

PUBLISHED EVERY WEEK. \$1.50 PER YEAR.



Vol. XLIX.

ENTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.
LONDON, ONTARIO, NOVEMBER 19, 1914.

No. 1156

FROST FENCE TARGET

Others Aim to Make Their Products Up to the Same Standard, But Do They?

Every farmer, no matter what he is about to purchase, compares it in his mind with another article of the same kind. This comparison is always made either thinkingly or unthinkingly, but it is there and is most human.

In fence talk, Frost Fence is that standard. We tell you that you need only to measure these other fences by this standard, and you'll be starting right.

You are not asked to believe that other fences cannot be made as good as Frost Fences, but we do say that it is impossible to make as good fence or anything near as good at the prices at which other fences are offered to you.

Do you expect anything more than suppose that you can get something tically what is offered you - fences enough to cover actual cost. This to be made to line up with Frost



you pay for? Is it safe, therefore, to for nothing? However, this is prac- so low in price that it seems not would not be if these fences had fences.

We want you to judge by the standard known by most careful fence buyers. Frost Fence has built into it service and appearance. This is everything a fence can have, because service means durability, which further requires good hard wire, well galvanized, and the bindings of stays and laterals must be tight---no possible shift. Appearance covers even-spaced laterals and stays equal distances apart, and the absence of the cheap fence trade mark---bowed stays. The fact that it is straight and flat when being first unrolled is the best proof of this.

If you do not know a Frost dealer, write us direct, because in choosing fence it is less trouble to get a good than a poor one. The good ones are few to choose from.

FROST WIRE FENCE COMPANY, LIMITED
Hamilton, Ont. Winnipeg, Man.

WE MAKE OUR OWN WIRE

Johnny-on-the-Spot

"Johnny-on-the-Spot" on skids or on truck, will take care of all your chores—pumping, separating cream, pulping, churning, washing, etc.

Stop wasting your time and energy in useless drudgery. Let "Johnny-on-the-Spot" do it—one of the famous Gilson "Goes Like Sixty" Line—a high quality engine at a low price. **WRITE FOR CATALOGUE AND FULL PARTICULARS—ALL SIZES.**

Gilson Manufacturing Co. Limited
2509 York St., Guelph, Ontario

\$47.50



R.M.S.P.

WEST INDIES


FORTNIGHTLY SAILINGS

TWIN-SCREW MAIL STEAMERS FROM

St. John (N.S.)
AND
Halifax (N.S.)

SPECIAL FACILITIES FOR TOURISTS

For Illustrated Folders, Rates, etc., apply to the Agents of The Royal Mail Steam Packet Company; or in HALIFAX (N.S.) to PICKFORD & BLACK, Ltd.



The Northern Business College
945 3rd Ave. E., OWEN SOUND, ONT.

With staff of specialists and 34 successful years of experience is the best place to get a business or shorthand training. Catalogue free. Enter any day.

G. A. FLEMING, F.C.A. G. D. FLEMING
Principal Secretary

MOFFAT Ranges

Are acknowledged best.

Write for Free Booklet

THE MOFFAT STOVE COMPANY LTD.
Weston, Ont.

"NINE LIVES"


Be sure that you buy your batteries with this trademark

XCELL DRY BATTERIES

are guaranteed to outlive and outlast all other makes. Extra lives have been given to the Black Cat.

Write for Catalogue


CANADIAN CARBON CO., 95 KING ST. W., TORONTO 8



BOOK ON DOG DISEASES And How to Feed

H. CLAY GLOVER, V. S.
118 West 31st Street
New York

Mailed free to any address by the author.

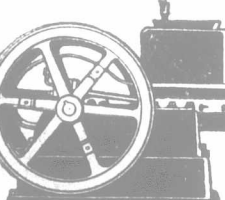


STANDARD GASOLINE ENGINE

Every one sold on a strong guarantee. Ask for our catalogue of engines.

London Concrete Machinery Co., Dept. B, London, Ont.

Largest makers of Concrete Machinery in Canada



Profit Results Count

Ask for Samples

LONDON LIFE Insurance Company

LONDON CANADA

THIRTY-FIRST ANNUAL

Ontario Provincial Winter Fair

GUELPH, ONT.

Dec. 5 to 10, 1914

\$21,000 Offered in Prizes

CANADA'S GREATEST WINTER FAIR

Entries close November 19th, 1914

WM. SMITH, M. P., President **R. W. WADE, Secretary**
Columbus, Ont. Parliament Bldgs., Toronto

LAND TILE

3, 4, 5, 6, 8, 10 and 12 Inch

We manufacture, and carry in stock, the best land tile in the above sizes. You know the many advantages of having your farm well drained.

Write and get one of our booklets on farm drainage free

The Dominion Sewer Pipe Co. LIMITED
Swansea, Ontario

ONCE USED ALWAYS USED

THE CELEBRATED

Heller-Aller Down-draft Tank Heater

The only thing on earth to supply warm water for your stock in cold weather. Every farmer should have one—and now is the time to buy, before the cold weather comes. They will consume anything in the shape of fuel—and will never wear out. The price is reasonable and within your reach.

Write to-day to

The Heller-Aller Co. WINDSOR ONTARIO



CANADA'S ONLY MUTUAL

FOUNDED IN 1869

AND CONDUCTED ON THE IDEAL SYSTEM OF MUTUALITY

OF POLICYHOLDERS BY POLICYHOLDERS FOR POLICYHOLDERS

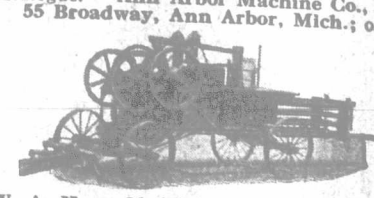
Mutual Life Insurance Co. of Canada

ONTARIO

Ann Arbor

THE BALER FOR BUSINESS

All admit its superiority. For 29 years Ann Arbor Press owners have made efficiency records. It bales any kind of hay or straw. There's a good income in a good press—get the Ann Arbor Columbia, the conceded leader—write for "Making Money from Hay" and catalogue. **Ann Arbor Machine Co., 55 Broadway, Ann Arbor, Mich.; or**



W. A. Hare, 28 Adelaide St., W., Toronto

BARGAINS

In Gasoline and Kerosene Engines

We have in stock the following Standard Field Engines which are new and in fine condition, although they have been used for demonstrating at the fairs. Every engine has a five year standard guarantee.

1 15-H.P., mounted	- -	\$400
1 15-H.P., on skids	- -	550
1 12-H.P., on skids	- -	325
1 10-H.P., on skids	- -	290
1 8-H.P., on skids	- -	250
1 8-H.P., mounted	- -	300

F.O.B. Ottawa; first come, first served. Everybody knows the superior quality of Field Engines. Ask the man who owns one.

W. A. HARE
139 Spruce St., - - - Ottawa

WANTED

Cream markets have advanced, and we are now paying WAR prices for good quality

CREAM

We need yours. Write us.

Cans Supplied.

TORONTO CREAMERY CO., LIMITED
Toronto :: :: Ontario

BULBS FOR FALL PLANTING

Ask for Bulb Catalogue.

100 mixed Tulips	-	90c.
1 doz. Hyacinths	-	50c.


Postpaid.

GEORGE KEITH & SONS
124 King St., E., - Toronto, Ont.
8-4 Merchants since 1866.

STEEL CORNER GRAIN FEED BOX

of heavy steel, well-riveted and braced. Clean, sanitary and very durable. Well finished. Price \$1.25 each F.O.B. Tweed. Write for catalog.

The Steel Trough and Machine Co., Ltd.
Tweed, Ont.



PATENTS TRADE MARKS and DESIGNS

PROCURED IN ALL COUNTRIES

Special attention given to Patent Litigation.

Pamphlet sent free on application

Ridout & Maybee
CROWN LIFE BUILDING, TORONTO, ONT.

CREAM WANTED


We are offering highest prices for cream to cheese factory patrons and others having a supply during the fall and winter. Express paid and cans supplied. Write us.

VALLEY CREAMERY OF OTTAWA, LTD.
319 Sparks St., Ottawa

Learn to Stuff Birds

Do you ever hunt or fish? Be sure to write today for our free book. Find out how to stuff and mount birds, animals and game birds and tax skins. Fine business, very fascinating and profitable. Every hunter and fisherman should have this book. Don't go another day without it. Book is free and payable when you receive it. You can make big money mounting for others. Write today and get free book. Act now.


Prof. J. W. ELWOOD, Taxidermist 7648 Elwood Bldg., Omaha, Neb.



MORE MILK—BETTER MILK.

Thorough tests on the Government Experimental Farms show that cows after being dehorned give more milk and better milk. They recommend the **KEYSTONE DEHORNER** as the most humane and efficient instrument for the purpose. Write for booklet.

