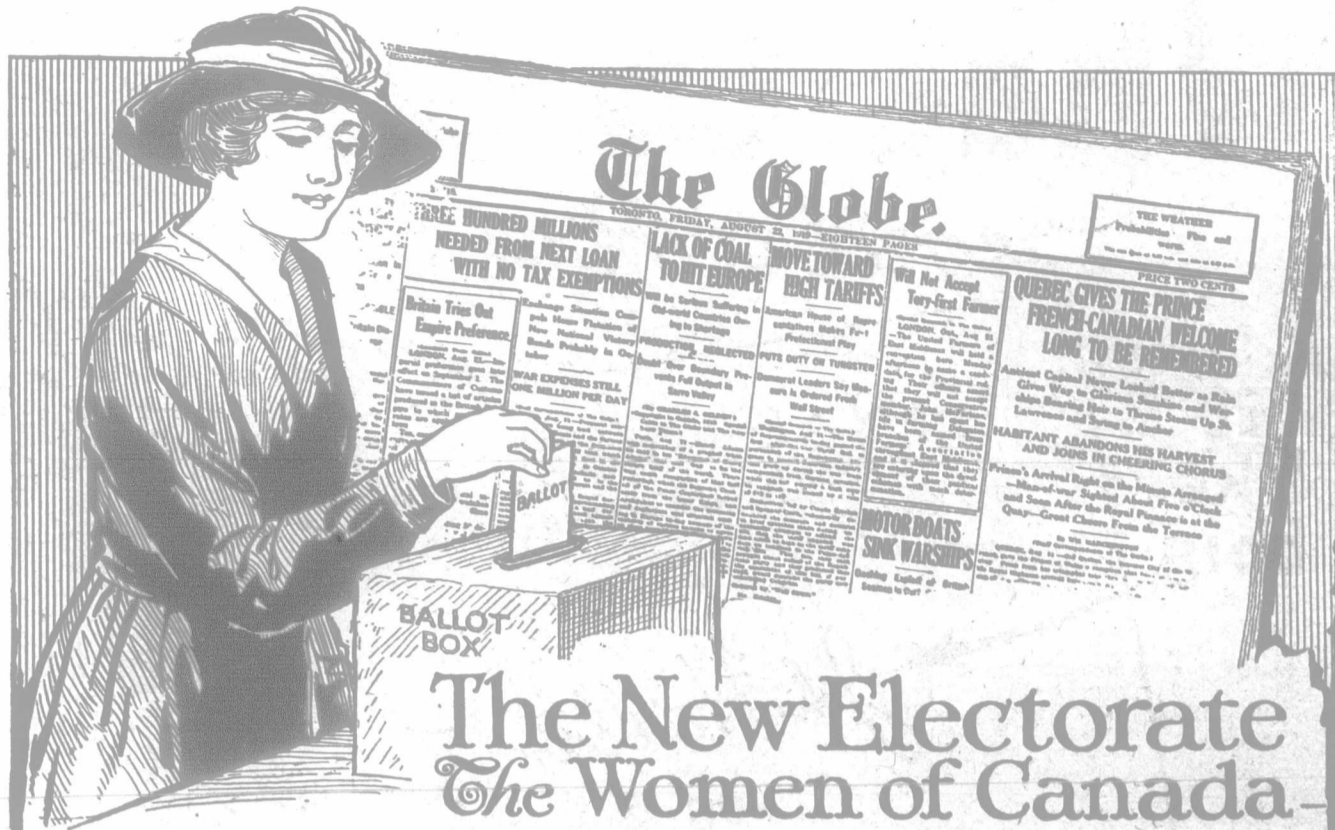
sometimes even being looked upon in disgust. "Only a farmer," have in the past been used as by-words, but their use in the last few years has very appreciably lessened. Of course, those in a position to understand should have paid no attention to such utterances. Their use was never anything but a sure and certain sign of gross ignorance on the part of the offender; but unhappily the effect of such on the farming industry has been only too apparent. To-day, however, when a man is introduced as a farmer people generally stop and take notice at least and rightly so.

What more complex subject could be imagined than agriculture? All its many branches, new ones cropping up every day and old ones becoming more intricate. The old and common belief that anyone could farm no longer holds sway. Time was, no doubt, and not so very remote either, when a rugged physique was the deciding factor between success and failure, and although it still remains important, it is no longer all important. People are only beginning to realize the possibilities to say nothing of the probabilities in agriculture. The several branches, some of which have hitherto remained incognito and undeveloped are now shaping themselves into their proper location, and the interdependence of the several branches is being more completely understood and appreciated. We might go even farther, in fact, we have started on the way in the hope of discovering the true relationship of farming to other industries. Should this phase receive just and conscientious consideration, we may feel certain that a bright day is dawning for agriculture.

I have already intimated the rather ridiculous aspect taken towards farming as an occupation by the average urban dweller, due largely to ignorance of the facts. It has recently been commonly asserted, perhaps believed, that farmers

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were getting rich quick. Now, from even a limited experience I know that it is hopeless to try and convince such people to the contrary. Suffice it to say that farming is altogether too honest an occupation to belong to the get-rich-quick variety. However, when people actually desire to jump at unwarranted conclusions, nobody need try to prevent them. The surest evidence that any such belief is groundless lies in the fact that city would-be farmers have had their dreamy plans completely shattered in the primary stage. Experience is said to be a satisfactory teacher, and its application in such cases has proven the assertion to be true. No, everybody cannot farm successfully. The Almighty never intended such to be the case. By being successful, this world emphasizes the ability to collect (not exactly mass) worldly goods. There are occasional exceptions to this rule also, and personally I am of the opinion that the exceptions should be encouraged; but we must judge conditions by the standards as they exist. But to get back to our subject, Who should or should not farm? The question is a vexed one and cannot be settled satisfactorily by other than the individual himself. The industry, occupation or early profession, commonly known as farming, undoubtedly has its drawbacks, its unattractions. These need not be enumerated here; indeed they are too often emphasized. Every walk of life has such. If it were not so our civilization could not endure or develop to any degree beyond barbarism, if even that, simply because every one would start out with the same object in view and would land nowhere. Why? Simply because the supernatural plan of interdependence and interchangeability would be no longer possible. It must be self-evident to every sane person that there must be different industries and different inclinations in people in order that advancement may materialize. But is this any reason why any one class should be ranked subordinate to any other? Farmers and laborers have taken second place as regardless class distinction, and it is up to them, and they only, to redeem themselves and prevent unnecessary and undue humiliation in the future. Nineteen hundred and nineteen would appear to be the turning point in this respect, judging from the present trend of events. Organization, firstly by the more enthusiastic and ambitious and finally culminating in a thoroughly united understanding and object. Such a course would appear to be in process of experiment. Another fact worthy of note is the present-day meaning of capital, labor, and producer. The manufacturers, railroad companies and the more prominent professions are designated by the word "capital," while those subservient to them are broadly and casually styled as "labor." In other words, employers are the capitalists, while their employees are the labor. The movements on foot espoused by distinguished leaders to establish means whereby these two classes can be brought to understand and appreciate each others problems, are certainly bound to have the effect of mutual betterment in the long run. Why should not the other class, the producer, the farmer, be set on an equal basis with the capitalist? He too is a capitalist and employer in the industry of prime importance to the nation's livelihood. Obviously the only possible objection lies in his lack of executive and organizing ability. But farmers are now becoming educated, are compelled to do so, and naturally the organization is following as a matter of course. Often when any person gets education other than the ordinary, it is taken for granted that that person intends to earn a living by his education, but of course not by farming. If he returns to the farm, he is constantly confronted with outbursts such as "Why don't you go and get an easy job?" "You are only wasting your time." "Do you not intend to make any use of your education?" Not only the city people, but people actually engaged in agriculture are guilty of such utterances. When viewed from this matter-of-fact angle, is it any wonder 't' at agricultural education has been delayed or that the advancement in farming has been backward? Those who were the very best prepared to advance its cause were encouraged to leave the farm. The intelligent observant person who is really anxious to live and not merely exist has all the necessary equipment at his disposal on the modern farm. Nature has provided unlimited material for



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CHANGING conditions have given the Dominion a new electorate—the women of Canada.

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observation and study in her soil, forest, rock, plants, the lower animals and in humanity itself. What better opportunity for study could be offered than is given the man on the land? And it is absolutely necessary for him to have considerable instruction before he can intelligently acquaint himself with the forces at work about him, and in order that he may derive the greatest benefit therefrom. To get the most out of farming and to rank with the really successful, a farmer must have unlimited knowledge. He must combine the scientist's knowledge with that of the business man; must be a practical student of live stock and their diseases, of horticulture, bacteriology, chemistry, physics, botany and zoology, and above all he must be a keen observer of the changes to which our climate is susceptible, thus embracing a thorough knowledge of physical geography, and mayhap of astronomy. All these together with the very necessary qualities of sound physique, untiring energy, and faith in the industry itself are the requisites largely responsible for modern successful farming. Let us hope that all classes will soon come to a full realization of the producer's problems and that greater encouragement and respect will be shown towards the industry, the value of which has been and must remain inestimable. Only can sincere consideration on the part of all contribute to the best interests of all and by so doing give agriculture its well-deserved rank. The time is now ripe and fully opportune for "professional agriculture."
Quebec. W. MAC DRUMMOND.

Start the Poultry Year Right.

The poultry year should begin November 1. At that time the old stock should be culled out, the cockerels divided from the pullets and the pullets selected from the flock and put into winter quarters. Don't Keep Old Hens. Only the best of those hens that are one and a half years old should be kept. Most of them with all the older ones should have been disposed of last spring but in case this was not done do away with them now. Even if they were culled then, go over them again now and see that nothing that will not likely produce is retained. Cull the Early Moulters. In selecting the hens that you intend to keep do not take those birds that are looking clean and well feathered, but rather those that are more or less shaggy in appearance. The ones that are still moulting, they are the layers; those that have moulted and have a nice new coat of feathers were not persistent layers. They quit laying too soon and had nothing to do but grow feathers. This explains why they have their new coat before their more industrious sisters. Early Pullets Best. Select as winter layers, the early, well-matured pullets. These should be carefully handled, put into their own house, fed well and given every opportunity to produce. Pullets that are but half grown or that will not be matured for months yet should be culled out with the cockerels, crate fed and marketed. Such pullets will be a bill of expense all winter and should not be kept on any excuse. Crate Feed Surplus. No matter what class of birds that are culled out for market, it will pay to finish them before killing. Even with the high prices of feed one cannot afford to market poor stuff. For further particulars on crate feeding, write the Poultry Division, Experimental Farm, Ottawa. Keep Accounts. We suggest that every person who wants to make his poultry pay begin at once to keep track of receipts and expenditure. To assist in this, blanks have been prepared by the Poultry Division, Experimental Farm, Ottawa, which will be sent on application to those who will promise to return each month a copy filled in. Those complying will receive suggestions on how to improve their results, based on the information given in their reports.—Experimental Farms Note.

In a recent issue the names of the winners in the Sheep Flock Competition were published. In District No. 1, A Wallace, of Osgoode, was credited with having won first place; this should have read Wm. A Wallace, of Kars.

Milk Values.

Are we on the right track when milk value is based on amount of butter-fat contained?

As butter-fat varies with the same cow, so may the bone, muscle, flesh and nerve qualities vary, and while milk is the one perfect food, it must be milk with properly balanced values.

Unless the food given an animal is thoroughly assimilated balanced results cannot be obtained. And there is nothing on the market that has been as successful as Herbageum in securing thorough assimilation of food stuffs and consequent balanced values.

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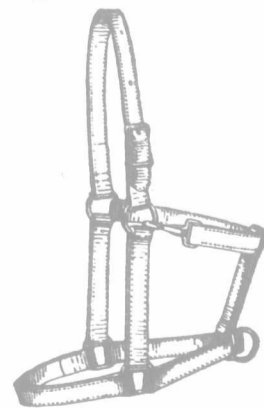
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study in her soil, forest, and lower animals and in the soil. What better opportunity could be offered than to the farmer on the land? And it is necessary for him to have instruction before he can acquaint himself with the details about him, and in order to derive the greatest benefit from the most out of the land, he must have unlimited knowledge. The farmer must combine the knowledge with that of the scientist to be a practical student of their diseases, of horticulture, of chemistry, physics, and above all he must be an observer of the changes in nature is susceptible, thus thorough knowledge of the soil, and mayhap of the weather, these together with the knowledge of sound physique, and faith in the industry, makes largely responsible for successful farming. Let us hope that the time will soon come to a farmer when the producer's problems are encouraged and shown towards the industry of which has been and is becoming nestimable. Only can the farmer on the part of all the best interests of all and the agriculture its well-being, the time is now ripe and for "professional agriculture."