R. H. MCKENNA, 219 Robert St., Toronto.

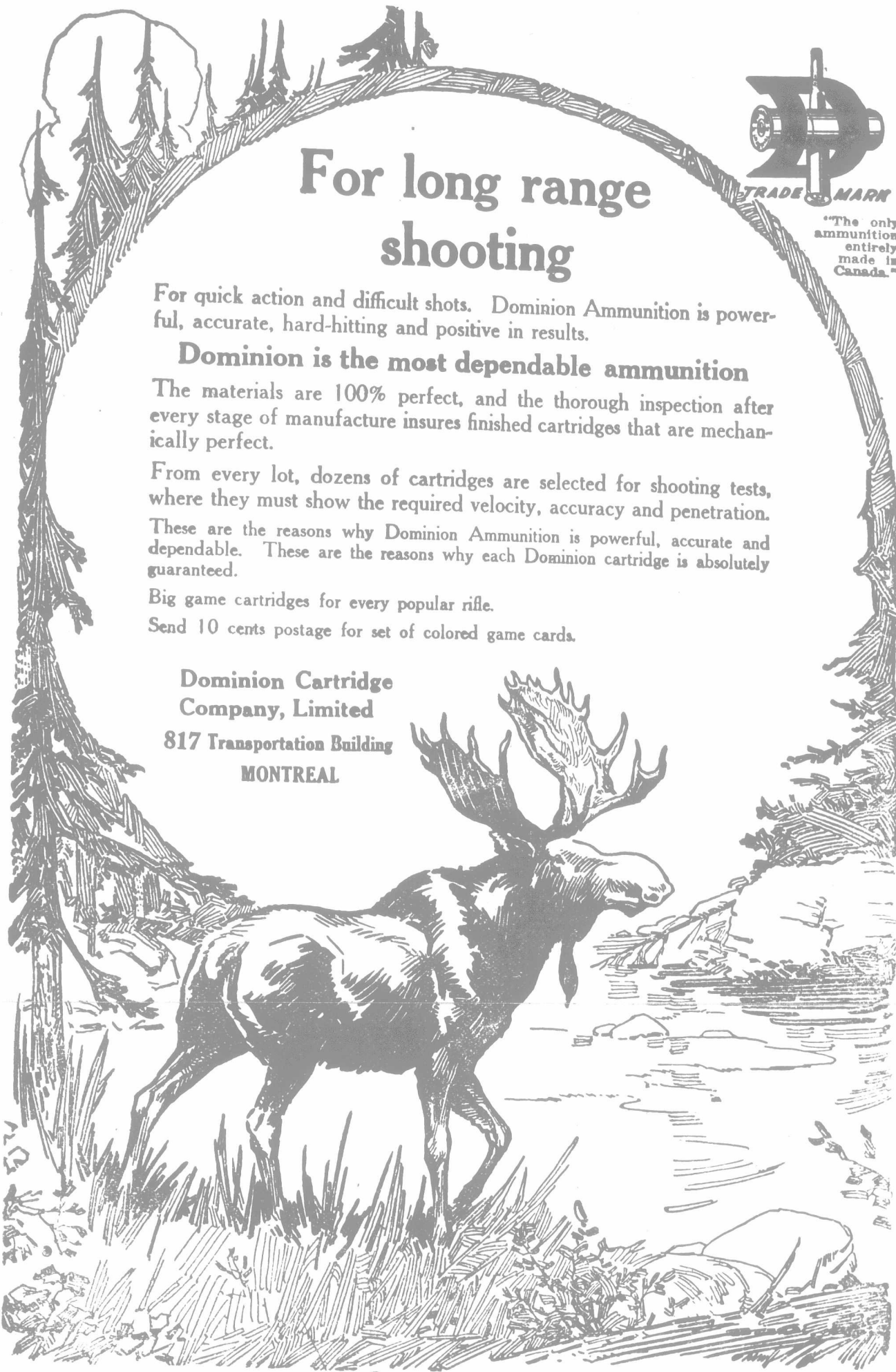


PEERLESS FENCE HOLDS

Made of heavy Open Hearth steel wire well galvanized. Wire intersections securely locked together with Peerless lock. They can't slip. Peerless fence is guaranteed to be weather proof and stock proof. Write for catalog. Agents wanted in open territory.

Banwell-Hoxie Wire Fence Co., Ltd.
Windsor, Man. HAMILTON, ONT.





For long range shooting

TRADE MARK
"The only ammunition entirely made in Canada."

For quick action and difficult shots. Dominion Ammunition is powerful, accurate, hard-hitting and positive in results.

Dominion is the most dependable ammunition

The materials are 100% perfect, and the thorough inspection after every stage of manufacture insures finished cartridges that are mechanically perfect.

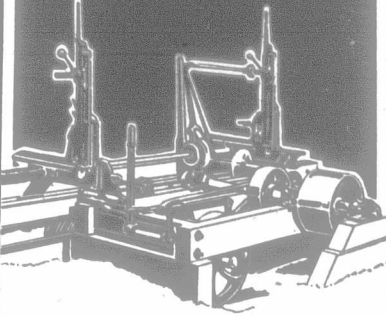
From every lot, dozens of cartridges are selected for shooting tests, where they must show the required velocity, accuracy and penetration.

These are the reasons why Dominion Ammunition is powerful, accurate and dependable. These are the reasons why each Dominion cartridge is absolutely guaranteed.

Big game cartridges for every popular rifle.
Send 10 cents postage for set of colored game cards.

Dominion Cartridge Company, Limited
817 Transportation Building
MONTREAL

PORTABLE SAWMILLS



Send us a card to-day for our Portable Sawmill Catalogue

WATEROUS
BRANTFORD CANADA

FREE LAND

For the Settler in
NEW ONTARIO

Millions of acres of virgin soil obtainable free, at a nominal cost, are calling for cultivation. Thousands of farmers have responded to the call of this fertile country, and are being made comfortable and rich. Here, right at the door of Old Ontario, a home awaits you.

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

H. A. MACDONELL
Director of Colonization
Parliament Buildings, TORONTO, ONT.

HON. JAS. S. DUFF
Minister of Agriculture
Parliament Buildings, TORONTO, ONT.

GRAND TRUNK RAILWAY SYSTEM
DOUBLE TRACK ALL THE WAY

TORONTO-CHICAGO
TORONTO-MONTREAL

The International Limited
Canada's Train of Superior Service

Leaves Toronto 4.40 p.m. daily, arrives Detroit 4.55 p.m. and Chicago 8.00 a.m.

MORNING SERVICE

Leaves Toronto 8 a.m., arrives Detroit 1.45 p.m. and Chicago 8.40 p.m. daily.

LAST TRAIN OUT OF TORONTO AT NIGHT

Leaves 11.35 p.m., arrives Detroit 8 a.m. and Chicago 3 p.m. daily, assuring important connections with principal trains for Western States and Canada.

FOR MONTREAL

Leave Toronto 9 a.m., 8.30 p.m. and 11 p.m. daily. Berth reservations, etc. at G. T. R. ticket offices.

To Farmers

SPRING 1915

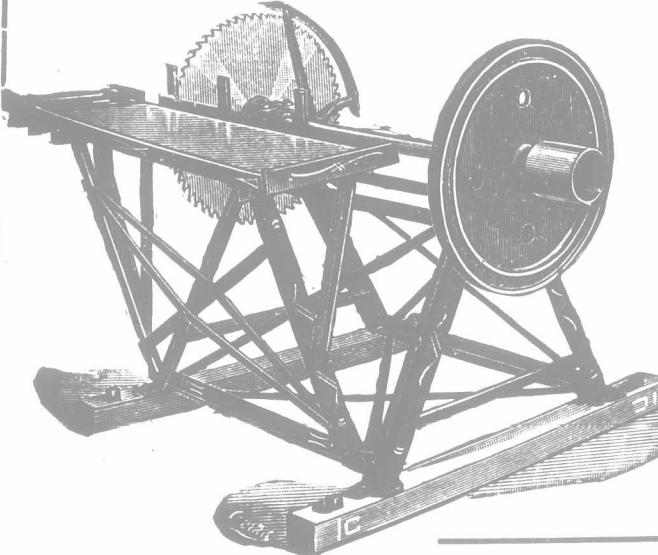
Farm help from England, Scotland and Ireland.
Special care given to selection.
Write, stating particulars, whether experienced, partly experienced, or inexperienced help required.
New magnificent steamers for direct Canadian service.

ANDANIA ALAUNIA
ASCANIA AUSONIA

AURANIA, 14,000 tons, building.
One class (H.) Cabin. Lowest Rates. Apply:

Cunard Steamship Co. Limited
Immigration Dept.
114 King Street West, Toronto

This PAGE STEEL FRAME TILTING TABLE WOOD SAW Only \$19.00
Freight Prepaid East of Fort William.



Saw Blades Extra as Below.

It has all the latest improvements in wood-saw construction. The frame is built of heavy angle steel bars strongly bolted together and rigidly braced in every direction by heavy flat steel bars. The shaft is a 4 ft. 4 in. piece of lathe-turned steel, and runs in well-babbitted, self-adjusting, dust-proof, non-heating boxes. The saw blade is protected by a heavy steel guard.

The tilting table has a roller at one end for convenience in handling long poles. The balance wheel and pulley are interchangeable. The inside distance between the balance wheel and the saw blade is 3 ft. 6 in. Size of pulley, 5 in. diameter by 6 in. face. Weight, 276 lbs., without saw blade.

It is unquestionably the strongest and most rigid steel saw frame of its style on the market, and the only one to which there is absolutely no shake when in operation.

Saw blades of 24 in. diameter from 24 inches to 30 inches can be supplied as follows:

24-inch.....	4 45	26-inch.....	5 25
28-inch.....	6 05	30-inch.....	6 85

PAGE WIRE FENCE CO., LIMITED
WALKERVILLE TORONTO MONTREAL ST. JOHN
1137 King St. W. 505 517 Notre Dame St. 39 Dock St.
Order from Nearest PAGE Branch.

Send for our general catalogue of fence and hundreds of other articles used in the home and on the farm

WHO BENEFITS?

The value of Canadian farm-products is greater this year than ever before. Prices are higher, and farmers bid fair to be in a better position than ever.

At present this is a direct result of the war. But, a year, or two years, from now will it still continue? It will if you help it to. It will if you support the market for your produce.

That market is the towns and cities of Canada, populated by Canada's factory workers.

By buying goods "Made in Canada" you support those workers, you build a permanent, substantial market for your produce.

Investigate Canadian-made goods every time you make a purchase. If they're just as good as others buy them, because you yourself will be benefited by the betterment of Canadian business conditions.

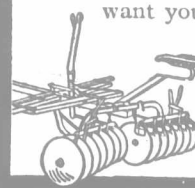
"Made in Canada" will make Canada 29

MADE IN CANADA

THE BISSELL

DISC HARROW

will do a better day's work for you tested in the field alongside any other. We know the Bissell will outclass the others, but we want you to see the Bissell at work. But first ask Dept W to mail you our Disc Harrow Catalog



T. E. Bissell Co. Ltd.
Elora, Ont. 104

ASK FOR

Rices's Salt

The purest and best for table and dairy use.

North American Chemical Co.,
Clinton, Ont. Limited

LOUDEN

Barn Equipments

SAVE TIME — SAVE LABOR — SAVE EXPENSE

Our new catalogue describes every kind of device for money-making and labor-saving on farms. Write to:
LOUDEN MACHINERY Co., Dept. 1
Guelph, Ontario

Consult your best interests and you'll never buy an ordinary spraying outfit. You will buy a

SPRAMOTOR

instead. Ask us to forward you the proof of the superiority of the Spramotor—the real facts as they concern you. This will place you under no obligation to buy.

B. H. HEARD SPRAMOTOR
104 King Street London, Canada

IF YOU ARE LOOKING FOR A

Good Farm

IN ONTARIO

OR MARKET GARDEN WE CAN SUPPLY YOU

EVERY FARM ON OUR LIST EXAMINED BY A PRACTICAL AGRICULTURIST

SEND FOR OUR LIST AND FULL INFORMATION ABOUT FARM LAND

ONTARIO FARM AND FRUIT LANDS DEPARTMENT

DOVERCOURT LAND BUILDING & SAVINGS

W. S. DINNICK, PRESIDENT COMPANY - LIMITED. 82-88 KING ST. E. TORONTO

LARGEST OWNERS AND DEVELOPERS OF REAL ESTATE IN CANADA

Dominion Portable Truck Scale

Made in Canada

The handiest all-round Scale for farm use. Built for accuracy, convenience and durability. Swivel handle and swivel ball-bearing casters. Low, bevelled beam. Steel bag rack. Specially tempered bearing points. Capacity, 2,000 lbs. by 1/2 L.S. Guaranteed. Fully described in "Profits and Pounds," an interesting booklet on weights. Sent free.

Farm Engines
Pumps
Tractors
Windmills
Lighting
Outfits
Water Systems
etc., etc.

The Canadian Fairbanks - Morse Co., Limited

Montreal Quebec St. John
Toronto Ottawa Hamilton Ft. William
Winnipeg Regina Saskatoon
Calgary Edmonton Vancouver Victoria

Canada's Departmental House for Mechanical Goods

SHIP US YOUR CREAM

WE Supply cans and pay all express charges within a radius of 100 miles of Berlin. Send a statement of each shipment. Pay every two weeks. WRITE FOR FULL PARTICULARS.

THE BERLIN CREAMERY COMPANY

BERLIN, CANADA

WE PAY HIGHEST PRICES FOR RAW FURS

WE receive more shipments of Raw Furs than any five houses in Canada

FREE HALLAM'S TRAPPERS GUIDE French or English HALLAM'S TRAPPERS SUPPLY CATALOG (Illustrated) and HALLAM'S RAW FUR QUOTATIONS worth \$50.00 to any Trapper

WE SELL ANIMAL BAIT, TRAPS GUNS & c. AT LOWEST PRICES

Write To-day—Address
Desk 382

JOHN HALLAM LIMITED TORONTO

The Farmer's Advocate and Home Magazine

PERSEVERE
AND
SUCCEED

ESTABLISHED
1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

Vol. XLIX

LONDON, ONTARIO, NOVEMBER 19, 1914.

No. 1156

EDITORIAL.

No stockman can afford to waste coarse feed this winter.

A clean, sweet manger is a great "appetizer" for the stock.

The sewing circle is aiding greatly in the comfort of the soldiers.

Everyone says, "It has been a great fall," and still there is plenty of work to do.

If it were not for the padded war news sheets some of us would not neglect our chores so much.

Added to the feeders troubles came the closing of the leading live-stock markets of the United States.

Every stable should be kept disinfected, and extra precautions taken to ensure good health among the stock in this time of danger.

Canadian stockmen will give their undivided support to our Federal authorities in their effort to keep foot and mouth disease out of this country.

Enlist in the army of agricultural recruits and plan to conquer the earth, and make it yield up abundantly to feed our soldiers at the front and those in need at home.

The foot and mouth outbreak is just another evidence that the stockman must be on the alert, and that his business has unseen dangers which demand his best attention.

The Belgians saved the day in the beginning of the war. It is Canada's turn now to forward all the relief possible. Why not induce some of these good people to settle in this country?

There is a great deal of talk about breaking up more new lands in Canada to increase crop output. Much more labor could profitably be expended on lands already under cultivation, but only one-half worked because of lack of help.

It does not help business to grumble; complaining of prices will not stiffen the market; grouching about the weather will not finish the fall work; worrying and talking about the results of the war will not end it sooner; cheer up!

It must not be forgotten that a nation's success or failure often depends as much on the way her business is kept up in a crisis as it does upon the way her brave soldiers fight on the field of battle. Push business; it is an effective weapon against foes.

The sacrifice of the man who puts extra effort into increasing food production may not be as great as that of the man who fights in the trenches, but it may be just as necessary. What would it profit us to have countless millions under arms and nothing to feed them?

Every Live-stock man in Canada should do all he can to keep foot and mouth disease out of this country, and to help stamp it out of the United States. Be exceedingly careful in the transferring of stock from place to place, and watch all avenues of possible infection.

An Unwarranted Attack.

Readers who have been following the daily press, and who are familiar with the facts of the case, are very indignant over the unfair and downright mean attacks on Prof. C. A. Zavitz, of the Ontario Agricultural College, Professor of Field Husbandry, and, in the absence of President G. C. Creelman, acting head of the Institution. A difference of opinion arose between some of the students and Prof. Zavitz over the advisability of military training at the O. A. C. Prof. Zavitz not favoring the idea which met the approval of the Minister of Agriculture, he promptly resigned as acting President, whereupon the matter was satisfactorily adjusted by Government heads at Toronto, and Prof. Zavitz continued to administer the affairs of the College, and the military drill went on. Not satisfied with the solution of the difficulty a number of disgruntled opponents of Prof. Zavitz, and residents of the city of Guelph, formed themselves into a deputation and went to Toronto demanding that Prof. Zavitz be asked to resign from the staff, and if he did not immediately comply with the request that he be summarily dismissed. Their petitions to the Government failing, they turned to the press in a vain effort to oust the man for whom the axe had been prepared. The absurdity of the movement made it scarcely worthy of comment. After all had been settled and both sides of the political press had editorially made it plain that Prof. Zavitz is too big a man to lose under any circumstances, to have the campaign against the Professor carried further was simply ridiculous.

There is no better known Field Husbandman in America than Prof. Zavitz, who has done more for field crops in Canada than any other living experimenter. Farmers know his real value if a few of the citizens of Guelph do not. Better even than this, we have it on good authority that the students at the O. A. C. felt so strongly on the matter that they as a body memorialized the Government that under no conditions would they countenance Prof. Zavitz' removal. We know hundreds of ex-students who feel the same. The Government had already recognized his worth. With the Government of the Province, the farmers of the Province, and the students and ex-students of the O. A. C. behind him, Professor Zavitz is solid, and the uncalled-for scathing criticisms of a few heelers should not under any conditions be allowed to disrupt the best agricultural college in the world, for once started such a system of procedure would soon check and hamper the good work of the Institution.

A Serious Live-stock Situation.

The seriousness of the outbreak of foot and mouth disease in the United States has been impressed upon those who are in touch with the situation. At time of writing, Nov. 10th, thirteen States are infected and quarantined. Stockmen on this side of the line should lose no opportunity to do all in their power to keep the disease from spreading into this country. Our Federal authorities are taking every precaution, cars are being stopped at the boundary and thoroughly disinfected and, of course, rigid quarantine regulations are placed on all stock from the United States, in fact this embargo has been placed on the whole of the United States and for the next six months no cattle, sheep, swine or goats or flesh, hides, hoofs, horns or other parts of such animals other than cured meats, lard and tallow, or hay, straw, fodder or manure will be

allowed to enter Canada from the neighboring Republic.

The United States too has placed an embargo on Canadian cattle entering that country so that trade is brought to a standstill in cattle, sheep and hogs between Canada and the United States. This is certainly unwelcome news to stockmen and will, no doubt, cause a downward tendency in market values. Feeders and owners of stocker and feeder cattle for sale should be careful at this time. Nothing will be gained by rushing large numbers of live stock to our markets, while those to the south of us are closed, because undoubtedly prices will slacken and trade slow up appreciably. It may be that the cold weather coming on and the rigid steps which are being taken to stamp out the disease will have it in control in a very short time. We can only hope that it will, and stockmen would be wise to wait a short time, at least, before rushing the stock to market. In fact there should be no big rush as this is what pulls the market down below the profitable level. The disease has not, at time of writing, gained a foot-hold in Canada and it is still likely that with the support of all stockmen, the authorities will be able to keep it out of this country. This being true there is no great cause for alarm. However, one more barrier is added between the feeder and profits. Feed is high in price this season and it was going to be a hard enough proposition to make anything like a fair profit on feeding cattle without any unforeseen danger of this kind creeping in to disrupt trade and up-set market conditions.