W. MAC DRUMMOND.

Poultry Yearling

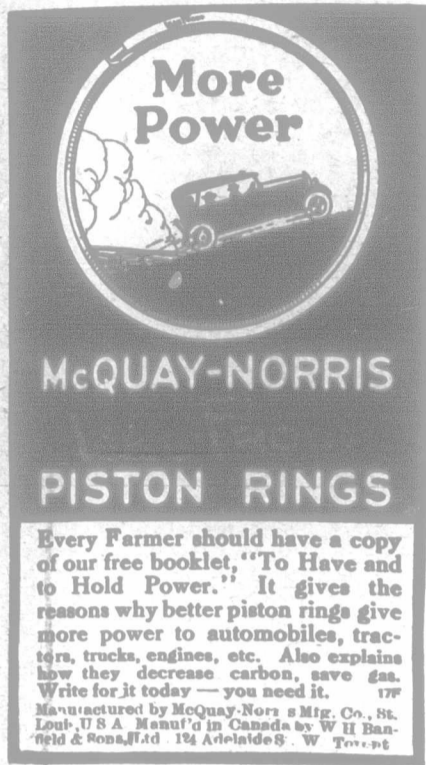
Yearling should begin at that time the old pullets and the pullets of a flock and put into

Hens. Only the best are one and a half kept. Most of them should have been culled but in case this away with them now. Cull them, go over and see that nothing is produced is retained. Moulting. In selecting intend to keep do not are looking clean and rather those that shaggy in appearance. are still moulting, they those that have moulted new coat of feathers were. They quit laying and nothing to do but this explains why they moult before their more

Best. Select as winter well-matured pullets. carefully handled, put use, fed well and given to produce. but half grown or that cured for months yet out with the cockerels, marketed. Such pullets expense all winter and on any excuse. plus. No matter what are culled out for way to finish them with the high prices afford to market poor particulars on crate the Poultry Division, n, Ottawa.

s. We suggest that o wants to make his at once to keep track expenditure. To assist e been prepared by the Experimental Farm, be sent on application promise to return each in. Those complying tions on how to imts, based on the in- their reports.—Experi-

the names of the Deep Flock Competition In District No. 1, Osgoode, was credited first place; this should Wallace, of Kars.



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25 Ewes. Average wool clip of flock for this year, 15 1/2 lbs. per fleece.

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Have Fraudulent Methods Been Practised in Cow Testing?

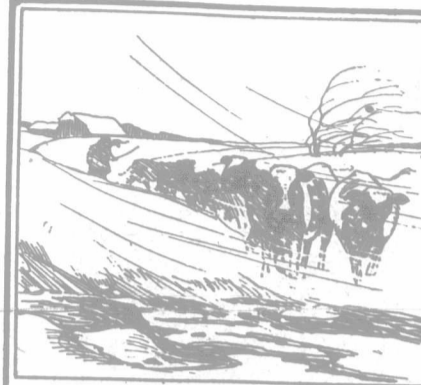
Breeders of Holstein cattle are particularly interested in the testing which has been done by Charles Cole, in the United States. From evidence which has been brought out, it would appear that fraudulent methods had been used. That the same methods had been used in testing other herds and whether or not such records would be retained by the Association is for the officers of the Association to decide. One prominent breeder whose herd had been tested by Mr. Cole has procured an injunction against the Association restraining them from interfering with records made on his farm. D. D. Aitken, President of the American Holstein-Friesian Association, in calling the board of directors together wrote as follows:

"Since your last meeting in Brattleboro Vt., the Executive Committee of the Board, in investigating the records made by Charles Cole, of animals tested belonging to Cole & Hicks, with supervisors from the Agricultural College of Vermont, a condition has developed that made it seem necessary to call you gentlemen together to develop some plan whereby the laws of the Association could be executed, relating to Advanced Registry. While the laws of the Association provide for trials of issues relating to registry of animals in the Herd-Book, no provision is made for the manner or mode of trial or investigation where the correctness of records in Advanced Registry, are at issue. And while the Executive Committee is generally, by the laws of the Association, empowered to do all things that your Board could do, when it is not in session, the Executive Committee, after considerable investigation, recommended to me that a full meeting of the Board be called to take into consideration what investigations made by them had demonstrated, and what further action the Board of Directors might deem advisable to take in order to determine to a moral certainty whether or not animals had been recorded in the advanced Registry by fraudulent and dishonest means, and what form of procedure should be adopted for the purpose of arriving at an accurate conclusion as to the correctness of the records that were questioned.

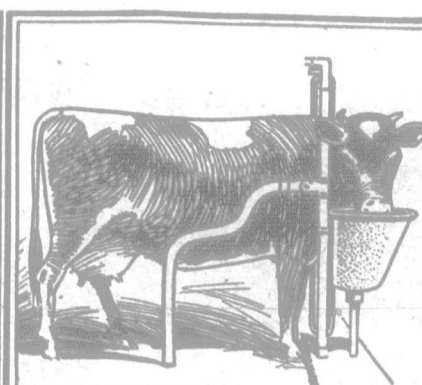
It will become apparent at once to the Board, the tremendous importance of the issue; the great importance to owners of animals whose record of performance are now on the books of the Association, because of the effect it would have upon the sales of their offspring and of the animals themselves, if it would be proven, that the records were fraudulent, and the records were expunged. On the other hand it must be apparent to every one, the tremendous importance, not only to the breeders of Holstein-Friesian animals, but to the breeders of pure-bred live stock of every character, if fraudulent records were permitted to remain and the effort was being continued to prove that like begets like and that animals of great performance are calculated to transmit the qualities to their offspring. As it will be seen that starting from a false premise or from a false record as indicative of what the animal should produce and not being able with her offspring to equal or excel, would be a fact or condition that would tend to discredit the whole doctrine of improving stock by selective breeding, and a condition might exist that would cause irreparable injury to the live-stock industry, through the creation of want of confidence in the possibilities of improving the breed.

It was with this situation in my mind that I instructed the Secretary to issue a call for this meeting of the Board. It is not alone, the question of these animals, it is the magnitude of the principle involved. This is a moral issue in its relation to the breeding of pure live stock, and the tremendous effect it will have upon the industry, that made it seem necessary to go to this great expense of calling a full Board to consider the problem that confronts us.

After the call was ordered, Oliver Cabana, Jr., commenced an action against the Association and procured an injunction practically restraining the Association, its Directors, Officers and agents from interfering or exercising authority over the records he, Oliver Cabana Jr., had made and that were



How are you going to water your cows this winter? Do you intend to drive them down to a creek, or out to a trough in the yard? If so, you are sure to find it cold, miserable work. The stock will dislike it as much as you.



With a water bowl outfit, the water will be in front of the cows all the time. You will not have to drive them out on a cold, blustery day. This hard disagreeable chore will be cut out entirely.

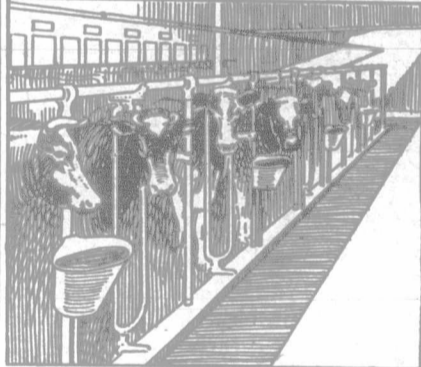
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Water	87 per cent
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The cows will be in better shape and will soon pay for the outfit in increased milk production. Milk is 87% water and if you want to get the milk from the cow you must put the water into her.



Send in the coupon below, get all the facts, and judge for yourself. No cow drinks the water she ought to drink when she stands shivering in the cold. The water is icy. If she does gulp down a quantity of it, it will only give her bloat and indigestion.



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The outfit will pay for itself in three months. It will last a lifetime and go on earning profits for you all the time. There is no easier way of increasing returns from your stock. Send in the handy coupon to-day.

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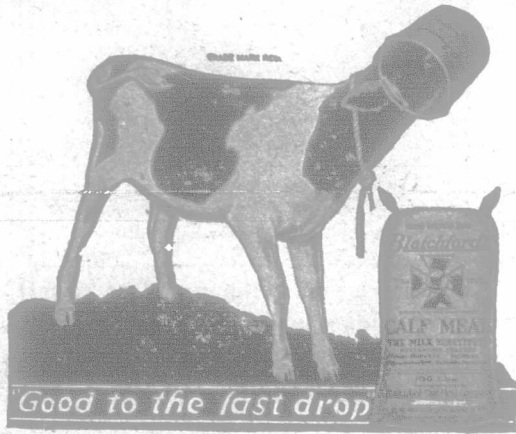
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Canada's farmers and dairymen may rest assured that the supreme quality which has always characterized Blatchford's Calf Meal will be zealously maintained in its manufacture in Canada. It is, always has been, and will continue to be the most efficient calf meal on the market. We invite your inquiries regarding Blatchford's Calf Meal, Blatchford's Pig Meal, Blatchford's Milk Mash and Blatchford's Egg Mash, all of which will be manufactured at our Canadian plant. Full particulars and name of nearest distributor on request.

Blatchford Calf Meal Company of Canada, Limited
250 PELHAM AVENUE, TORONTO, ONT.

Established in Leicester, England, in 1800; in the United States in 1880, and in Canada in 1919.



Very easy
to erect.
No rafters.

Big
opening
for filling.

**Empire
Silo Roofs**

Get one for YOUR silo

Don't let your silage go to waste through snow and ice and excessive freezing.

Read what Agricultural College men have to say about having roofs on silos. Their remarks are published in our Free Leaflet on "EMPIRE" SILO ROOFS.

Prices greatly reduced this year. Send a card to-day for prices and leaflet.

The Metallic Roofing Co.
LIMITED
Manufacturers since 1885
King and Dufferin Sts., Toronto
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TRAPS AND GUNS

AT FACTORY COST
We buy traps and guns and sell you Guns, Traps, and more. AT FACTORY COST. Write for FREE CATALOG, TRAPPERS' GUIDE, and Fur Price List.
E. W. BIGGS & CO. 172 Biggs Building, Kansas City, Mo.

**100%
SANITARY**



Germs flourish in the seams and joints of ordinary milk-pails. No matter how carefully you scald and cleanse, you never can be quite sure that some crevice does not harbor a colony which will make trouble later on.

EDDY'S INDURATED FIBREWARE MILK PAILS

are 100 per cent sanitary, because there are no joints or seams to cleanse. They are made in one piece, from wood pulp, under tremendous hydraulic pressure. The hard, glazed surface is baked on at high temperature, and is absolutely impervious to liquids. Eddy's Milk Pails are practi-

cally indestructible. They cannot be dented and no cracks can develop on the surface. Rust cannot attack them and no ordinary accident will do them injury. They cost no more than ordinary milk pails. They will save you labor now, and in the long run they will save you money.

The E. B. EDDY CO. Limited
HULL, Canada
Makers of the Famous Eddy Matches

NORTHERN ONTARIO

A vast new land of promise and freedom now open for settlement to returned soldiers and sailors FREE; to others, 18 years and over, 50 cents per acre. 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

H. A. MACDONELL,
Director of Colonization,

G. H. FERGUSON,
Minister of Lands, Forests and Mines.
PARLIAMENT BUILDINGS, TORONTO.

recorded in the books of the Association, setting up and alleging in his affidavits and prayer for injunction, that the Officers of the Association were illegally elected; that legal meetings of the Association or of its Officers could only be held in the state of New York, the domicile of the corporation; alleging prejudice in the minds and conduct of the Officers and of the Executive Committee. Which injunction is now in force and which was duly served on the Treasurer of the Association at his home in Syracuse, N. Y.

It, therefore, becomes apparent that no action can be taken by you at this meeting, that would in any way affect the records of Oliver Cabana, Jr. The questions, however, that have been raised, go to the very heart and life of the Association, and if the contention is true, then any records made during the last four years are recorded, or any Officers or Directors elected during the last four years when the National meetings have been held outside the state of New York, would be invalid. And that is the situation that confronts you at this meeting; that is, providing Mr. Cabana's contentions are true and that the courts of New York will permit him to raise the issue in the manner in which he has raised it. And until these problems have been decided by the court, my own judgment is that no action should be taken that in the most remote contingent infringes, even the spirit of the injunction. I take it, however, that any court of equity would realize the necessity of your meeting together and going over the situation and determine what counsel shall be employed to represent the Association, and take any other steps that might be necessary to protect the Association's interests.

There are other matters that I wish to bring before the Board, more perhaps, as a matter of advice than otherwise, relating to the Extension work of the Association, and the condition that exists in various states where you gentlemen live, and where you are more familiar with the situation than I am, because we cannot remain dormant while the question of Mr. Cabana's records are being inquired into.

The work of the Association must go on. When the shadow that is now thrown over our records is removed, as it will be, and when right and honesty shall prevail, as it will, our representatives will be in the harness, used to the work, and there will be no slacking of interest in these great animals that are doing so much for the dairy industry and are taking such a great part in solving the food supply, that is most necessary for the human race."

Questions and Answers.
Miscellaneous.

Pigs With a Cough.

I have a number of pigs which have a bad cough and it seems to be spreading through the litter. I am feeding middlings and whey. What treatment would you advise?
G. D.

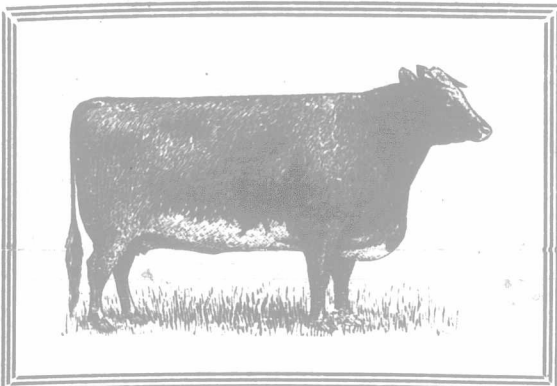
Ans.—The pigs may be suffering from bronchitis which is contagious in many cases. Treatment is to fumigate with burning sulphur. When this disease becomes general it is probably the best plan to dispose of the herd and thoroughly disinfect the premises. It is possible that the pigs have contracted tuberculosis, as when the respiratory organs are involved there is usually a cough. This disease might be contracted through the feeding of unpasteurized whey, or may be contracted from other causes. Curative treatments are ineffective.