There is a danger that a grave injury may be done to the live-stock end of farming in this country, at this time. The agitation to grow more wheat has been pushed with vigor and anything which militates against live stock prices will cause a curtailment of that industry which in the end would prove disastrous. It is a well-known fact that there is a shortage of live stock the world over and this shortage is increasing in magnitude daily. Stockmen in Canada should keep their stables clean, disinfected, and should take every precaution to bar out any form of disease and we feel sure that in a short time conditions will be cleared up, markets open and everything progressing favorably.

Some idea of what it means to close such stock yards as Buffalo and Chicago may be had from the fact that in one day the Chicago Union Stock Yards has taken in 33,501 cattle, 1,803 calves, 87,716 hogs and 26,999 sheep, to say nothing of 838 horses or a grand total of 150,357 animals in 2,933 cars. Of this number a large proportion was shipped East alive to be slaughtered for export, namely 10,063 cattle, 28 calves, 21,188 hogs, 6,469 sheep and 109 horses or a total of 37,807 animals. This was a big day and it gives readers some idea of what is handled at these yards and what it means not only to local but to export trade to have them closed. The Buffalo yards handle about 350 carloads of stock per day, including as high as 4,875 head of cattle, 13,600 head of hogs, 14,000 sheep and 1,250 calves. This market has been receiving large consignments of Canadian stocker, feeder and finished cattle, and like Chicago large shipments of stock are made East for killing and to different States in the Union for feeding and finishing. As a result of the quarantine no business will be done in these yards and no shipments from Canada are allowed to go into any part of the United States.

Prices of meats are advancing in Chicago and Buffalo but at time of writing are dropping in Canada's large cities. The closing of the outlet

The Farmer's Advocate

AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

Published weekly by
THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.

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

1. **THE FARMER'S ADVOCATE AND HOME MAGAZINE** is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
2. **TERMS OF SUBSCRIPTION.**—In Canada, England, Ireland, Scotland, New Zealand and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries, 12s.; in advance.
3. **ADVERTISING RATES.**—Single insertion, 25 cents per line, agents. Contract rates furnished on application.
4. **THE FARMER'S ADVOCATE** is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrearsages must be made as required by law.
5. **THE LAW IS,** that all subscribers to newspapers are held responsible until all arrearsages are paid, and their paper ordered to be discontinued.
6. **REMITTANCES** should be made direct to us, either by Money Order, Postal Note, Express Order or Registered Letter, which will be at our risk. When made otherwise we will not be responsible.
7. **THE DATE ON YOUR LABEL** shows to what time your subscription is paid.
8. **ANONYMOUS** communications will receive no attention. In every case the "Full Name and Post-office Address Must be Given."
9. **WHEN A REPLY BY MAIL IS REQUIRED** to Urgent Veterinary or Legal Enquiries, \$1.00 must be enclosed.
10. **LETTERS** intended for publication should be written on one side of the paper only.
11. **CHANGE OF ADDRESS.**—Subscribers when ordering a change of address should give the old as well as the new P. O. address.
12. **WE INVITE FARMERS** to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve "The Farmer's Advocate and Home Magazine," Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods, of Cultivation, are such and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
13. **ADDRESSES OF CORRESPONDENTS ARE CONSIDERED AS CONFIDENTIAL** and will not be forwarded.
14. **ALL COMMUNICATIONS** in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—THE FARMER'S ADVOCATE, or
THE WILLIAM WELD COMPANY (Limited),
London, Canada.

of meat to the United States would mean cutting off a market of approximately \$8,000,000 worth of live stock annually. These figures will serve to bring home to the stockman the necessity of doing all in his power to keep his herds and flocks free from the disease and it will also serve to bear out the policy and efforts of the Live Stock Department, at Ottawa, in taking all precautions to prevent the disease entering this country. Regulations cannot be made too rigid and too much care cannot be taken to confine the disease to the areas already infected and to aid in stamping it out entirely.

We would caution breeders and feeders not to lose their heads and to watch the market conditions closely, being careful to avoid over-supply. Nothing can be gained by indiscriminately rushing cattle to market in the hope of getting them sold before the prices drop or the disease develops. This will be the surest cause of lower prices. It would be safer to play a waiting game and take precautions in the herds.

Already the increased demand for wheat and grain has caused a rush of live stock to markets. This war bids fair to undo much of the good work accomplished in building up mixed farming. A wholesale return to grain growing will prove disastrous in the end when farms become impoverished and demand slackens.

Writers who have seen a part of the destruction and slaughter in Europe say, with others who have been in actual touch with the conditions, that the result should surely be a permanent peace in place of the armed truce which has so long been forced upon the people by armament manufacturers and bureaucrats.

At the Right Time.

"The Farmer's Advocate" is all that can be desired because it says the proper thing at the right time.

N. B.

C. H. SPIKE.

Farmer and Manufacturer Getting Together.

A number of leading grain-growers and farmers of the West recently held a conference with some of the most prominent members of the Manufacturers' Association in Winnipeg, and the results of the convention have been summarized for the press. Great interest always attaches to any meeting of manufacturers and agriculturists, representatives of Canada's two greatest industries, for somehow the false impression is abroad that these men are enemies and that what is good for one industry is detrimental to the other, and a lively time is generally anticipated when leading manufacturers and wide-awake farmers come together. Moreover, when appeals are made to Governments the petitions of the one class of men generally draw forth counter petitions from those interested, in the other industry, and it is said that the manufacturer has profited more often than his farmer friends. However, for some reason representatives of the inseparable industries are drawing closer together, and they now meet to discuss the biggest problem in Canada, viz., the "Rural Problem."

At their meeting in Winnipeg, no doubt after long deliberations, they decided once again that "something must be done to make life upon the farm more attractive in all its aspects." This had been decided many times previously, but they went a step farther and suggested how in part it might be accomplished. Foremost among their remedies for present-day conditions they placed "technical instruction"; not the kind of instruction given at schools and agricultural colleges, but the kind that is taken to the farmer on his own farm at home. This is the class of work that is already being carried on to good advantage by District Representatives of the Ontario Department of Agriculture in this Province. The convention hit upon no new idea in so far as this phase of the work is concerned. The movement is, however, worthy of extension. Ontario is profiting greatly from this class of work, and the West is beginning to follow her lead.

The second means by which farm life could be improved, according to the ideas of this convention, was in the methods of distribution of supplies to the farm, and of produce from the farm to the market or consumer. Organization and business methods was the remedy proposed to overcome the present-day ills.

Third in the list was placed transportation, including good roads, better shipping facilities and lower rates.

Next in line, and one of the most important of the lot, was cheaper money and easier credit. One very good feature of this part of the discussion was the advice that it is desirable to modify the present practice of insisting that payment shall fall due immediately after the harvesting of the crops. This often places the producer in an awkward position, and compels him to sacrifice his produce, including live stock, on an overcrowded market at resultant low prices. It is a general practice to have notes, and all other monies, falling due just after harvest, sometimes almost before threshing can be completed, or at such set dates as the first of September, first of October, or first of November. Anyone who has watched market reports and conditions knows what happens to prices around about these dates.

This convention even went so far as to discuss the tariff, and advised that in so far as the tariff was responsible for handicaps, under which the farmer labors, it should be carefully studied with a view to rectification.

It seems to us that, taken on the whole, the convention ended about where it began, for after defining the underlying weaknesses that are at present a hindrance to agricultural development, the convention passed resolutions asking that a searching investigation be made by a committee dealing particularly with production, transportation, distribution, markets, and finance; that the committee be comprised of non-partisan men of outstanding ability, broad experience, high ideals and unquestioned probity, first to acquaint themselves with the needs existing, and second of evolving and submitting to the Government in

time to report to the approaching session a plan calculated to meet these needs, and follow this up by putting the plan in operation with Government approval.

The public generally is of the opinion that we have had about enough commissions of one kind and another in this country up to the present time. It has been surfeited with copious volumes familiarly known as blue books, the resultant reports of the investigations of commissions. Many of the best of these have been shelved without further action, and is it not probable that another of the same kind might go the same way? Most of the remedies mentioned are in the hands of the farmers and manufacturers themselves. Why can they not carry them to a successful issue without calling upon the Government and the accompanying red-tape to solve the question for them? True, the Government can help some, but the thing for the farmers of this country to do is to help themselves, stick together and make conditions such that no Government dare turn down their appeals when they represent an absolute need and a lasting good to the country.

Farmers, themselves, by co-operation and organization through farmer's clubs, and farmer's associations and societies, with the help of capable District Agricultural Representatives already appointed by the Department in Ontario counties, can do much to make life on the farm more attractive, and more remunerative than it is at the present. Organization will teach modern business methods, will make public spirited men, will eventually procure cheaper transportation and an easier and readier line of credit. Why should not farmers form their own credit societies and set their own rates of interest? As far as the tariff is concerned, it has always been a political question, and farmers themselves are divided upon it. If it does the harm which some claim it does, then why do farmers not bury their political feelings and demand tariff re-adjustment favorable to their business?

Much good should eventually come of this class of meeting. Without some sort of organization, such a meeting would have been impossible, because there would have been no one officially authorized to represent the farming class. It is to be hoped that meetings such as this will be carried on in the future and much good come out of them, but we have little faith in Government investigations by the commission route as a solution to "The Rural Problem."

Isolated, But Capable of Holding Out.