Gossip.

A. J. Hickman & Co., of Halse Grange, Brackley, Northants, England, whose advertisement appears in another column of this issue, write that they have recently sold 30 Romney ewes and one ram and Shorthorn bull to one of their clients in Uruguay, and the same purchaser has cabled for another 25 Romney ewes. Three Red Polled bulls and two heifers, one of the former a prize-winner at the Royal Norfolk Show, were also shipped to Uruguay, and to South Africa were sent two Red Polled bulls and four heifers. Romney sheep are also being sent to customers in South Africa.

Important Auction Sale of High-class Scotch Shorthorns

TWENTY-TWO HEAD—SIXTEEN FEMALES, SIX YOUNG BULLS



At Karama Dell Farm,
Lot 11, Con. 10,
Lobo Tp.

Wednesday, Oct. 22nd, 1919,

The property of Robt. Mitchell, R.R. No. 2, Ilderton, Ont.

The foundation stock is from the noted herds of Messrs. Watt, H. Smith and J. T. Gibson. Only the best sires available have been used, such as Blarney Stone, Strathallan Chief, and Roan Blarney. The young bulls offered range from 3 months to 19 months, and among them are some good herd headers.

Nearly all the females of breeding age are in calf, and some of the attractive offerings are Scottish Rose 6th, a beautiful four-year-old, sire Scottish Baron (imp.). Carmine 2nd, dam Carmine = 114664 =, is a beautiful 3-year-old by Blarney Stone. There is also a 2-year-old heifer by Roan Blarney, a son of Blarney Stone, the highest-priced bull at Western Ontario Consignment Sale, London, 1915.

There will be included in this sale 3 Clydesdales—a brood mare 7 years old and two of her fillies, all registered or eligible.

As the farm is for sale, there will be no reserve, and all the other farm stock, together with implements, etc., will be sold also. Any person desiring to purchase this farm will do well to correspond with the undersigned. Sale commences 1 o'clock. Trains will be met at Komoka and Ilderton stations on morning of sale.

Terms—8 months' credit on approved paper; 6% per annum off for cash.

Auctioneers:
CAPT. T. E. ROBSON, London, Ont. H. STANLEY, Lucan, Ont.

ROBERT MITCHELL, R.R. No. 2, Ilderton, Ont., Prop.

Aberdeen-Angus

Meadowdale Farm
Forest Ontario.

Alonzo Matthews Manager
H. Fraleigh Proprietor

SUNNY ACRES ABERDEEN-ANGUS

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

G. C. CHANNON P.O. and phone Oakwood, Ontario
Railway connections: Lindsay, C.P.R. and G.T.R.

Alloway Lodge Stock Farm

ANGUS, SOUTHDOWNS,
COLLIES

A choice lot of Angus cows in calf to Queen's Edward. Collie puppies—A litter now ready.

ROBT. McEWEN, R. 4, London, Ont.

Sunny Side Herefords—Heifers to calve in Sept., some calves at foot. A few bulls ready for service. All priced to sell.
ARTHUR F. O'NEIL & SONS
Phone Granton. Denfield, Ont.

Aberdeen-Angus Cattle—Sired by Middlebrook Abbot 2nd (won 1st prize when shown at Toronto and Ottawa). Apply to A. DINSMORE, Manager, "Grape Grange" Farm, Clarksburg, Ontario, 1 1/4 miles from Thornbury, G.T.R.

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

Beaver Hill Aberdeen-Angus and Oxford Sheep—Bulls from 8 months to 20 months. Females all ages. Shearing rams and ram lambs. Priced for sale.
ALEX. MCKINNEY, R. R. No. 1, Erin, Ont.

Questions and Answers.

Miscellaneous.

Crossing For Feeders.

I have a small herd of grade Holsteins, but as I live in a district where nearly everyone is in beef raising I would like to get into a line of stock suitable for both milk and beef. Would breeding the Holstein cows to Shorthorn sires give the desired result?
M. L. S.

Ans.—No doubt the progeny of such mating would have more beef conformation than if the progeny were straight Holstein. It is not considered a good plan to cross the breeds as you suggest, as it is not what might be termed constructive breeding. If you are buying your cows all the time, then you might get very good satisfaction from following this practice, but if you are raising the heifers for milk we doubt the advisability of the plan.

Horse Out of Condition.

What kind of condition powders would you recommend to loosen the hide of a six-year-old mare? I am feeding her heavily on timothy hay and give her five quarts of oats three times a day. She did not lose her old hair until this fall. While she is in high life she appears to be getting thinner all the time.
D. W.

Ans.—It is possible that her teeth need attention. It is not advisable to feed too heavily on hay. Give what the mare will clean up in about an hour and a half. A laxative of 8 drams aloes and 2 drams ginger might be given. A little flax-seed meal or oil cake fed with the oats should aid in improving her condition. A feed of boiled oats a couple of times a week is also good. The following is a tonic: Equal parts sulphate of iron, gentian, ginger and nux vomica. Feed a teaspoonful three times a day.

O. A. C. Annual Auction Sale of Pure-bred Cattle Sheep and Swine

Under instructions from the Minister of Agriculture for the Province, there will be held at the Ontario Agricultural College, Guelph, Ont., Thursday, October 30th, 1919

A public sale of selected surplus breeding stock, the property of the Ontario Government. Nearly all this stock has been bred and reared in the College herds and flocks. Five fashionably-bred Shorthorn bull calves and two choice open heifers, one extra choice Hereford bull calf, four young Holstein bulls from heavy-producing ancestry, two Ayrshire bull calves, three fat steers, a number of Shropshire and Leicester ram and ewe lambs from good ewes and by an imported ram; also a few breeding ewes, and a large selection of Yorkshire and Berkshire sows, a number bred to farrow soon and many young sows are included in the offering. For catalogue apply to.

WADE TOOLE, O. A. C., Guelph, Ontario

BROOKDALE HEREFORDS No matter if you want bulls or females, see the get of Bonnie Ingleside 7th, before buying elsewhere. We have the best of breeding and good individuals, priced right. Visitors welcome.
W. READHEAD, MILTON, ONT.

Dual-Purpose Shorthorns—Herd headed by Dominator 10624, whose two nearest dams average 12,112 pounds of milk in a year. Several bulls from six to nine months, priced for quick sale. Inspection of herd solicited.
WELWOOD FARM, Farmer's Advocate, London, Ont.

SPRUCE GLEN FARM SHORTHORNS
A number of good young bulls and a few extra good heifers for sale. You should see them.
JAMES McPHERSON & SONS DUNDALK, ONTARIO

WESTERN ONTARIO SHORTHORNS

Canada's Greatest Semi-Annual Sale

Listing eighty choice selections from Western Ontario's leading herds, and selling at the Western Fair Grounds,

FIFTY-SIX FEMALES

London, Ontario, Tuesday, November 4th, 1919

TWENTY-FOUR YOUNG BULLS

Of these eighty lots of Scotch and Scotch-topped Shorthorns, all have been carefully selected from the prominent herds of Western Ontario. The families represented include nearly all of the more popular present-day strains, offering the get of such noted sires as Raphael (imp.), Best Boy, Hillhead Chief, Trout Creek Wonder, Brownal Reserve, Gainford Supreme, Strathallan Chief and etc.

The herds from which these have been drawn include

such successful breeders as Jno. T. Gibson, Wm. Waldie, Harry McGee, H. Smith, E. Brien & Son, R. S. Robson, G. A. Attridge, T. W. Douglas, Wallace Gibb, Percy DeKay, Jas. Chinnick, R. H. Scott and others.

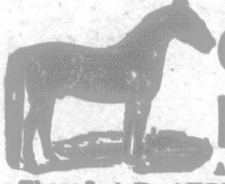
The offering throughout, as regards both quality and breeding, is such that there will be no disappointments and no excuses to offer on sale day, and, as usual, they sell under the most liberal guarantee ever offered in a Shorthorn sale-ring in Canada.

For Catalogue address

HARRY SMITH, Hay, Ont., Manager of Sale

Auctioneers { CAPT. T. E. ROBSON
J. W. LAIDLAW

Horse Owners! Use
GOMBAULT'S
Caustic Balsam
A Safe, Speedy, and Painless Cure



The safest, Best-BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Hemorrhoids from Horses and Cattle. SUPERSEDES ALL CAUSTIC OR FILING. Impossible to produce scar or Hemorrhoid. Every bottle sold is warranted to give satisfaction. Price \$1.75 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. - Send for descriptive circulars. The Lawrence-Williams Co., Toronto, Ont.

Heaves
AND HOW TO CURE
—A Standard treatment with years of success back of it to guarantee results in
Fleming's Tonic Heave Remedy
Use it on any case—No matter what else has been tried—and if these horses fail to relieve, we will refund full amount paid. Further details in
Fleming's Vest Pocket Veterinary Adviser
Write us for a Free Copy
BEST EVER USED
Dear Sirs—Enclosed find \$1.00 for 1 package of Tonic Heave Remedy. I used a package last year and completely cured a case of Heaves of some 8 years' standing.
H. B. BURKHOLDER, Lillooet, B.C.
Per Box, \$1.00; 6 for \$6.00
FLEMING BROS., Chemists
79 Church St. Toronto




Shorthorns
The Breed For You
Shorthorn steers hold the high-price record for a carload on the open market in Canada. They also hold the high-price record for carlots of heavy steers, yearlings and feeders on the American open markets. They are money makers.
Write the Secretary for free publications.
Dominion Shorthorn Breeders' Association
W. A. DRYDEN, President, Brooklyn, Ont.
C. E. DAY, Secretary, Box 235, Guelph, Ont.

HEAVES CURED
Not merely relieved, but absolutely cured. For 24 years
CAPITAL HEAVES REMEDY
has been saving horses for farmers and stockmen. Even the worst cases yield to its action, and every full treatment is sold with our positive guarantee of satisfaction or money back.
FREE TRIAL OFFER
We have such confidence in this remedy that we send a full week's trial free, for 5c. to cover postage and wrapping. Write us **VETERINARY SUPPLY HOUSE,** today. 750 Cooper Street, Ottawa, Ont.



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Marvelous Book Sent FREE
You can now learn Taxidermy, the wonderful art of mounting birds, animals, tanning skins, etc. Learn at home, by mail. The free book tells how. Mount your own trophies. Decorate home and den. Hunters, trappers, nature lovers, you need taxidermy. Interesting, fascinating, big profits. Join our school. 50,000 students. Success guaranteed. Get our free book without delay. Send right now—today.
N.W. School of Taxidermy, 506 Elwood Bldg., Omaha, Neb.



Mardella Dual-purpose Shorthorns
8 choice young bulls; 30 females, cows and heifers. All of good size, type and breeding. Herd headed by the Duke; dam gave 13,599 lbs. milk, 474 lbs. butter-fat. He is one of the greatest living combinations of beef, milk and Shorthorn character. All priced to sell. Write, call or phone.
THOMAS GRAHAM, Port Perry, R.R. 3, Ont.

SHORTHORNS & TAMWORTHS
Young bulls fit for service, also heifers in calf to Isobela Prince Earl. In Tamworth Stock, for sale both sexes and all ages. Write or come to
CHAS. CURRIE, Morrison, Ont.

Report of Farm Conditions.

The following is a summary of reports made by Agricultural Representatives to the Ontario Department of Agriculture, under date of October 6.

Plowing and other fall work is more advanced than usual, as timely rains caused the land to work up nicely, and the weather generally has been remarkably open for field activities generally.

The new fall wheat has a comparatively large acreage, and is looking well. That sown late has been favored with suitable weather for a good start. Some farmers in Wellington are growing fall wheat for the first time in twenty years.

Essex reports that considerable rye is being grown for green manure.

Buckwheat is turning out much better than was expected a month ago, especially in Leeds.

Corn is well spoken of both for husking and the silo, very little being immature. The lack of labor for handling the crop has been the only drawback.

Tobacco has been harvested under favorable weather conditions.

Tomatoes have given the largest yield in Essex for the last five years, and the general quality has been excellent. Canning companies cannot get sufficient pickers, although they are paying eight cents a bushel.

Roots are making great growth with moist soil and warm weather.

Lincoln states that grapes shipped by the Grape Growers' Association to the American market have brought \$80 a ton, f.o.b. at point of shipment.

Pastures have revived greatly with the recent rains, but rather too late to have much effect upon the milk flow.

Feed will be comparatively scarce this coming winter, and this, with the slump in prices, has resulted in a considerable number of cattle and hogs being put on the market in an unfinished condition. Leeds, however, describes those marketed locally as being chiefly canners, fat cows that failed to breed, grass calves, etc., and states that "there is no abnormal tendency to market cattle that would go on to a profit." Dairy cows are selling in Northumbria at from \$80 to \$150, but around Fort William fresh cows are bringing \$140 to \$150.

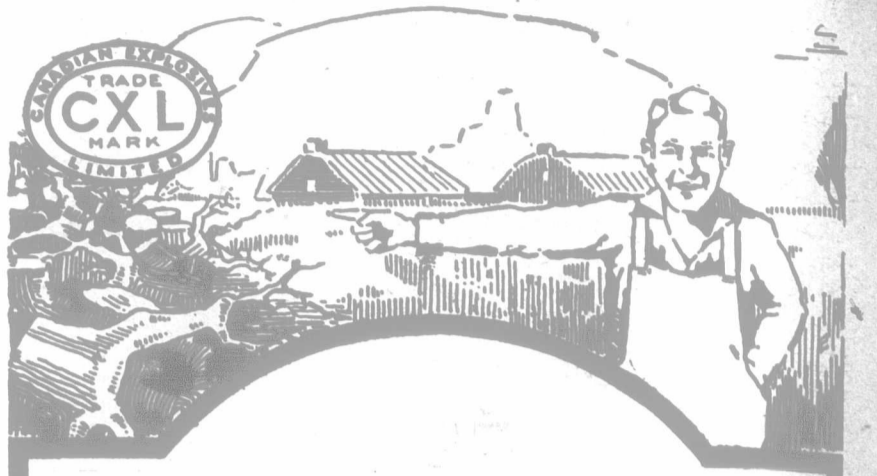
Oxford points out that hogs in that county have dropped in value from \$24.25 to \$16.50 a cwt., in less than eight weeks. Little pigs have also fallen off greatly in value. Oxford says fifty per cent., while Lennox and Addington state that six and eight-week-old pigs are offering at \$4 each.

Less grain is being marketed in Lambton than usual, and the representative is of the opinion that most of the barley and oats will be kept on the farm for feeding purposes.

Peel reports that three more tractors have gone into the township of Chinguacousy during the week.

Armstrong's Sale of Oxfords.

One of the largest and most important sales of pure-bred Oxford sheep to take place in Ontario in years is now advertised by A. A. Armstrong, for Wednesday, Oct. 22. The sale will be held under cover in the town of Fergus, and comprises 100 head. Many of these have been included in Mr. Armstrong's show flock with which he has been so successful this year at a score or more of the larger local shows. The official catalogue issued for the sale lists twenty shearing rams nearly all of which are sired by a son of imported Cowley's U. S. A., 12. A number of the eleven shearing ewes are also got by this same sire. There are seven two-shear ewes catalogued and only two that are above two-shears. In all there are sixty lambs in the offering, forty of which are rams. About half the lambs are got by the imported Hobbs-bred ram, Kilms Scotonia No. 452, 17. This is the flock ram at present and he is not only one of the strongest rams that came over last year, but his get as will be seen on sale day are exceptionally thick, well-fleshed youngsters and full of character from the nose all the way back to the twist. The terms of the sale will be cash, or 6 months credit will be given on bankable paper bearing interest at the rate of 7 per cent per annum. Fergus can be reached by either C. P. R. or G. T. R. trains. Write now for catalogue and mention the Advocate.



"I Blew Out 148 Three Foot Stumps in Six Hours"

This six hours work would have taken a team of horses and two men two weeks.

C.X.L. Stumping Powder

will help you clear your land of stumps and boulders, do your ditching and tree planting and save you money.

C.X.L. as a permanent help on the farm means more and quicker profits. No matter what kind of a farm you have, our free book "Farming with Dynamite" will tell you how to improve it economically.

Write for your free copy today.

There is money in Agricultural Blasting. Write for proposition.

Canadian Explosives, Limited
816 Transportation Building, Montreal, 13

ELMGROVE SHORTHORNS, YORKSHIRES

Owing to pressure of other business I will not hold my annual sale of Shorthorns this fall but am offering privately a limited number of young cows, several with calves at foot, and also a few choice-bred heifers near calving. The most select offering I ever had on the farm and all showing in good condition.

In Yorkshires I have several bred sows; a few boars of serviceable age and some young litters.
JAS. R. FALLIS, Elmgrove Farm, BRAMPTON, ONT.

Pure Scotch and Scotch Topped Shorthorns—We have several choice young bulls service. Two are by Rapheal (imp.), one by Right Sort (imp.), one by Sittyton Selection, and several by our present herd sire, Newton Cedric (imp.).—Prices right.
R. M. MITCHELL, R.R. No. 1, Freeman, Ontario.

A 12 MONTHS' OLD ROAN WIMPLE BULL FOR SALE
Others coming on. Also Lincoln lambs, rams and ewes, got by an imported ram, out of heavy shearing ewes.
J. T. GIBSON, Denfield, Ontario

ANEEDIA FARM SHORTHORNS AND SHROPSHIRE
We have a few Shearling and Ram Lambs for sale. All sired by an Imp. Buttar Ram. Ewes are Campbell bred. Prices right.
J. F. WERDEN & SON, R. R. 8, PICTON, ONT.

MAPLE HALL SHORTHORNS We have on hand at present, four young bulls ready for service (two reds, two roans), that are just the herd sire sort; they are all got by that great sire Flower King No. 90447 and from our Good Crimson Flower and Butterfly dams.
D. BIRRELL & SON, CLAREMONT, ONT.
Greenburn C.N.R., Pickering G.T.R.

1854 Maple Lodge Stock Farm 1919 Herd Dorothy Star (imp.) now at head of Scotch bred and dual-purpose Shorthorns. Two Shearling rams and a few good ram lambs. For sale now.
Lucan Crossing 1 mile east of farm Miss Charlotte Smith, Glanboye, R. R. No. 1

TOP-NOTCH SHORTHORNS
FOR SALE—Sixteen yearling heifers, imported in dam, and four heifer cows and four bulls. See these before buying elsewhere.
GEO. ISAAC, MARKHAM, ONTARIO

Spring Valley Shorthorns—Herd headed by Sea Gem Pride = 96365 =. Present offering includes two real herd headers. One imported in dam, the other by Sea Gem's Pride and from a show cow. A number of other good bulls and few females. Write for particulars.
Telephone and telegraph by Ayr.
KYLE BROS., R. 1, Drumbo, Ont.

SHORTHORNS SHROPSHIRE COTSWOLDS
Blaigowrie Stock Farm
Cows in calf and calf by side. Also heifers in calf and others ready to breed. Bulls of serviceable age.
JNO. MILLER (Myrtle Stations, C.P.R., G.T.R.) ASHBURN, ONTARIO.

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

Newcastle Herd of Shorthorns and Tamworths for Sale—5 choice bull calves, 5 to 6 months old, several heifer calves, all sired by Primrose Duke 107542, and various ages; young sow or two bred to farrow in Sept. or Oct., all from noted prize winners.
Long-distance 'Phone.
A. A. COLWILL, R.R. No. 2, Newcastle, Ont.

Irvin Scotch Shorthorns—Herd Sire Marquis' Supreme—by Gainford; Marquis (imp.). We have at present three young bulls of serviceable age and one younger, all sired by our herd sire and from Scotch bred dams. Good individuals and the best of pedigrees. Also pricing a few females.
J. WATT & SON, ELORA, ONT.

When writing advertisers please mention Advocate.

Tobacco Crop Report For 1919.

The Ontario tobacco crop has been harvested without damage by frosts. This is the largest and the best crop that has been grown in Ontario since the writer began the annual statistical crop report. In 1911 the production was larger if tradition is correct, but we have no figures covering that year.

The Tobacco Division began the work of securing the exact acreage planted to tobacco each year in 1916 and issuing an annual report each fall since that time.

These reports are secured by having a grower in each school section in the tobacco districts of Ontario report the acreage devoted to tobacco in his school section and also the yield per acre. Township reporters give the same information for the township in which they reside throughout the tobacco producing area. All figures thus obtained are checked by the Tobacco Inspector who, late in the summer and early fall visits every school section, and practically every farm in checking up all reports and estimates.

Despite the remarkable fall for harvesting and curing too many growers made the mistake of leaving the harvested plants in small piles in the fields for several days, and in many cases rains came and sand and mud covered the leaves. This damaged the quality of the cured article very materially. This is a very poor method of handling, and such tobacco cannot be expected to command the price that the carefully handled article does. Tobacco should never be rained on after it has been cut and thoroughly wilted. Placing in small piles for two or three days starts the yellowing and curing process, but scaffolding on rough scaffolds in the field would be better and leave the plants free of dirt and mud in case rains came before the tobacco could possibly be housed.

The following figures give the acreage and estimated production of the tobacco crop for this year, 1919:

County	Kind of tobacco	Acreage	Estimated production pounds
Essex	Flue-Cured	1,450	1,800,500
"	Burley	3,010	3,612,200
"	Havana, Gold Seal and dark types	800	942,000
Pelee Island	Burley	700	895,400
Kent	Burley	2,700	3,210,500
Welland	Zimmer, Snuff, etc.	265	291,500
Elgin	Burley	8	9,000
Prince Edward	Burley	162	181,200
Lincoln	Burley	24	25,000
Brant	Connecticut Havana	35	36,300
Norfolk	Burley	12	16,800
	Burley	60	89,000
Total for all types of tobacco			10,709,400

It can be seen that the total acreage for all varieties in all of the tobacco growing districts of Ontario amounts to 9,226 acres which, placing the estimate exactly where experience and the crop indicates, will yield 10,709,400 pounds. The flue-cured tobacco acreage shows only a slight increase over 1918, the same is true for the Snuff, Zimmer, Comstock and all types other than the White Burley. The White Burley shows between sixty and eighty per cent. increase over 1918.

MARKET OUTLOOK—The market outlook was never brighter. The fact that flue-cured tobacco is selling in the Southern States at higher figures than for this period last year, though the crop is considerably larger indicates in a measure a shortage of tobacco stocks. This year's crop will be a few million pounds short of our home requirements, high prices prevailing in the

**A Better Furnace
A More Comfortable Home
and Greater Economy**

THESE are the three things you are looking for when buying a furnace.

These are the things you get in Clare Bros.' Hecla.

The Hecla Furnace is a better furnace.

It is built for a long life of satisfactory service. It is the best furnace twenty-five years' experience, and skilled workmen, using highest grade material, can make.

Besides:

The Hecla Furnace has three exclusive patented features which lower your coal bills, give you a warmer, more comfortable home and look after your health, assuring ample moisture with the warmth.

FUSED JOINTS.—This feature means that your home will be absolutely free from gas or dust escaping through the registers. The radiator joints, fused by a patent process, give you a more comfortable, cleaner home because free from this nuisance common to ordinary furnaces.

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CIRCULAR WATERPAN.—Moist, warm air adds much to the comfort of your home. The warm air must be properly humidified if you are to have good health. The Circular Waterpan of the Hecla runs completely around the furnace, assuring not only sufficient moisture with the warmth, but that each room gets its proper share.

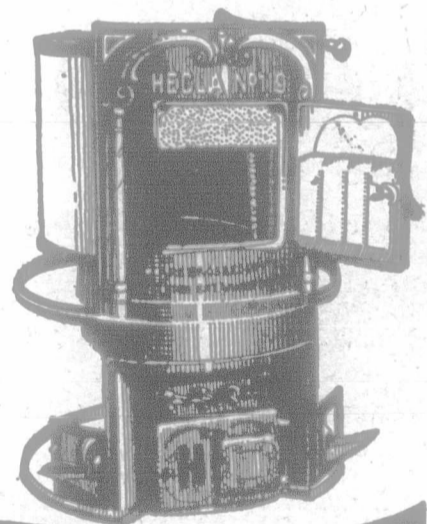
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... hand at present, four young
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ASHBURN, ONTARIO

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... Have a few choice bull
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 Two heifers to freshen in April. One heifer just fresh. Young cows due Oct., Nov., and Dec. James Begg & Son, St. Thomas

WHEN WRITING ADVERTISERS Please mention Advocate

Southern States and the adverse exchange on Canadian money in American markets, all go to increase the demand for our 1919 crop of tobacco.—H. A. FREEMAN, Tobacco Inspector.

Hygiene of the Rural School.

The word "Education" has broadened in its meaning during the past two generations so far as the public mind is concerned, and now includes much more than a training in and knowledge of the three "R's." We now have an emphasis placed upon the care of the body as well as training of the memory. We no longer hold to the old fallacy that the body is a thing of evil that needs to be harshly disciplined in order to train the mind and purify the soul. On the contrary, we recognize an essential unity, a correlation of mind, soul and body; or in other words, that the training of the mental, moral and physical powers must go hand in hand in order to secure the greatest measure of human welfare. No one any longer doubts the truth of Juvenal's fine old phrase: *mens sana in corpore sano.*

We are realizing to-day that the sanitary condition of our schools is a very vital matter. We know that there is an intimate relation between the child's physical condition and his school efficiency. Failure in studies, general apathy and dullness, nervousness and even viciousness, are often traceable to minor bodily defects that are largely remedial. It is a well known fact that the children often suffer from minor defects, but how serious these may be can only be determined by a qualified nurse or physician. Recently an examination of some 135,000 pupils in the New York schools showed that about 69 per cent. were physically defective. Of course, in this instance slum conditions figure largely, but even allowing for this it must be confessed that such a state of affairs is not very bright for the nation of the future. What are the conditions in Canada?

Whilst the newer schools, especially those of the cities and the recent consolidated schools, are well equipped to meet the needs of physical training and sanitary environment, it must be said that in many rural schools, village schools and even town schools throughout our land, very undesirable conditions exist. We cannot blame the higher authorities for it all. The Department of Education provides plans, specifications, inspections and grants, but the requirements are sometimes evaded or carelessly carried out or only the minimum is provided, and the recommendations of the inspectors are not taken seriously enough. Trustees often postpone much needed changes, do little more than the minimum requirements and keep just within the inspector's report.