As far as the live stock trade is concerned, Canada is at the present time in a condition of almost entire isolation. The war has cut off all chances of importing horses from Belgium and France and only a few are being exported from Britain, Canada getting a small percentage of these. On top of all this comes the announcement that the United States has placed an embargo on all Canadian stock and that Canada, in turn, has placed an embargo on all United States stock, other than horses, this embargo to last for, at least, a period of six months. This latter step, of course, is due to the most serious outbreak of foot and mouth disease which this continent has ever known.

All this, however, should not spell discouragement to the Canadian live stock man. Our abattoirs will still be open and with the increased demand for cured meats which may still be exported freely larger quantities than ever before should be handled in our packing houses. This is good for the industry and stock which otherwise would have been killed and prepared for the plate in American packing houses will have to be dressed here. It is to be hoped that the powers that be, on the live stock markets of the country will not take an undue advantage of the present-day conditions to force prices of all kinds of live stock placed upon the market down below the line of profitable production. This would be in the end disastrous to Canada's live stock industry as there would be an undue rush to get out of the live stock business and back to the wheat-growing industry, the rosy outlook for which has been so

strong
since t
Bre
golden
that t
period
mouth
own e
in the
and th
first-cl
breeds.
sires p
standa
even ac
crisis v
into th
business
foundat
This w
surplus
herds a
is a ne
right
them es
of the
that w
States,
cuse wh
our own
very fin
really n
class in
behind i
light of
in Belgi
Individual
scores o
of credit
some of
country
water on
saying
founded
not cap
ourselves
is concer

The w
small ro
produce
but as t
by another

The
from the
mon or h
given loc
cause of
hours of
of some
most of
The Crow
the dayti
This com
the sport
tree, dart
cution so
flight av
long string
round it g
ing, then
Horned O
turns Cro
more quiet
a meal of
the long-e
small anim

Another
range in C
Owl inhab
species and
winter it
meadows
cent. of th
of meadow
the small,

In the
"eared" o
feathers on
The Scr
Canada.
unlike that
hoot, but
Owl" woul
name than
ally indulg

strongly emphasized in speeches and press articles since the war began.

Breeders of pure-bred live stock have one golden opportunity ahead of them. It is true that the English ports are also closed for a period of six months on account of foot and mouth disease and our breeders must rely on their own efforts, but Canada has not been backward in the pure-bred live stock industry in late years and there are in this country large numbers of first-class individual animals of the several breeds. It is up to the breeder to get the best sires possible and do all in his power to keep the standard of his live stock up to a high level and even advance it—somewhat, notwithstanding the crisis which has come over the industry. Those into the live stock business in a small way, or those contemplating making a start in the business should have no hesitation in purchasing foundation stock from our own live stock men. This would make an outlet for nearly all the surplus breeding stock on the farms where large herds and flocks are already established. There is a need of more herds and more flocks of the right kind of stock and we should like to see them established with good Canadian-bred animals of the right kind. These are available and now that we cannot buy in England, in the United States, in France or in Belgium there is no excuse why we should not buy at home and boost our own business. The word "imported" looks very fine after the name of an animal but it really means very little. If the animal is a first-class individual and has the right kind of blood behind it, it matters not whether it first saw the light of day in Scotland, in England, in France, in Belgium, in the United States or in Canada. Individuality is what counts and we have seen scores of scrub imported animals and thousands of creditable Canadian-bred individuals. Of course some of the best animals we ever had in this country were imported from the other side of the water or from the United States but this is not saying that with our herds and flocks well founded and running along on right lines we are not capable of fairly well taking care of ourselves, as far as pure-bred live stock breeding is concerned for at least a short time.

Nature's Diary.

A. B. Klugh, M.A.

The war which is waged by the Hawks on the small rodents which are so destructive to farm produce is given up with the coming of evening, but as the Hawks retire the conflict is taken up by another group—the Owls.

The Long-eared Owl is a fairly common species from the Atlantic to the Pacific. Just how common or how scarce any species of Owl is in a given locality takes a long time to ascertain, because of the time at which they are abroad. The hours of daylight are usually spent in the centre of some thick tree, and the ornithologist, has most of his Owls found for him by the Crows. The Crows hate an Owl, and if they find one in the daytime they set up a great hullabaloo. This commotion attracts other Crows to join in the sport of Owl-baiting. They gather in the tree, dart at the Owl and often carry this persecution so far that the Owl takes flight. But flight avails little, for the Crows follow in a long string, and as soon as the Owl alights surround it again. This often goes on till the evening, then if the Owl happens to be the Great Horned Owl the tables are turned and the Owl turns Crow-hunter, and goes about the work far more quietly but far more effectively, and makes a meal of some of its persecutors. The food of the long-eared owl consists almost exclusively of small animals.

Another species which has a transcontinental range in Canada is the Short-eared Owl. This Owl inhabits more open country than the last species and breeds in marshes. In the fall and winter it often congregates in large bands about meadows and marshes. About seventy-five per cent. of the food of the Short-eared owl consists of meadow mice. It takes a few birds, usually the small, ground-haunting Sparrows.

In the case of Owls, where the terms "eared" or "horned" are used, it is tufts of feathers on the head which are referred to.

The Screech Owl is a very common species in Canada. It is a little Owl with a voice quite unlike that of most of the Owls, as it does not hoot, but utters a tremulo whistle. "Whistling Owl" would in my estimation be a far better name than Screech Owl, though it does occasionally indulge in a rather loud screech, but far, far

more rarely than it whistles. This species has two phases of plumage, a reddish phase and a grey phase. These phases have no relation to age, sex or season, but as a rule a certain phase very largely predominates in a certain locality. The Screech Owl feeds very largely on insects, but also consumes quantities of field mice. About fifteen per cent. of its food consists of birds, nearly all House Sparrows. It also eats Crayfish, Frogs, Lizards and Fish. It catches most fish in winter, when it sometimes watches by holes in the ice and seizes such fish as come near the surface.

The Snowy Owl, which comes down from the North in the winter, also destroys large numbers of injurious rodents, and it is extremely unfortunate that many people consider that they are doing a good deed when they shoot one of these allies of the farmer.

In the southern parts of Manitoba and Saskatchewan and in the Dry Belt in British Columbia the Burrowing Owl is found. It breeds in old badger holes. The food of this species consists almost entirely of insects.

The Great Horned Owl occurs in all the timbered parts of Canada, and is the bird whose deep "who-who-who-who" sounds out in the still nights. The main food of this Owl consists of small and medium-sized mammals. It takes a great many rabbits, rats and various species of mice. The only harm it does is in attacking poultry which are allowed to roost out in the trees. If all poultry were shut up at night this species would do a lot of useful work and no harm.

Thus we see that the birds of prey are far from being the enemies of the farmer, but are in reality among his best friends, and that he should in return for their good services not only protect them himself, but should urge others to do so.

after 1916, which eliminates all stallions carrying number four certificates, and after 1916 certificates will be granted to none but pure-bred stallions.

The report gives 1,118 grade stallions enrolled, which is a very high percentage when we consider that the total number is 3,201. A few horses, however, that received grade certificates might have been enrolled as pure-breds, but they did not receive pure-bred certificates because the owners did not furnish proof of breeding and ownership.

The Stallion Enrolment Board are very pronounced in their efforts to improve the quality of the Ontario horse by the elimination of grade sires travelling in the country, and claim that history has shown that in districts and countries where pure-bred sires have been used for generations the average quality of the horses is much higher than in those places where grades and nondescript sires have been used for breeding purposes. In view of the fact that France and Belgium have suffered heavily through the destruction of many good Belgian and Percheron horses, it would be well for Ontario breeders to strengthen the reputation of their horses of all recognized breeds by using only pure-bred sires of undoubted quality, and by selecting such females for breeding purposes as from their sires, conformation and soundness will insure high-class progeny.

Pure-bred mares are, of course, desirable, but by resorting always to the use of pure-bred sires the progeny will in time be eligible for registration in four of the different stud books, which are a part of the Canadian National Records. Females of the Clydesdale, Shire and Standard-bred breeds with four top crosses by sires recorded in the Canadian Stud Books of the Associations to which they belong are eligible for registration, while female Hackneys with two top crosses by

such sires are capable of being recorded in their stud books. Percherons, French Coaches, Belgian draft, Thoroughbred and Suffolk breeds do not admit of grading up, yet it is the right policy for the breeder of those horses to pursue a course wherein only the pure-bred sire receives recognition, and even if they cannot be recorded as pure-breds the animals will reach that perfection of form and quality which will insure the highest market prices, and yield that satisfaction which comes only to those who do their share towards improving the live stock of the country.

It is very necessary that all stallions be recorded in the names of their owners, and a buyer should make it a condition of sale that his own name (the buyer's) should appear in the stud book established for

that particular breed of horse. This is to insure owners of mares that the certificate of service furnished by the owner will be accepted by the National Live Stock Records at Ottawa when the owner of the mare makes application to register the progeny.

Would Not be Without It.

Editor "The Farmer's Advocate": Please find enclosed money order for \$1.50 in payment of my subscription which I notice is due. Your paper is greatly appreciated by farmers around here. Personally I find it full of information, and interest every week and would not be without it.