Progress in school sanitation is no faster than that of society in general and the average school is much behind the average home in comfort and convenience. Even in towns, where one would naturally expect that these matters would be attended to, the heating, lighting and sanitation generally are often such as no businessman would tolerate in his office or in his own home. The perfect school building has not yet come, and many boards to-day have on their hands old school plants which they have inherited. Whilst a business firm would not hesitate to pull down a building which they considered not adequate to their needs, a school board doing a similar thing with an old school-house would likely get into all kinds of trouble. The public need educating along this line. But when a new building is to be erected, no intelligent official dare ignore the truth and light of sanitary science.

It should be needless to argue for better health conditions in our schools. Good health and long life are desired by all, and every father and mother wishes to see the children grow up strong and healthy, as well as receive that mental training so necessary to young people going out into life for themselves. A perfect physical condition is just as desirable for the boy or girl on the farm as for those in the towns. What is needed, however, is to point out where we have been lax, to do this emphatically enough that the public will demand improvement, and then see that proper sanitary arrangements are secured and, what is very important, to have them properly and regularly maintained. The physical welfare of the individual has a

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December 5th to 11th, 1919

Write to the Secretary for Prize Lists, entry forms and any information you desire. Entries close November 17th.

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Raymondale Holstein-Friesians

A herd sire of our breeding will improve your herd. We have sons of our present sire, Pontiac Korndyke of Het Loo (sire of \$12,750 Het Loo Pieterje), and also sons of our former sire, Avondale Pontiac Echo. Several of these are of serviceable age, and all are from good record dams. Quality considered, our prices are lower than anywhere else on the continent. These youngsters should not remain long. Write to-day.

RAYMONDALE FARM
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We have yearling grandson of King Segis Alcartra Spofford—a splendid individual. Also fine bulls of younger age, prices reasonable Apply to Superintendent.

Manor Farm Holstein-Friesians

If it's a herd sire you want, write me. I have sons of both my senior and junior sires, King Segis Pontiac Posch and King Korndyke Sadie Keyes. All from good record dams. Choice bull calves at present to offer—average for two nearest dams, up to 34.7 lbs. butter to seven days. Correspondence solicited. Visitors welcome.

GORDON S. GOODERHAM, Clarkston, Ont.

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CLOVERLEA FARM HOLSTEIN FRIESIANS

Our present offering consists of two choice young bulls ready for service. Priced right for quick sale. Write **GRIESBACH BROS., Collingwood, Ont. R.R. No. 1**

Cedar Dale Farm—The Home of Lakeview Johanna Lestrang, the \$15,000 sire—chief sire in service. He is a son of the 33.06-lb. cow, Lakeview Lestrang, and is our by him, at right prices. We are offering a few females bred to him, and also have a few bull calves sired by King Segis Walker. Other older bulls, sired by our former herd sire, Prince Segis Walker, son of King Segis Walker. A. J. TAMBLYN, Cedar Dale Holsteins (C. N. R. station one mile) Orono, Ontario.

Silver Stream Holsteins—Special offering—Four choice bulls fit for service, sired by King Lyons Colantha, the records of his six nearest dams average 30.10 lbs. butter in 7 days, and from R.O.P. tested dams. Individually as good as their breeding. Write at once for particulars and price. or better come and see them.

JACOB MOGK & SON, R.R. 1, Tavistock, Ont.

Holstein Bulls—A few ready for service, one from a 32.7-lb. dam. He has a 33.94-lb. maternal sister. Baby bulls by "Ormsby Jane Burke", and "Ormsby Jane Hengerveld King", grandsons of the 46-lb cow, "Ormsby Jane Segis Aaggie," the only twice 40-lb. cow of the breed. Also females.

R. M. HOLTBY, R.R. 4, Port Perry, Ont.

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I am offering a choice lot of bull calves sired by May Echo Champion who is a full brother of world's champion May Echo Sylvia; also a few cows just fresh.

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We have several 10 months old, from dams with official records up to 100 lbs. of milk per day and 32.32 lbs. of butter in 7 days. These are well marked and straight individuals. Inspection invited.

J. W. Richardson, Caledonia, Ontario

9 HOLSTEIN BULLS

Any age up to 14 months. From high record and untested dams. Sired by May Echo Prince and Gipsy Pontiac Cornucopia; both 30 lb. bulls. Price right.

JOS. PEEL, Port Perry, Ontario.

For Quick Sale—One Bull Eight Months Old—His dam gave 16,388 lbs. milk, and his sister 20,400 lbs. milk. He is a son of Judge Hengerveld De Kol 8th, who is a 32.92-lb. grandson of De Kol 2nd Butter Boy. Write at once for price, or better, come and see him. Take Kingston Rd. cars from Toronto. Stop 37.

ARCHIE MUIR, Scarborough P.O., Ont.

PIONEER FARM HOLSTEINS

My present sales' list includes only bull calves born after Jan. 1st, 1919. These are priced right.

WALBURN RIVERS & SONS R.R. No. 2, Ingersoll, Ontario

INDIVIDUAL PEDIGREES SALE CATALOGUES SALE MANAGEMENT
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LAKESIDE AYRSHIRES

Our bulls took the Senior Championship, Junior Championship and Grand Championship in Sherbrooke, and first in their respective classes at Quebec, in addition to taking the special prize for the best bull on the grounds any breed. We have others like them. Write for catalogue.

Geo. H. Montgomery Dominion Express Building, Montreal
 D. McArthur, Manager Phillipsburg, Quebec

WESTSIDE AYRSHIRE HERD

I have two extra choice March bull calves from heavy-milking, high-testing dams, one dark and one white in color. Also a few good females, one just due to freshen. Write, or come and see.

Middlesex Co. DAVID A. ASHWORTH, Denfield, Ontario

social and economic value because the nation is strong only so far as its units are strong.

Among the recent advances in the study of school hygiene are improvements in the arrangements for ventilation; research in regard to heating and lighting; physical training considered and dealt with as athletics, drills, marches, plays and games; better medical inspection on the part of the teachers themselves and by the district nurses selected specially to do this; and lastly, health teaching in the schools, indirect rather than didactic.

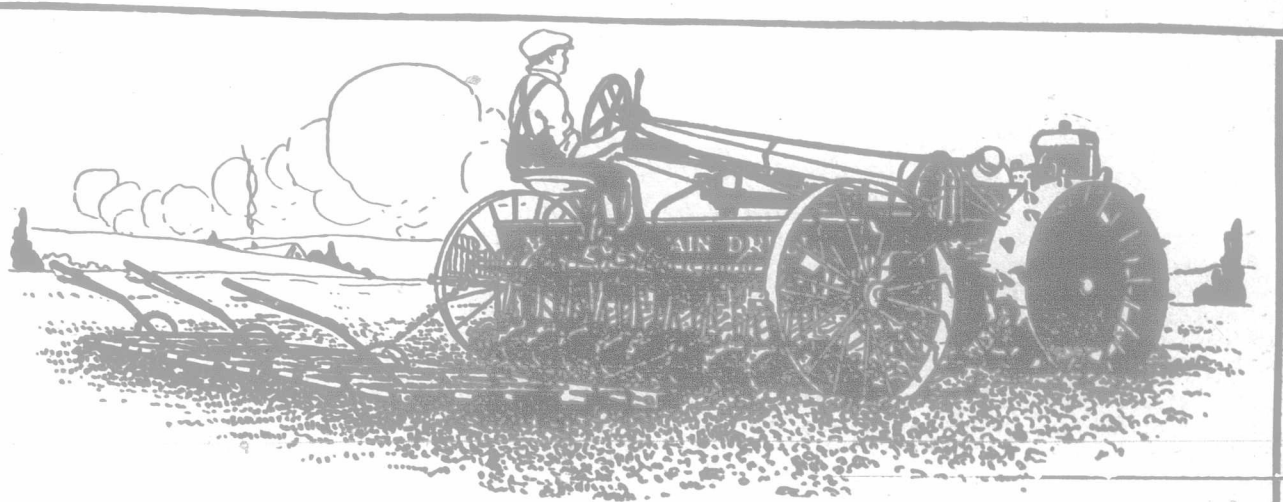
A notable feature of recent progress is the united effort in many parts by medical authorities, school officials, nurses and such organizations as the Grain Growers' and Home Economic Societies. This speaks of a very wide interest in the subject. In the early days of Canada there was not felt the need of much care. Virile settlers came in and the vim and enthusiasm consequent upon the new venture in the new land carried us through many dangers, but that time is past and there is now no doubt but that much needs to be done in the west along the line of school hygiene.

As the years go by and settlement becomes permanent, and various peoples pass to and fro, the need will become greater. To speak of one need only; it is a long time since general vaccination has been insisted upon. True, it is to an extent done in a prefatory way, but in such a manner that if we did happen to have an outbreak of smallpox serious results would occur. We have a very large percentage indeed of boys and girls growing up who have never been vaccinated. If it is true what medical authorities tell us, that vaccination is a valuable safeguard, then either school authorities, medical officials, or the people are failing in a manifest duty and are endangering the health of a great part of our people. The situation calls for action before we are forced by a threatened outbreak into feverish haste, as we were some fifteen or eighteen years ago.

It would be wise to have a thorough survey made of the health of the boys and girls in all our rural and village schools. The reports of surveys that have already been made show much disease and malformations existing, which could to a large extent be prevented, and a mortality that should be lowered. I have asked several physicians with extensive country practices, and many give, as their opinion, that rural children, as a rule are underfed and poorly cared for, and that the cold lunch and other conditions at school tend to undermine their health. Whilst some doctors were not ready to give a decided opinion, I gathered as a general conclusion that the average town child was superior in general health, energy and physique. It must be confessed, however, that the data was far from being complete. And so in regard to the feeble-minded and the presence of malformations. No provision is made at all for atypical children by way of examination or special treatment. No doubt in our new land things are better than in the older countries, and yet, when a careful survey is made, often strange things are revealed.

The doctors in the New Hampshire Children's Commission (of 1914) discovered "that the range of feeble-mindedness gradually ascends from the smallest percentage in the most populous county of the state, to the largest percentage in the more remote and thinly populated centres." The question is not whether Canadians are healthier than our cousins or not. The important fact is that wherever careful examination has been made defects are found to exist in rather alarming percentage, and if conditions are not soon altered our Anglo-Saxon physique will degenerate. It might be a good experiment to take some typical district and have a regular medical survey made; it would be productive of good. In the most ordinary business establishments it is found needful to take regular inventories and find how the concern stands; why not do this in the greatest of all our resources—the health and well-being of our boys and girls?

School-house sanitation has made good progress during the last ten years owing to the rigorous care of the Department of Education, but the matter of medical inspection of rural school children is



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Have one this fall. Put it to work and plan for bigger crops next year.

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The Largest Jersey Herd in the British Empire

At Toronto Exhibition, 1919, we won twenty-five out of twenty-seven first prizes. We now have for sale first-prize young bulls from R. O. P. dams, as well as females of all ages.

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The CANADA'S MOST BEAUTIFUL JERSEY HERD
Woodview Farm Herd headed by Imported Champion Rower, winner of first prize with five of his daughters on the Island of Jersey, 1914, second in 1916, and again first in 1917. We are now offering for sale some very choice bull calves, ready for service, sired by imported bulls and from Record of Performance imported prize-winning cows. Also some cows and heifers. Prices right. We work our show cows and show our work cows.

Edgeley Bright Prince—a son of Sunbeam of Edgeley, R.O.P. champion, sired by a son of Viola's Bright Prince, is for sale. He is 3 years old, sure and active. Won third prize in aged class at Toronto and London, 1919. Write for price.
JAMES BAGG & SONS (Woodbridge C.P.R., Concord G.T.R.) EDGELEY, ONT.

DON HERD OF PRODUCING JERSEYS
We have three young bulls of serviceable age—good individuals and priced right. Could also spare a few choice bred heifers. Visitors welcome.
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Twenty-five Years Breeding Registered Jerseys and Berkshires

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

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By an expert wrestler. Learn at home by mail. Wonderful lessons prepared by world's champion Farmer Burns and Frank Gotch. Free book tells you how. Secret holds, blocks and holds revealed. Don't dial. Be strong, healthy. Handle big men with ease. Write for free book. State age.
Farmer Burns, 621 - Riverside Bldg., Omaha, Neb.

OXFORDS Summerhill Flock

If you want breeding stock, buy now. First class Rams and Ewes different ages. Special offering in Stock Rams. Leading flock for past 35 years, winning almost all the prizes and championships at Calgary, Edmonton, Saskatoon, Brandon, Regina, Toronto and London 1919.

Write us for prices
Peter Arkell & Sons, R.R. 1, Teeswater, Ont.

Shropshires

One hundred shearling imported ewes, twenty imported rams, one and two years old, and ram lambs my own breeding; also

Cotswold

ewes one and two years old, Canadian-bred.

W. A. DRYDEN
Brooklin - Ontario

Dorsets and Oxfords

I have at present a choice offering in shearling and ram lambs (both breeds). We were unable to show this year, but these rams are the choicest lot we ever bred. Also have four two-year-old stock rams, as well as a limited number of shearling and two-shear Dorset ewes. Prices right.

S. J. Robertson (C.P.R.) Hornby, Ont.

SHROPSHIRE

Fifty Shearling Ewes
Fifteen Shearling Rams
Twenty-five Ewe Lambs
Twenty-five ram Lambs
Twenty Ewes of different ages
WM. D. BURTCH, BRANTFORD R.R. No. 2
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Shropshires and Clydesdales For Sale

Ram Lambs for sale—A first class lot of rams, good growthy fellows, good size and well covered with fine wool; also one 3-year-old ram, a sure stock ram, and two Clydesdale Stallions, one imported and one Canadian, bred right, every way inspected and passed; also several Clydesdale geldings and mates.

W. F. Somerset, Port Sydney, Ont.
Long Distance Phone.

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The hardest and best grazing mutton and wool sheep of Great Britain. Successfully acclimated wherever grazing sheep are required. Descriptive pamphlet, list of breeders, and all information from

A. J. BURROWS, Ashford, Kent
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SHROPSHIRE

Shearling and ram lambs by imported ram Also a few ewes, all stock my own breeding.
E.E. LUTON St. Thomas, Ont. R.R. No. 1.
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LEICESTERS

Of good size and quality.
C. E. WOOD, Freeman P.O., Ontario

Shropshire and Cotswold Sheep—A fine lot of yearling rams and ram lambs, large and good quality, imported and home-bred; also ewes, all ages. Prices very reasonable.
JOHN MILLER, Claremont, Ont.

Shropshire Flock Headers

for sale Reasonable prices.
J. & D. McPHERSON,
R. R. 2, Glanworth, Ont.

Shropshires—A choice lot of ram lambs, well covered, true to type; sired by imported ram of Kellock breeding. A few yearling rams and ewes. Prices reasonable.
ALEX. GRAY, Claremont, Ont.

SHROPSHIRE

11 ram lambs, 1 yearling ram, 1 three-year-old ram (extra). Also a few ewe lambs. All registered.
A. S. A. Mason,
D. HYNEMAN, Port Stanley, Ont. Bell Phone

MILLBANK OXFORDS

Pedigreed Oxford Downs, Shearling rams and lambs of both sexes, for sale. Tried from E. Barbour & Sons, Blenheim flock. Prices reasonable. Write or phone. Frank Weekes, Varna, P. O. Ont. Brucefield Station.

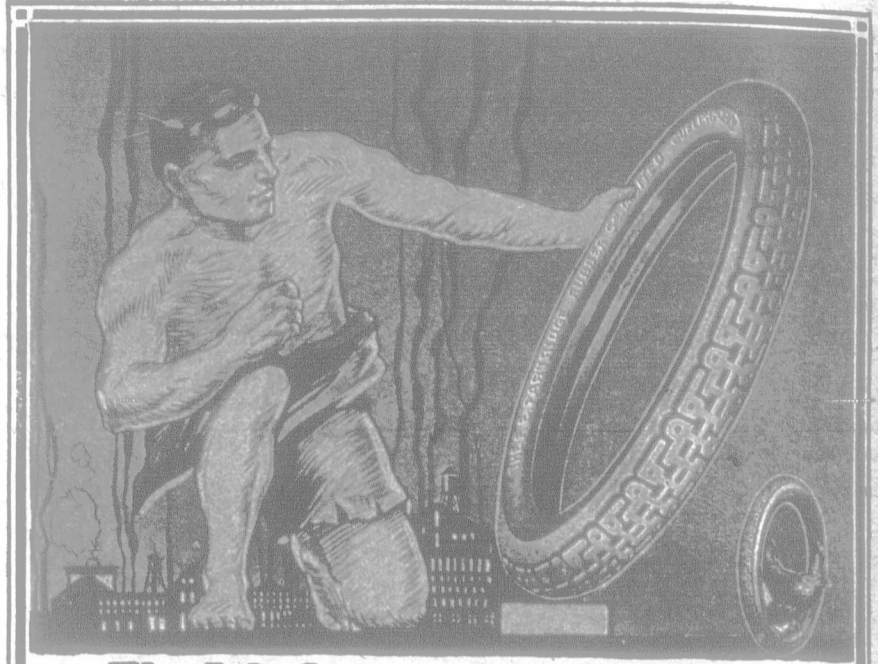
only nicely beginning. Only in the large cities and older municipalities is it being done thoroughly, and in these it is not needed so much as in our rural communities, because greater care is observed in these homes, diseases are treated on their first appearance and medical aid and advice is more convenient and less costly. There is need of stricter legislative requirements covering health supervision, based on the observations of medical science. This might be along these lines: (1) Compulsory health inspection at regular times of all rural schools; (2) Co-operation of school officials and medical authorities to secure general and regular vaccination; (3) Physicians to inspect for contagious diseases, defects of a more serious nature and malformations, which might send a boy or girl into life as a misfit and a dependent; (4) Regular tests for sight and hearing, which in a measure might be conducted by the teachers; (5) Examination of buildings, premises and drinking water with health only in view; (6) Teachers in training to have these matters explained to them by doctors lecturing at the normal schools.

Popular discussions of health topics in the public press, by qualified physicians is very valuable indeed. These articles are more widely read than people sometimes suppose. Some time ago in one of our western towns the health officer contributed to the local paper a number of articles on the matter of health, and they were very closely read and I believe had beneficial results. People after all are really concerned with the matter of health, and quite often unhealthy conditions arise through ignorance.

Then, actual examples of typical up-to-date schools should be placed where people might see them; say at the exhibition. At the Panama Pacific exposition, two models of school-houses were shown; one was marked "A.D. 1914" and showed a sanitary country school, the other was marked "A.D. 1890" and proved to be the unsanitary kind still too common, having little or no regard to lighting or other environment, no provision for physical exercise or pure water, or for a proper lunch. The former building had proper lighting, ventilation and seating arrangements, a good privy, good water, well-drained and convenient grounds, provisions for a hot lunch and many other devices for health and convenience. This part of the exhibition proved to be very attractive indeed.

This problem of health in the rural school has only been recently discovered. A decade or so ago it was unknown. We took it for granted that on the farm and in the country schools nothing but health could prevail. But opinion in recent years has been changing. Research in other countries and the extreme care observed in the older lands, leads us to hesitate in accepting the trite statement that all rural schools were healthy and the pupils comparatively immune from the ills discovered in city schools.

The rural pupil is the main factor in our public life. The city imports its best men and women from these districts, and as this continues it cannot but lower the standard of life in the country. The vigor of our nation depend in the long run upon the farm and the rural school. Here is where our greatest care should be exercised and where our largest grants from the treasury should go. The cities and towns will see that as the time goes by, yet larger grants be made to rural schools and for agricultural instruction. There has for many years been much drifting so far as public policy is concerned, but of late years a change has taken place. Our greatest asset in this country is not our wheat fields and other physical resources, valuable as they may be; it is our boys and girls, particularly those in our rural communities. If we neglect this, nothing but national disaster to us would result. It is useless for us to lay all the blame at the door of the farmers. Their hands, in a way have been bound, but as a people united in the interests of a great movement we must face these questions. The farmer must become seized with the supreme importance of his schools. Systematic examination of physical conditions must be done to discover defects before they seriously impair life in general. Communities must not be satisfied with the minimum requirements for school purposes, but these plants must be so safe and so at-



The Workman's Masterpiece

Partridge Tires

Made By Hand

By The F.E. Partridge Rubber Company Limited, Guelph, Ont.

100 OXFORDS RAMS AND EWES

IN GREAT UNRESERVED AUCTION

Fergus, Ontario, Wednesday, October 22nd
(1 o'clock p.m., old time)

20 Shearling Ewes	40 Ram Lambs
11 Shearling Ewes	20 Ewe Lambs
7 Two-shear Ewes	2 Two-shear Ewes

Fifty per cent. of the lambs are sired by the imported Hobbs-bred ram, Kelems Scotonia (452) of 17. This offering is a choice one throughout, and includes many 1919 prize winners at local shows.

TERMS.—Cash, or 6 months' credit will be given on bankable paper bearing interest at rate of 7% per annum.
Sale held in village, 300 yards from C.P.R. and G.T.R. stations.

WRITE FOR CATALOGUE

ADAM A. ARMSTRONG - Fergus, Ontario
Auctioneers: WOOD & HEFFERNAN

CNOCFIERNA SHROPSHIRE

8 yearling rams, 12 ram lambs for sale now.

W. H. BARRETT & SONS, Port Dover, Ont.

Oxford Down Sheep—Present offering: This year's crop of ram and ewe lambs; also a few yearlings and two young Shorthorn bulls. Prices reasonable.
JAS. L. TOLTON, Walkerton, R. 3, Ontario

Registered Dorset Rams for Sale—One good

shearling and a few good ram lambs; also a registered Shorthorn bull four years old.

Fred. Ferris & Sons, Aylmer, Que.

Oxford Downs—A choice lot of shearlings and ram lambs for sale. Established 18 years. Prices reasonable.
CLARENCE D. COLE
R.R. 1, Codrington, Ont.

Shropshires and Southdowns YEARLING EWES AND RAMS

We are offering Ewes and Rams of both breeds fitted for show purposes or in field condition. All are selected individuals, true to type and sired by our Show and Imported Rams.

LARKIN FARMS, QUEENSTON, ONTARIO.

Registered OXFORD DOWNS, EWES and RAMS, for sale.

Inspection invited
George McDonald, R.R. No. 3, St. Marys, Ont.

Shorthorns and Oxfords for Sale—Two choice roan grandsons of Right Sort; also ewes and lambs, either sex.

GEO. D. FLETCHER, R.R. No. 1, Erin, Ont.

OXFORD DOWN SHEEP

America's Pioneer Flock
Present offering is between ninety and a hundred shearling and two shear rams. Flock headers a specialty. Also a number of shearling and two shear ewes of the best breeding, and ram and ewe lambs. All registered. Prices reasonable. HENRY ARKELL & SON, 70 Beatty Ave., Toronto Can.

Bowhill Leicesters—A few two-shear rams in show condition, and several shearlings and lambs, both rams and ewes. Also Shorthorn bulls and heifers.
GEO. B. ARMSTRONG, Teeswater, Ont.

FOR SALE

Shropshire ewe lambs and young ewes, two Clydesdale stallions, four Shorthorn bulls.
W. H. PUGH, Myrtle Station, Ontario

When writing advertisers will you be kind enough to mention The Farmer's Advocate

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Some defective are: (1) the requ Educatio tors; (2) social an arrang ing scho Lack of (5) Gros citizens—which co resources

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tractive, so well equipped and conducted, they will minister with some abundance to the physical, social, mental and moral well being of those who provide them, own them and use them.

Some of the reasons for many of the defective conditions found in our schools are: (1) Half-hearted compliance with the requirements of the Department of Education and the reports of the inspectors; (2) Ignorance regarding the physical, social and mental effects of unsanitary arrangements; (3) False economy in erecting schools and making alterations; (4) Lack of regular medical supervision; and (5) Gross carelessness on our part as citizens—a carelessness similar to that which cost us so much of our natural resources in, say, forest areas.

We might proceed to suggest remedies, but our space will permit us only to point out the lines along which action could profitably be taken: (1) A vigorous campaign of public education regarding conditions which are desirable and possible in rural schools. We have seed trains and experimental farms, why not demonstrate model rural schools? We educate the farmer along the line of grain growing and stock raising, why not show him ideal schools? Boys and girls are surely as precious as wheat and beeves! (2) Competition in neatness, etc., among schools to promote progress and initiate change. In this matter home economic societies and rural organizations can do much and are doing much. During the past few years the progress has been remarkable in many localities. (3) An extension of the work of the boards of health and other organizations having to do with rural conditions, such work to be in co-operation with local authorities. That a determined effort will be rewarded with success is assured us when we consider the results obtained from the campaign for physical drill introduced several years ago. In this case the teachers and pupils heartily took the matter up and even now we can see a change in the carriage of our senior pupils.

As a final word, let it be observed that we are on the eve of great things in the educational world. Whilst we are busy with questions of studies, with programs suited to the needs of the people, let us not forget that the physical welfare of our children is a basic requirement without which all our other efforts would be rendered abortive.—E. K. MARSHALL.

Shorthorns and Yorkshires at Elmgrove.

In the advertising columns of this issue Jas. R. Fallis of Elmgrove Farm, Brampton, Ontario, announces that he will not hold his annual fall sale of Shorthorns owing to pressure of other business, but states that he never had a more select lot of females on the farm. The families represented include many of the more popular present-day strains such as Secret's, Nonpareils, Broadhook's, Kilblean Beauty's, etc. He mentions a half dozen young cows and about double this number of young heifers, all of which are well forward in calf to the service of the good breeding, young herd sire, Last Command. This bull is a choice, thick fellow sired by the noted show bull, Bandsman Commander, and his second dam was Meadow Beauty 3rd imported. The only young bull on the farm at present is a four-months youngster from the imported Broadhook's cow, Broadhook's Lass, and sired by Broadhook's Stanford. The dam of this calf is one of the most outstanding matrons in the herd, and the sire, Broadhook's Stanford, was the former herd sire in service at Elmgrove. The calf has all the ear-marks of a promising herd sire. In Yorkshires the offering includes several bred-sows, one or two choice young boars and a number of young litters that will be ready to leave the sow by Oct. 15.

Attention is again drawn to Robert Mitchell's sale of Shorthorns at Ilderton, on October 22. Twenty-two head, comprising sixteen females and six young bulls, will be disposed of. The progeny of Blarney Stone, Strathallan Chief and Roan Blarney are in the sale. The bulls range in age from three to nineteen months. For fuller particulars write Robert Mitchell, R. 2, Ilderton. The trains will be met at Komoka and Ilderton stations on the morning of the sale.

TRAPPERS AND HUNTERS For highest prices ship your RAW FURS direct to

John Hallam Limited 306 Hallam Building, TORONTO. THE LARGEST IN OUR LINE IN CANADA

We will send you a FREE SAMPLE of Hallam's Paste Animal Bait

This is an entirely new and much improved form of Animal bait—it is made in a paste form and put up in tubes (like tooth paste).