B. C.

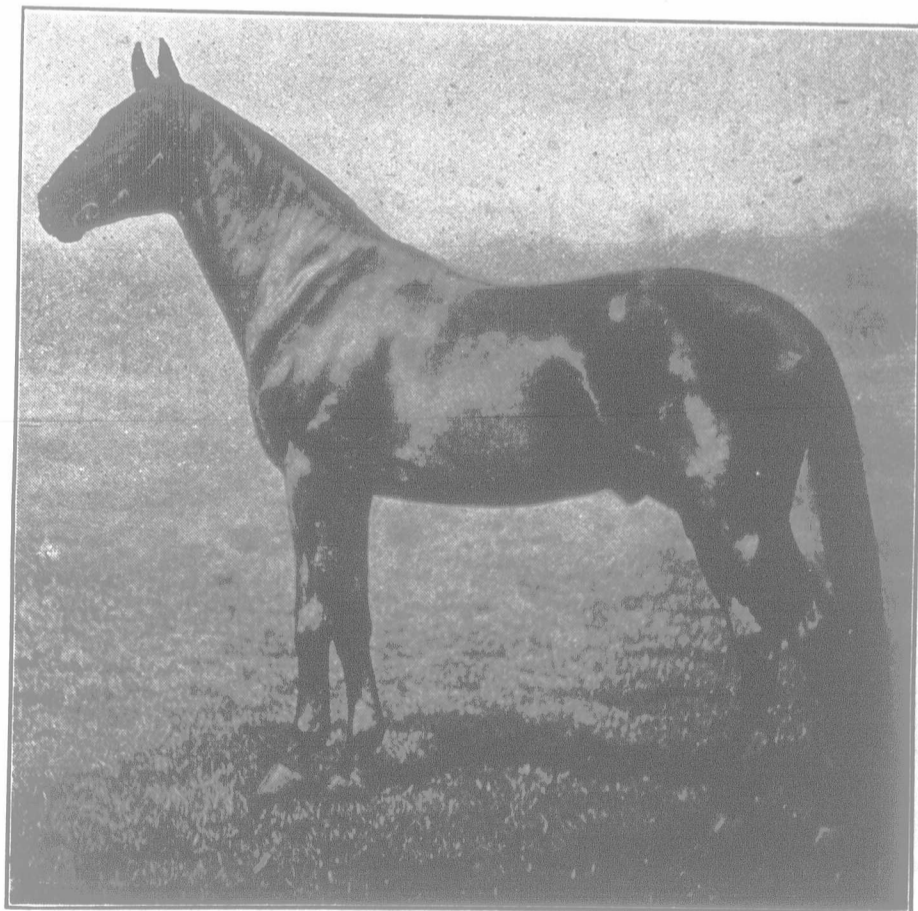
J. SPRY.

Some Items Worth the Subscription

I thought for some time that I could not afford to pay for the Advocate when a kind friend persuaded me to try it for one year, by that time I found out I could not afford to do without it. Some items are worth the whole subscription alone.

Ont.

A. C. REID.



A Great Stallion.
One of the greatest trotting stallions in England.

THE HORSE.

The Season's Inspection Work.

The work of the Ontario Stallion Enrolment Board for 1914 has been placed before the public in bulletin form. Their records reveal the enrolment of 3,201 stallions, an increase of 441 over the previous year. The total is made up of 888 new enrolments, and 2,313 renewals.

In the work of the past year there were six forms of certificates, namely: Number one—pure-bred, inspected and approved; number two—pure-bred that has failed to pass inspection; number three—pure-bred not inspected; number four—grade that has passed inspection; number five—grade that has failed to pass inspection; number six—grade not inspected. By the amendments to the Ontario Stallion Act, which came into force on Aug. 1st, 1914, inspection was made compulsory, eliminating the non-inspected classes. Consequently there will only be four forms of certificates to be issued in 1915. Another feature of the amended Act is that grades failing to pass the official inspection will not be granted certificates

LIVE STOCK.

Foot and Mouth Disease.

In view of the alarming spread of foot and mouth disease in cattle in the United States and the danger of its introduction into Canada, it may be considered opportune to discuss the subject thoroughly in these columns.

It is a highly contagious and infectious disease, due to a specific virus and characterized by vesicular eruptions in the mouth, between the clouts, around the coronets and often in other regions. In some cases the mouth only is affected, while in others the eruptions appear only in the feet. In milch cows the udder and teats are often involved. In such cases the milk is unfit for use. While cattle are more susceptible than other classes of stock, others are not immune, as sheep, pigs, dogs, poultry and even horses are sometimes attacked, and even the human being is not exempt, but in this article we will confine our remarks to cattle.

CAUSES.—Like all other contagious diseases it can be caused only by the introduction of the virus or contagion into the system of healthy animals. In diseased animals the virus exists in great numbers in the saliva, the discharges from the eyes and nostrils, and as the intestinal mucus is highly charged the excretions are a source of great danger. Thus food or litter of any kind, as hay, grain, roots, grass or straw which has been contaminated with the saliva of diseased animals, becomes a carrier of the virus, and requires only to be ingested by other animals in order to propagate the disease. It is also readily conveyed from diseased to healthy animals by the hands or clothing of attendants, by rugs, blankets, pails or other stable utensils. It is claimed that the disease can, and has been spread by diseased cattle wading through and defecating in streams, which subsequently coursed through healthy districts. There is no doubt that the disease often follows the course of a stream.

SYMPTOMS.—After a period of incubation (the period that elapses between the introduction of virus into the system and the appearance of the first symptoms) varying from twenty-four hours to three or four days, or in some cases longer, the temperature of the animal becomes increased from 2 to 4 degrees. This symptom is often not noticed except in cases where the animals are being closely watched and their temperatures are regularly taken. The increase in temperature is soon followed by the appearance of vesicles or blisters varying in size from a ten-cent piece to that of a twenty-five-cent piece on the tongue, inside of the lips, roof of the mouth and sometimes on the udder and teats. Smaller vesicles appear between the clouts, around the coronets and heels, and there usually is a discharge from nostrils and eyes. The animal presents symptoms of irritation in the mouth, by a constant movement or smacking of the lips, champing of the teeth, a flow of saliva from the mouth, and difficulty in mastication; the affection of the feet being manifested by more or less lameness in the foot or feet affected. In a short time the walls of the vesicles are thrown off leaving raw surfaces, which, however, are soon covered by fresh material. In severe cases there is an entire separation of the hoofs from the sensitive structures of the feet. Owing to the escape of contaminated fluid from mouth, feet and intestines, pastures or yards soon become impregnated with the virus, which contaminates cattle walking in these sections, or can be carried from field to field, or from road to road by vermin, small game or dogs. One attack does not render an animal immune from another, but it is claimed by many that an animal is attacked only once in a season, but there are exceptions, and it is not unknown for an animal to suffer from two or three attacks during a period of a few months. Milch cows suffering from a severe attack usually go dry, but when the attack is light the decrease in milk supply is not great. In mild cases the symptoms are not serious, and when the feet are not seriously involved recovery often takes place in from one to two weeks from the first manifestation of the symptoms. In cold weather if the cattle be exposed a hoarse cough is often noticed accompanied by a nasal discharge, and in aggravated cases the mucous membrane of the whole intestinal tract is seriously involved, and when vesicles appear at the anus this condition is indicated. When the feet become seriously involved the animal stands with back arched and with all feet well under the body, or lies most of the time.

TREATMENT.—Preventive treatment of course consists in keeping cattle away from the virus. Curative treatment is more effective than in most contagious diseases. Mild cases require little medical treatment, the disease being a fever that runs through a definite course and terminates in recovery. While the mouth is sore the patient should be given free access to cold water, and if the fever be high an ounce of nitrate of potassium should be given three times daily. The food

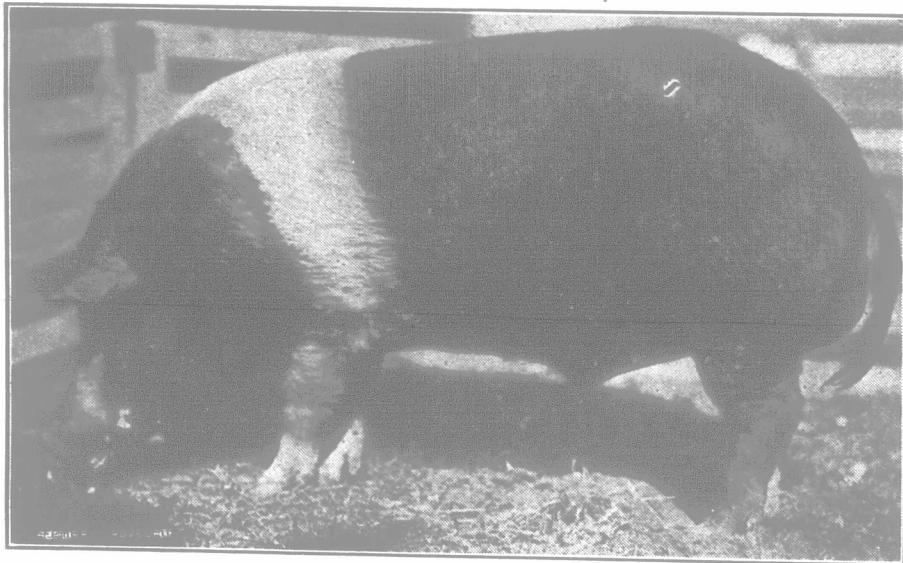
should be soft and easily masticated. If supuration be present in the feet all partially detached horn should be removed, and the raw surfaces dressed three or four times daily with an astringent as 1 oz. each of acetate of lead and sulphate of zinc dissolved in a pint of water or a 4 per cent. solution of carbolic acid. When the soreness is not too great pegets of tow dipped in the solution may be placed between the clouts and around the coronet and bound there by a bandage. In more severe cases, where debility and loss of appetite and strength are well marked, it is well to give stimulents as 4 to 6 oz. of whisky or 2 oz. sweet spirits of nitre in a little cold water every few hours and also tonics, as 2 drams each of gentian, ginger and nuxvomica three times daily. Where the sloughing of the feet is extensive the advisability of destroying the patient should be carefully considered, as treatment is troublesome and tedious, and a perfect recovery or even a partial recovery doubtful. Fortunately this disease is practically unknown in this country, and we hope that the precautions that the Government is taking at present will succeed in preventing its introduction.