While possessing all the excellent qualities of the liquid bait it lasts longer and is unexcelled for attracting all flesh eating animals, such as Mink, Fox, Wolf, Lynx, Skunk, etc.

It is easy to carry, economical and handy to use, (simply squeeze out enough for your set each time)—not affected by snow or rain.

You can have a FREE sample for the asking (enough for 2 or 3 sets).

We will also send you Hallam's Trappers and Sportsmen's Supply Catalogue, 48 pages, (in English and French) showing traps of all kinds, guns, rifles, ammunition, fish nets, shoe-packs etc., at very moderate prices.

Hallam's Raw Fur News contains latest information on Raw Fur prices and market conditions, sent free on request.

WRITE TO-DAY SURE Address in full as below



Hallam's Fur Fashion Book 1920 Edition illustrating 300 beautiful fur garments in latest styles, free on request.

Only Healthy Hogs are a Source of Profit

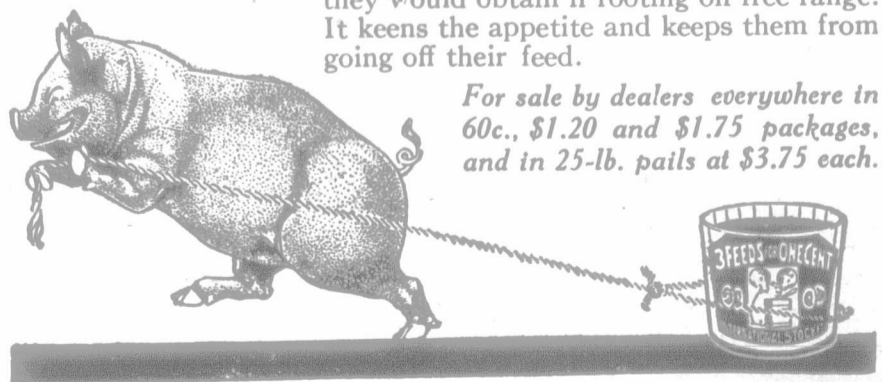
In order to get the best results from hogs by forced feeding, a reliable stock food tonic must be used—otherwise this style of feeding places an unnatural strain on the digestive organs, and they become overworked, and consequently cannot perform their functions properly.

INTERNATIONAL STOCK FOOD TONIC

has proved itself to be the ideal Stock Food for keeping hogs healthy, thrifty and in rapid growing condition.

For the past thirty years it has held the confidence and endorsement of hog raisers by producing the most satisfactory results.

International Stock Food Tonic supplies to the hogs the valuable properties of roots, herbs, seeds and other things which they would obtain if rooting on free range. It keeps the appetite and keeps them from going off their feed.



For sale by dealers everywhere in 60c., \$1.20 and \$1.75 packages, and in 25-lb. pails at \$3.75 each.

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

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

YORKSHIRES

We are now booking orders for Fall pigs, both sexes. Several large litters to choose from. WELDWOOD FARM, Farmer's Advocate London, Ont.

Pine Grove Stock Farm

The Home of the Berkshires Offers for sale boars fit for service, sows bred and ready to breed, younger ones coming on. The Crompton and Wandsworth strains, the best strains of the breed. W. W. Brownridge, Georgetown, No. 3, Ont. Milton C. P. R. Georgetown G. T. R. Milton Phone

INVERUGIE TAMWORTHS

Boars ready for service; young sows bred for fall farrow; extra fine lot of little stuff just ready to wean. Leslie Hadden, Pefferlaw, Ont. R. R. No. 2 Meadow Brook Yorkshires—We have a choice offering of sows bred and boars fit for service. Also a number of large litters ready to wean. All show the best of breeding and excellent type. G. W. MINERS, R.R. No. 3, Exeter, Ont.

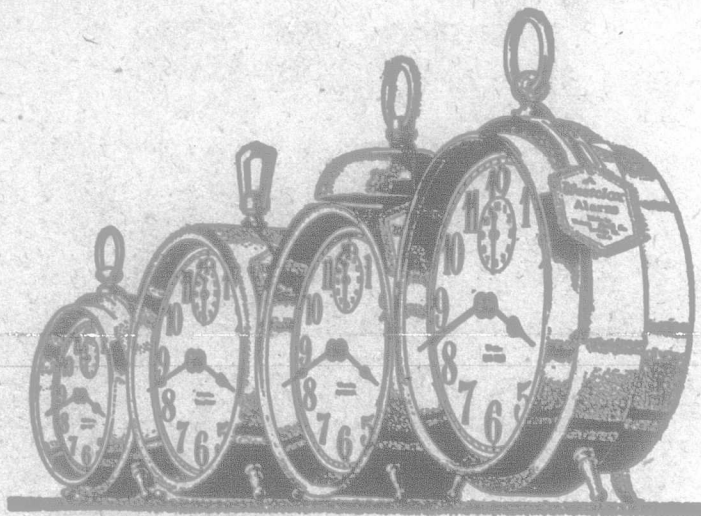
Big Type Chester Whites—Five importations in 1918 and 1919. We won all championships, and 1st in every class we had an entry, Toronto and London, 1919. Our champion boar weighs 1,005 lbs., and champion sow 815 lbs. April boars and weaning pigs for sale. JOHN ANNESSER, Tilbury, Ont.

Have three pure-bred York Boars for Sale, three months old; dam bred by Duck, Port Credit; sire bred by Brethour, Burford. E. J. BRADY, Glanworth P.O.

Elm Brook Yorkshires—Boars ready for service, and younger sows, all ages; a few suckers, both sex. All good type and very best of breeding. T. L. SPARLING, R.R. 1, Wanstead, Ont.

Berkshires Some very fine pigs just weaned and some spring sows that are sure money makers. Can breed to a Tamworth if you write at once. ALVIN ANDERSON, Hawkstone, Ont.

Lakeview Yorkshires If you want a brood sow or a stock boar of the greatest strain of the breed (Cinderella), bred from prize-winners for generations back, write me. JOHN DUCK - PORT CREDIT, ONT.



Westclox

WESTCLOX is a short way of saying Western clocks. It means a line of good alarm clocks made by the Western Clock Company. Every clock in the Westclox family is manufactured by the patented process that made Big Ben famous. Whether you select Big Ben, Sleep-Meter, America, or Baby Ben you *know* you're getting a good clock because each one is a Westclox.

To make it easy for you to recognize our clocks, we print the family-name, *Westclox*, on the dial right above the name of the clock. We also attach an orange colored, six-sided Westclox tag. These are marks of good time-keeping. Look for them on the alarm you buy.

Western Clock Co.—makers of Westclox
Offices at La Salle—Factories at Peru, Ill., U.S.A.

Our School Department.

A Dairy Cow.

In last week's issue we suggested that you study twelve points of the dairy cow and make certain observations. In this article we shall describe the dairy cow and make other suggestions that should lead up to some interesting work in your school section.

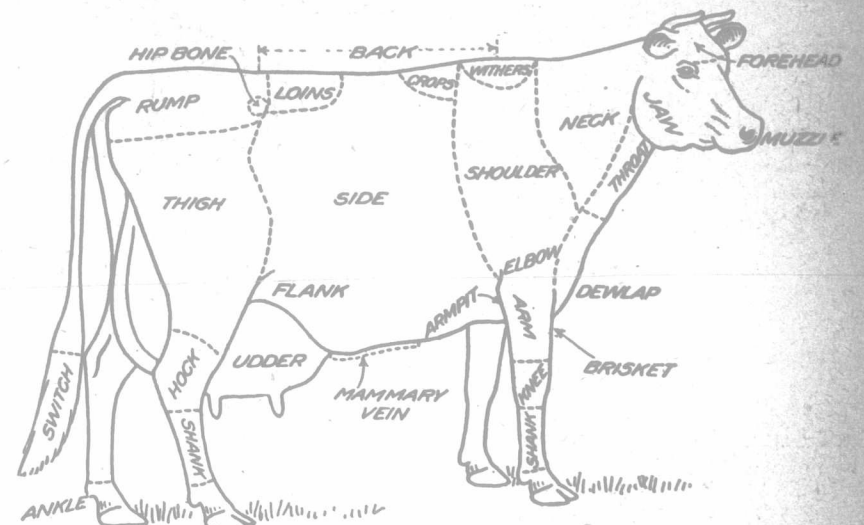
It is unnecessary to mention breed points. A good dairy cow conforms to a certain type, regardless of breed, and there are good Holsteins, Ayrshires, Jerseys and Guernseys—as well as some poor ones.

With the accompanying illustration of a dairy cow before you, note the following points in regard to conformation and see how they correspond with the conclusions you arrived at last week. The head of the dairy cow should be lean, broad of muzzle, and large of nostril. She should have prominent, clear, calm eyes, wide apart, beneath a broad, full forehead. The neck tends to be long and muscular. In males, the neck is strong and heavily muscled, but that of the cow should be long and thin. The shoulders should incline to a good angle well into the back, lying fairly close together at the top, making what are known as sharp withers. This is one place where the dairy cow differs from the beef animal. The withers and back of a Shorthorn, Hereford or Angus should be flat, broad and well covered with flesh. The vital organs of the cow lie just behind the shoulder and a good development here indicates a strong constitution. Therefore, the chest development should be ample. The ribs should be sufficiently long and arched to provide a capacious body. Flat, short ribs go with poor

to find out how many pure-bred dairy cattle there are in it, and the breeds they represent? The section could be divided with side-roads and concessions allotted to certain pupils, or groups of scholars. This work could be extended to include all breeds of live stock and the entire survey would be an asset to the school and the community. Some sections will far outclass others in regard to the numbers of pure-bred live stock reared, and the figures are a pretty good index to the progressiveness of the community.

Prize Speech at Kemptville School Fair.

We are here reproducing the first prize speech delivered at the Kemptville School Fair by Melvin Halpenny. Not only does it suggest other suitable topics for similar occasions, but it makes an interesting lesson for horticulture. The McIntosh is one of our most delicious apples and its history is herein related: "I have chosen for my subject to-day, 'the McIntosh Red Apple.' In the latter part of the 18th century the late Mr. Allan McIntosh moved to Matilda township, in the county of Dundas, Eastern Ontario. That part of the province being but newly settled, he with other new comers erected a small log house in which he and his family lived for some years. In the spring of 1796 Mr. and Mrs. McIntosh went back into a nearby woods to secure a few trees to plant about their home. Among the trees which they secured was a small apple tree. When this tree bore its first fruit the apples were of a beautiful red color, and of a lovely flavor. Mr.



The Important Points of a Dairy Cow.

feeders and bad doers. The ribs of a dairy cow should lie well apart so one can put two or three fingers between them, depending on the size of the hand. The whole middle of a good dairy cow should be large and very roomy, indicating that the cow can consume a great deal of roughage and convert it into milk. The udder is a very important part. This should extend well forward on the belly and well up behind, and should be level on the bottom. Leading forward from the udder there is to be found what is commonly called the milk vein, and which is called the mammary vein in the accompanying illustration. This supplies the udder with blood and at its foremost end it enters the body through what is often called a milk well. When this vein is large and tortuous, or winding, it is taken as an indication of good milking qualities in the cow. The size of the well through which the vein enters the body is another mark of production. The rump of a dairy cow is long and the thighs are long and well-muscled, but not fleshy.

The dairy cow may be said to be wedge-shaped in three particulars. Compare the depth from the top of the hip bone down to the bottom of the udder with the depth from the withers to the bottom of the chest. Thus it will be seen that a dairy cow tapers somewhat towards the front. The cow is also wider behind than in front and thicker through below than on top of the back.

Would it not be interesting to make a survey of the school section in order

McIntosh, realizing what the fruit was like, at once started to cultivate it. Then he took the buds and small sprouts from the tree and grafted them on to other trees. In this manner the number of 'McIntosh Red Apple' trees were soon increased. He afterwards started a nursery, securing small roots from other seedling apple trees grown by other dealers, then grafted his own sprouts on to these roots. Owing to the superior quality of the McIntosh Red apples the demand for these trees soon exceeded the supply. Mr. Harry McIntosh, the great-grandson of the late Allan McIntosh, is the present owner of the McIntosh nursery and has several thousand trees bearing fruit from year to year. In the fruit markets to-day, in Montreal, Toronto, Ottawa and other cities, these apples bring from \$1.50 to \$2 per barrel more, wholesale, than any other apples in the market. Some years ago some American nurserymen tried to claim the honor of being the first producers of this famous apple, and published long articles in their papers trying to establish their claim. The people living in Dundas county, to offset this claim, erected a monument by public subscription near the present home of Mr. McIntosh, upon which is a copper plate stating that about 120 rods north of where the monument stands, there still stands the stump of the first McIntosh Red Apple tree, planted by Allan McIntosh in 1796. This stump was only blown down by a storm last summer. Here is a small branch off the original tree which I hold as a souvenir."

In sealed airtight packages.

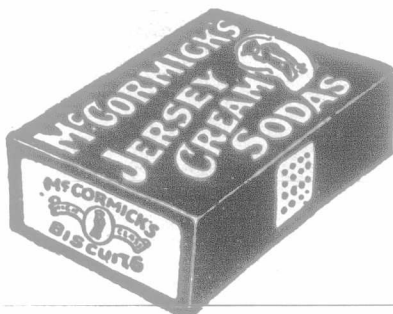
McCormick's Jersey Cream Sodas

Sold fresh everywhere

Factory at LONDON, Canada

Branches at

Montreal, Ottawa,
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John, N.B.