WHIP.

Our Scottish Letter.

We should have settled down this week to write a brief review of the quarter of a century which has passed since we first began this monthly letter to "The Farmer's Advocate," but unfortunately the excitement of the time in which we live, accompanied by the companionship of a mild form of dyspepsia which has manifested a recurring affection for us since the beginning of August, has made it impossible for us to stay our minds on that serious task. Instead, then, this week we pen a few thoughts and reflections on the six weeks that have elapsed since last we faced this duty.

Autumn of 1914 will be memorable in Scottish agriculture. The whole season will be memorable quite apart from the stupendous war which be-



Yearling Hampshire Boar.

First and champion, Toronto and London, 1914, for Hastings Bros., Crosshill, Ontario.

gan on the first of August. Farmers have not had a season so favorable to their interests since 1879, the year of the crowning disaster to British agriculture, and of the beginning of sorrows which lasted with little intermission until the close of the nineteenth century. The revival began with the opening of the twentieth century, and culminated this year in fruitful returns coupled with high prices. These two things, under normal conditions, do not always go together. More frequently it is the other way about. When produce is plentiful prices are low—but this season it is not so; produce is certainly plentiful, but all round there is a high level of prices for everything produced on the farm. Sheep have been a splendid trade in spite of an inferior turnip or root crop. The one crop of the season which is a disappointment is the root crop. Swedes were sadly in lack of moisture at the proper time, and turnips of every variety are in a worse plight—having been attacked by mildew. In spite of these drawbacks prices for lambs have maintained a high level all through the store stock season, and sheep of all other ages and both sexes have been making plenty of money. At the ram sales held in September Border Leicesters sold up to £300 apiece, that at the H. & A. S. Show at Hawick in July. Cheviot rams made, in two cases, £105 apiece, and a group of five sold at an average price of £58 4s. Blackfaces made in two cases £110 each, in one case £105, and in two cases £100 each. Other breeds besides these purely Scots and local breeds have been selling well. Suffolks, which for a decade had rather been in the background, have come to the front once more, and

at the Kelso sales were both numerous and high-priced. Oxford Downs have fairly caught on in this country, and at Kelso they actually outnumbered the native Border Leicesters. They do not make anything like the same individual prices, but, selling to a large extent as lambs, these great, lean-fleshed types make good remunerative prices, and many English breeders find it profitable to send large consignments of Oxford Down ram lambs to the Kelso sales. The lamb produced by the Oxford ram out of the Half-bred ewe is a most valuable butcher's beast. It carries a fine deposit of lean flesh, and while much of the fat has to be pared off the chop before it can be sold in a west-end shop the parings are not lost, and the whole leaves a very substantial profit to the butcher. Hence the popularity of the Oxford ram with farmers on medium land who cater for the lamb market.

At present there is a somewhat acute dispute between the wool brokers, who maintain that they are acting in the flockmaster's interest and the Government. The Government has rightly forbidden the exportation of wool to neutral countries during the progress of the war. The reason is very obvious. No matter what precautions merchants in neutral countries may take, it is impossible for them to refuse to sell to those who may be buying for this country's enemies. But the brokers maintain that the strong Blackface wool produced on Lanarkshire and other ranges in the midlands of Scotland cannot be manufactured into cloth. Therefore, they urge that the embargo should be withdrawn, and liberty given to export Blackface wool to the United States where it is in great demand in the manufacturing of carpets. This has been the great market for such wool during the past twenty-five years, and wool brokers maintain that seeing there is no market for such strong wool here, the embargo on its export should be withdrawn. Unfortunately for this contention it is a fact that there is a market for such wool in this country, that quite a fair proportion of it can be sold in this country for the manufacture of cloth, and therefore it is impossible to allow its free export. It is to be hoped the Government may stand firm. The home market may be small, but it is not non-existent, and we cannot afford to run any risks. We are at war; our soldiers and sailors are not on the continent and blockading German ports for fun; they are not having a picnic these times. It is the duty of every true patriot to bear his share of the burden, and at all costs to refrain from doing anything likely, even in a round-about way, to enable the enemy to prolong the conflict.

Shorthorn autumn sales are over. They were held under very depressing conditions. The war cloud was bad enough—to it, so far as England was concerned, were added renewed outbreaks of foot and mouth disease in Kent and Northampton in the very week of the English sales. This meant that no one could buy for export. All ports will be closed against England for at least six months, and those whose hands are not full are hardly to be blamed, if, under these conditions, they refused to fill them. The sales revealed the extraordinary hold which certain pedigree strains have taken of the breeder's fancy. A very sound, healthy lot of cattle were sold by Mr. Parkin-Moore at his farm of Whitehall, Mealsgate, Cumberland. Perhaps no sounder lot of cattle has been put upon the market this year. Yet because of the absence from the catalogue of the favorite lines of breeding, prices were decidedly disappointing. Forty-five head made an average of £32 18s. 5d. They were well brought out, had all passed the tuberculin test, and the herd has given a good account of itself at the Birmingham Spring Show and sale; yet the absence of the fashionable paper made all the difference. It seems altogether too absurd. In the following week we had a series of sales in the north, when again the same results were revealed. The top price at the Collynie sale was 850 guineas, paid on behalf of H. R. H. the Prince of Wales for his farms in the Duchy of Cornwall for a bull calf. The 29 bull calves sold made an average price of £192 2s. 3d. The highest average made by Mr. Duthrie's bull calves was £409 16s. 3d. for seventeen in 1907. The most successful sire in the Collynie herd at present is easily the home-bred Knight of Collynie. Thirteen of his bull calves made an average of £244 5s. A wonderful trade was experienced at

the M
Messrs
hood,
men.
The h
The dif
see.
which
of unbr
as tho
two of
were n
prices
nine
figure
price
Shorth
two-ye
was fir
est de
August
Goldie
pany t
norther
consist
heifers
Ascott,
ent cou
On the
day) t
ferred t
good
averagi
260 gu
Deane
Wilts.
termine
who ov
plucky
their m
of Kin
Shrewsb
guineas,
bull for
Manvers
is one o
as he
breeding
as a si
sweet, w
Ascott 2
average
at a join
the nati
varying
average
was 155
Aberfeldy
strain.
of pedig
were mad
Having r
in 1879,
of Short
able line
ing negle
not neces
for cattl
sound, g
fashionab
The h
flourishin
was held
of Clydes
day of th
Clydesdal
8d. apiec
average o
625 guine
—own sist
Cawdor C
the Cawd
and in
Buchlyvie
313 head
lings of b
313 was
year-olg f
an averag
three-days
land this
The Cumb
build, and
as work h
ings, and
Clydesdale
that they
fluence of
the countr
prise has
its pre-en
draft hors
other Lan
created th
are bred o
horses for
thing to b
castrated
highly prof
The War
trade for t

THE FARM.

A Reply on Insurance and Farm Finance.

Editor "The Farmer's Advocate":

It is not my intention, nor is it your desire, that there shall be a lengthened controversy on the points mentioned in my former letter on the Rural Problem. However, I should like to make a few observations on the letter of "Veritas," which appears in your issue of Nov. 5th. The Latin word veritas means truth. We are always pleased to meet a man who has dipped in "The Spartan Soup of Truth," but our friend reminds me of the story of the skunk. He went for a walk one day and wandered into a woodchuck's den at dinner time. The woodchuck was busy at a dinner of fresh clover plants gathered that morning in a farmer's field. "How-do-you-do, brother woodchuck!" says the skunk. The woodchuck eyed his visitor suspiciously, but said nothing. "Don't you know me?" "Why, I'm your long-lost brother!" "Don't you remember the day we went out for a walk, and a dog chased us? I ran in one direction; you in the other. The dog took after me, and I ran, and ran, and ran, until when nearly exhausted, I found a hole and then fainted. When I came to, I found I had lost a good deal of my round fat form, and some of my hair had turned white. But I'm your brother!" The woodchuck sniffed and sniffed again the air of his den. The skunk meanwhile nibbled at the clover which the woodchuck had collected. Finally the woodchuck said,—"You look something like a woodchuck; you walk like a woodchuck; you talk like one, you eat like one, but I'll be darned if you 'smell' like a woodchuck." So, "Veritas," and truth.

In the first place, we were not discussing the value of Life Insurance as a means of protection for a man's family, but we were considering it as a source of ready cash for emergency needs on the farm, therefore, the diatribe in "Veritas" second paragraph has no bearing whatever on the point under discussion.

The word "endowment" was used in its general meaning and not in a technical sense. The writer has had experience with four life insurance companies, amounting in the aggregate to \$10,000 insurance—not large, but enough to give a person a fair amount of experience. Farmers are a practical people. They find that an ounce of experience is worth a pound of

bluff. The fact that legislation was found necessary to prohibit the "estimate" evil in life insurance is sufficient proof of our statements under this head. Things have usually got to a pretty bad pass in this country when legislators intervene on financial matters.

The gratuitous insult about "his anticipated steal," needs no further comment than this: the thief was the Agent who induced him to take out the policy; and further, the thieving was sanctioned at the Head Office of the Company. The party insured knew no more about Life Insurance than a babe, at the time the policy was taken. No wonder legislation was necessary to prevent this form of highway robbery of innocent persons.

Regarding interest on loans, the paragraph confirms what we said—little or no advantage to the holder of a policy.