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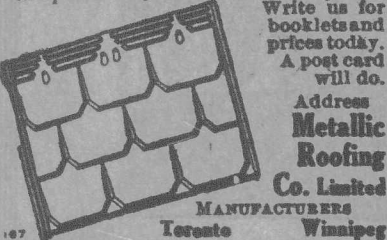
Build to last



BEFORE you build or repair your barn or house, let us show you how much money we can save you. Here are the "Metallic" fireproof, stormproof and timeproof specialties.

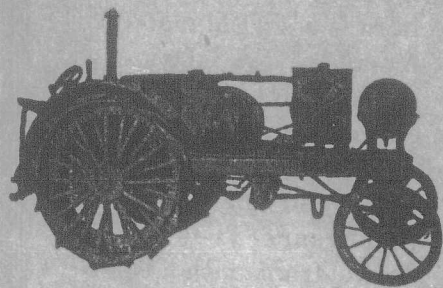
- "Eastlake" Galvanized Shingles.
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- "Metallic" Ceiling and Wall Plates, (for inside use.)
- "Metallic" Brick and Rock Face and Clapboard Siding.
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We guarantee the best for your money. Our goods have been tried and proven superior for over 30 years.

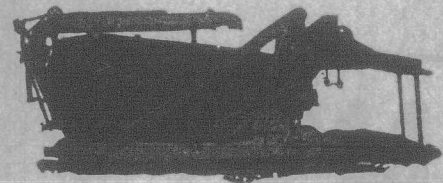


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WATERLOO BOY
The Simplest, most Accessible, most Powerful 3-plow Tractor on the market. Suitable for hauling 3 plows, Threshing, Silo Filling and General Farm Work.



Individual Farmers' Threshers, suitable size to be driven by small Tractors and Gasoline Engines. Do your own threshing. Keep your farm clean and save expense. Write for free catalogue, prices and any information wanted.

THE ROBT. BELL ENGINE & THRESHER COMPANY, LIMITED. Seaforth, Ontario. Also Steam Tractors, and large size Threshers

GRAND TRUNK RAILWAY SYSTEM

The Double Track Route
BETWEEN MONTREAL, TORONTO, DETROIT AND CHICAGO

Unexcelled dining car service
Sleeping Cars on Night Trains and Parlor Cars on principal Day Trains.
Full information from any Grand Trunk Ticket Agents or C. E. Horning, District Passenger Agent, Toronto.

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

Stanfield's "Red Label" Underwear

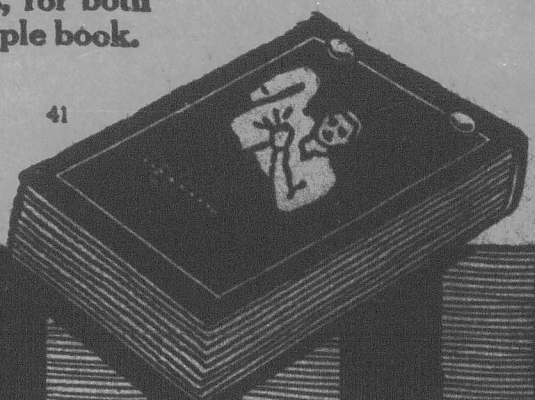
To men who work outdoors in Canada, the question of winter underwear is one of great importance. The answer lies in

Stanfield's "Red Label" Underwear

which is made of the best grade wool obtainable. It fits perfectly, giving comfort, freedom, and warmth, and is the best underwear for outdoor work. All good dealers sell it.

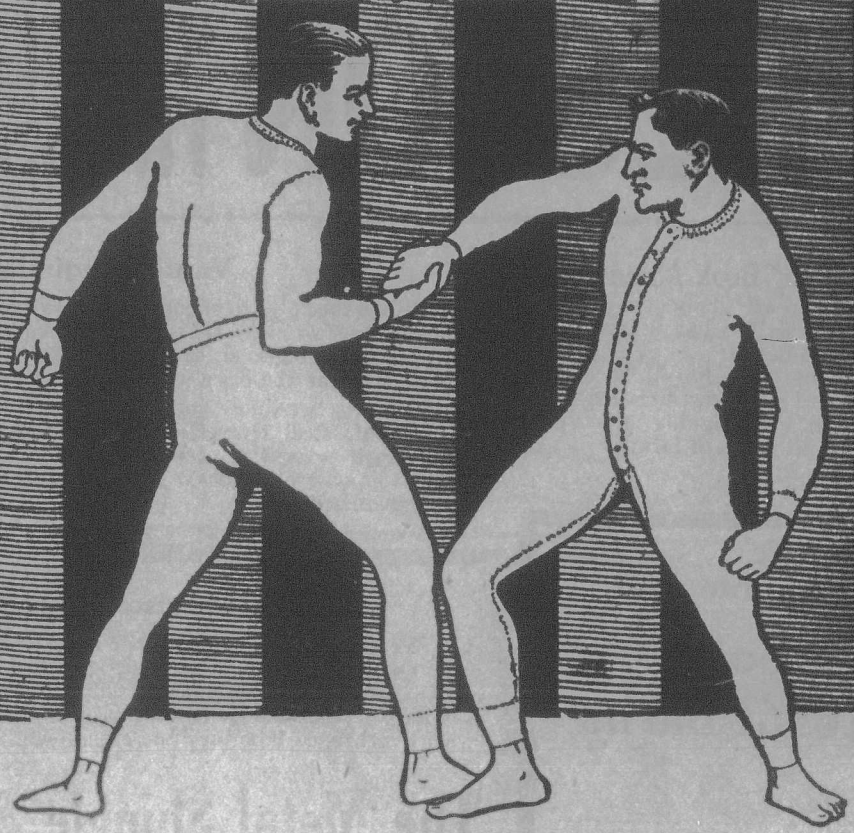
We also make underwear of lighter weights, for both indoor and outdoor work. Send for free sample book.

Stanfield's Limited,
Truro, N.S.



"It wears longer"

STANFIELD'S Unshrinkable UNDERWEAR RED LABEL



"Stands Strenuous Wear"

What a Contrast!

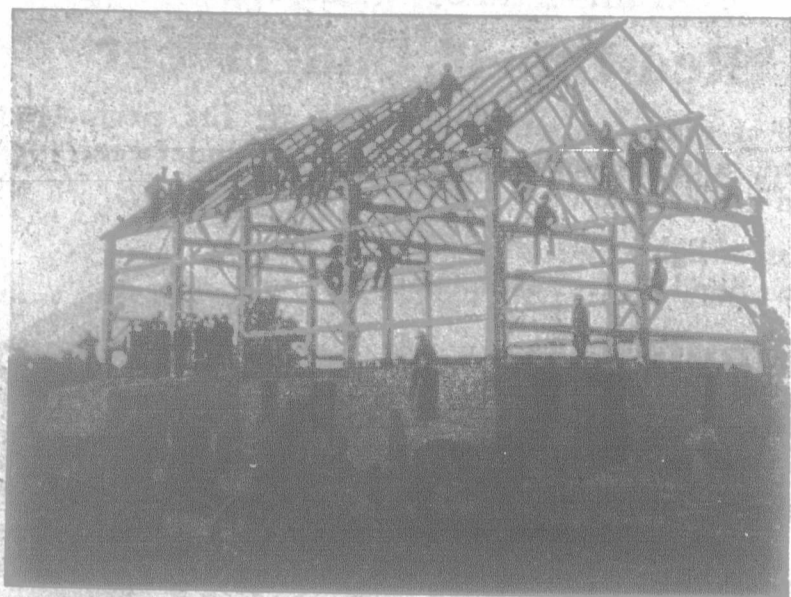


Photo No. 1—Reproduced above, shows a typical barn raising, on a farm in Lambton County, Ontario. This is one of the old-fashioned timber frame barns—and though it is a comparatively small building, the photo reveals that there were exactly 39 men engaged on this job.

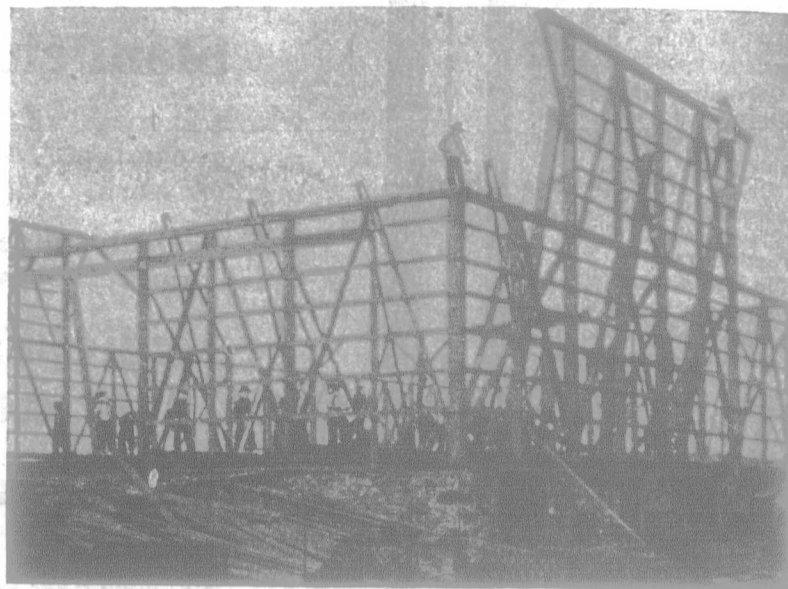
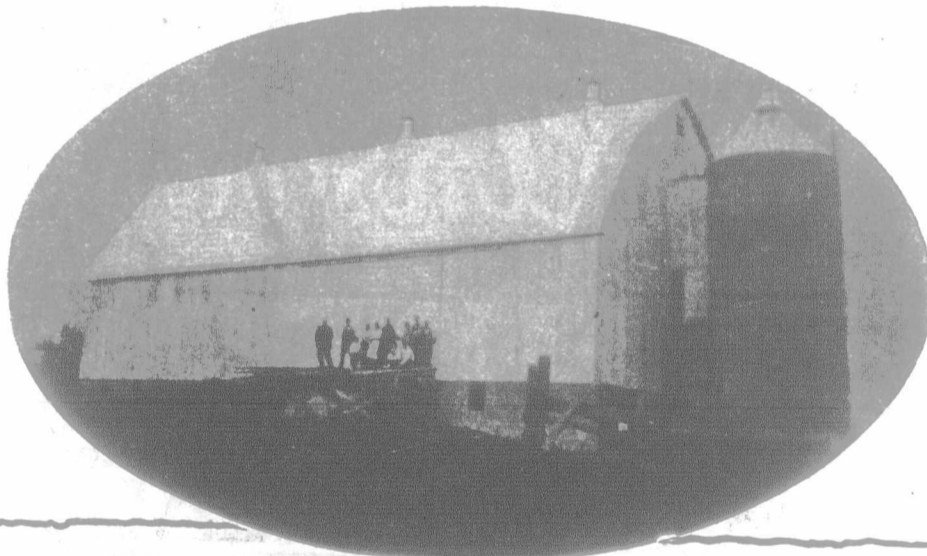


Photo No. 2—Shows, in course of construction, one of the largest "Steel Truss Barns" ever built. Only a few men are visible in this view—and as a matter of actual fact, but 14 men were employed in its construction. This barn was built for Mr. Conrad Gies, St. Clements, Ont.

The old-style Barn raising was a tedious troublesome way of getting a Barn up—thirty or forty men to be boarded, and after all that labor the barn might be destroyed in a single night — by fire or lightning.



By the Preston method, erecting a barn is a simple matter of a few days, completed by a few expert mechanics.

Result:—A Barn to be proud of—one that cannot be set fire to from without, spark-proof, and protected against lightning.

PRESTON STEEL TRUSS BARN

Send for our Book About Barns

It tells you all about the Preston Service, and describes the Preston Steel Truss Barns in detail.

State size of your Farm, so that we may give you the benefit of the experience we have had in designing all types of buildings for all kinds of farms.

Send me your
**Book
About Barns**

Name

Address

R.R. No.

Value Unequaled

Photo No. 3—In the centre of this page, shows a good example of the Preston Steel Truss barn construction. It is the most sturdy and altogether satisfactory barn you can get at any price—and at the price we ask is "Value Unequaled".

The price we quote you includes Galvanized iron for sides and roof, steel trusses, doors, windows, track and complete hardware—everything but the foundation. Our lowest price barns have wood "sides"—the more expensive ones have "sides" of galvanized iron.

We make barns in 286 standard sizes. We also make Farm Garages and Implement Houses.

Rural Landscape Architecture

We also furnish plans for the most efficient layout of fields, lanes, fences, gates, windbreaks, orchards, and shrubbery. By utilizing our service, you not only secure an Ideal Barn—but also expert assistance in raising the produce to fill your Barn, with lightened labor and increased profits.

Important to Farmers Who own Wood Lots

We are prepared to negotiate with farmers who are willing to trade in wood lots as either whole payment, or partial payment, for Preston Steel Truss Barns. By taking over the farmer's timber in payment we can make the purchase of a fine barn an easy matter for any one to finance.

The Metal Shingle & Siding Company, Limited

PRESTON, 120 Guelph St.

TORONTO, 40 Abell St.

MONTREAL, 86 DeLorimier Ave.