We shall conclude this discussion, so far as Life Insurance bears on the subject, by relating one of Lincoln's stories, which illustrates the position of some farmers at the present time: An elderly lady was driving down a very steep hill, when suddenly the horse started to run away, the harness broke, and she was thrown out of the rig. Fortunately she was not seriously hurt. Relating her experience afterwards, she said, "I trusted in the Lord until the brithin broke and then I didn't know what on a'th to do." WOOD B. FARMER.

and last twelve Clydesdales were exported to Canada, and 18 choicely-bred mares, most of them in foal to first-class sires, were exported to New South Wales. The purchase of these last four, is part of a Government scheme promoted by that State to improve the quality of the draft horses bred within its borders. Major Sanderson was commissioned to undertake the work, and spent three full months in Scotland investigating the whole subject, and satisfying himself as to the best means of attaining the end he had in view. When war was declared he had already been at work, and resolved to complete his task notwithstanding the untoward conditions. It is to be hoped that the ship carrying his purchases across the Indian Ocean escaped the attentions of the Emden and may arrive safely at her desired haven. This war is a very big thing, and it will strain all the resources of the Empire to bring it to the only satisfactory conclusion—the annihilation of militarism in Europe and the establishment of frontiers on a basis of nationality and mutual regard with the fullest guarantees for the well being and integrity of the smaller nations. The Canadian troops have arrived, and the Indians have already been doing excellent service. We have heard that the passage of the Canadians across the ocean and up the channel was a magnificent sight. The bottling up of the German fleet has made many things comparatively easy. SCOTLAND YET.

Precautions Against Foot and Mouth Disease.

From the Acting Veterinary Director General, Dr. George Hilton, "The Farmer's Advocate" recently received the following communication, re the foot and mouth outbreak in the United States and the danger to Canada.



Oxford Yearling Ewe.

Champion at Toronto and London, 1914. Owned by Peter Arkell & Sons, Teeswater, Ontario.

"Very strict precautions have been taken by this Department in an endeavor to protect Canadian live stock from possible infection from the United States. Additional men have been placed at proper points along the boundary to watch any traffic which may be going on.

The following order from the Agricultural Department at Ottawa prohibits the transit of animals mentioned therein, and also animal products and fodder.

"Under the provisions of The Animal Contagious Diseases Act, for the period of six months from the date hereof, the importation or introduction into Canada of cattle, sheep, swine or goats or of the flesh, hides, hoofs, horns or other parts of such animals, (with the exception of cured meats, lard and tallow), or of hay, straw, fodder or manure, from the United States of America, is prohibited."

There passed away in Winnipeg, on Sunday, Nov. 8th, that well-known and highly successful Shorthorn breeder and exhibitor, James Yule. Mr. Yule had been in failing health for some time but his end was rather sudden. No man was better-known in Western live stock circles, and as a fitter and exhibitor of Shorthorns he was second to none.

the Mains of Sanquhar sale near to Torres. The Messrs. Law hold three farms in that neighborhood, and the four brothers are famous stockmen. They know how to take care of stock. The byre full of two-year-old heifers from the different herds was a sight worth going far to see. Here again it was pedigree and not merit which made the big prices. Some of the cattle of unrecognized tribes were fully as meritorious as those belonging to the fashionable tribes, and two or three of those belonging to these tribes were not in any way distinguished for merit, yet prices went by families and not by merit. Fifty-nine head made an average of £68 apiece; a figure not at all to be despised. The highest price was 320 guineas paid by the Edgcote Shorthorn Co., (Ltd.), Banbury, Oxon, for a two-year-old heifer of the Clipper family. She was finished to perfection. The families in keenest demand are the Clippers, Princess Royal's, Augusta's Orange Blossom's, Missie's, and Goldie's. A fortnight later the Edgcote Company themselves had a sale at Banbury, and the northern men turned out in force. The offering consisted of 39 bull calves from Edgcote, and 26 heifers from Leopold de Rothschild's herd at Ascott, in the same valley, although in a different county. The sale happened most unluckily. On the previous Monday (it was held on Wednesday) the foot and mouth outbreak already referred to had been confirmed. Still there was a good local demand. Thirty-nine bull calves averaging £81 9s. 4d., the highest price being 260 guineas paid by the noted breeder, J. Deane Willis, Bapton Manor, Codford, St. Mary, Wilts. The family strains again told, and determined values. Messrs. Wallace & Gresson, who own the herd, have been extraordinary plucky buyers. On the evening preceding the sale their most recent purchase, the two-year-old Earl of Kingston, which was first at the Royal Shrewsbury, had arrived home. He cost 3,000 guineas, the highest price paid for a Shorthorn bull for many years. His breeder was Earl Manvers, Holeve Pierrepont, Nottingham. This is one of the best bulls seen for many years, and as he is of combined Cruickshank and Bates breeding, much curiosity exists as to his success as a sire. He is one of the most level and sweet, well-colored bulls seen for many years. The Ascott 26 heifers, sold on the same day, made an average of £47 10s. 8d. On the following day at a joint sale held at Darlington in the heart of the native home of the Shorthorn, 115 head of varying ages but chiefly calves of 1914 made an average of £33 5s. 2d. each. The highest price was 155 guineas paid by Messrs. Munro, Moness, Aberfeldy, for a heifer calf of the Princess Royal strain. This sale again demonstrated the value of pedigree, and any prices above the ordinary were made by animals of certain fashionable tribes. Having regard to the collapse of the Bates boom in 1879, it does not seem wise policy for breeders of Shorthorns to run so much on these fashionable lines. Good cattle of sound breeding are being neglected, while fancy prices are being paid, not necessarily for inferior cattle, but certainly for cattle individually less meritorious than the sound, good cattle whose pedigrees are not fashionable. That way lies disaster.

The horse trade of the country is in a very flourishing state. At Lanark a three-days sale was held a fortnight ago, when over 1,000 head of Clydesdales of all ages were sold. On the first day of the three 240 head, including 45 pedigree Clydesdale females, made an average of £54 12s. 8d. apiece. The 45 pedigree females made an average of £97 14s. 5d., the highest figure being 625 guineas for the mare Montrave Vanda 32752—own sister to Montrave Victory—and got by the Cawdor Cup champion Hiawatha 10067 out of the Cawdor Cup champion mare Lady Victoria, and in foal to the £9,500 horse Baron of Buchlyvie 11263. On the second day of the sale 313 head were sold, mainly brood mares and yearlings of both sexes, and the average price of the 313 was £33 5s. 6d. On the third day 459 two-year-old fillies and geldings were disposed of at an average price of £45 10s. 2d. A similar three-days sale was held at Wigton in Cumberland this week when over 800 head were sold. The Cumberland horses are heavy and strong in build, and have long enjoyed a unique reputation as work horses. The colts make splendid geldings, and one of the remarkable things about the Clydesdales of Cumberland and Westmorland is that they owe nothing almost to the fostering influence of horse breeding societies. In no part of the country are there fewer such. Private enterprise has almost wholly secured for Cumberland its pre-eminence as a great breeding area for draft horses. The demand from Liverpool and other Lancashire centres for heavy horses has created the supply. In Cumberland Clydesdales are bred deliberately to supply the demand for horses for street traffic. It is not a common thing to breed many entire horses there; colts are castrated right ahead—the gelding market being highly profitable.

The War notwithstanding, there is some export trade for breeding horses and mares. This week

THE DAIRY.

Fall and Winter Feeding of Milk-Cows, Science.

Editor "The Farmer's Advocate":

The feeding of cows, as of all farm animals, may be considered from two viewpoints—the scientific and the practical. If one only, is to be taken into consideration then we should say, let this be the practical. An ounce of good practical sense in feeding cows is worth a pound of science when it comes to results, and these are what most dairymen are looking for. Of two men, one a good practical feeder who keeps his eyes open, and the other a trained scientist, who is lacking in cow sense, we should prefer the former, although both can and ought to learn something each from the other.

Let us briefly consider a few of the scientific aspects of the question, then deal in our next article with some practical phases of the problem.

Scientists have set for themselves a solution of the problem of economic feeding, in order that they may help the man on the farm, and in the feeding stable. One German scientist has stated the problem in this form,—“The work of science is to ascertain how much of the gross energy of the food passes over into stored energy—flesh, fat, milk, etc.” Thus stated, we learn that it is a study of energy and the transference of energy in the form of food, to another form,—milk, in the case under consideration. If you ask what “energy” is, we answer, it means work—all farmers know what “work” is. An example of energy in a potential form, is that of a boy 10 or 12 years old, full of life and spirits, or what we may call energy, although it is not easy in some cases to get the boy energy transferred into effective work—it is more likely to take the form of play, which is a form of work or manifested energy.

In order to get a practical basis to work on, scientists have put forward, or proposed various theories in the feeding of live stock. A theory is something supposed,—a speculation. No one ever saw a “theory,” but theories have helped to solve many practical difficulties, including the feeding of cows.

Four leading theories with reference to cow-feeding have been suggested. One of the first, and possibly the best known at present, is the “Balanced Ration,” as set forth by German scientists. While it is true that the “Balanced Ration” theory has been over-worked in many cases, and the writer has gone so far as to say that a successful feeder may entirely disregard it, if he has cow-feeding sense, it is also true that a theory may be an aid in compounding rations if used with sense and judgment.

In a word, this balanced ration theory assumes that in order to have good results in feeding milk cows, each cow must be supplied with so many pounds of “dry matter,” digestible “proteids,” “carbohydrates” and “fat” daily, according to live weight, and the ration must have a certain “nutritive ratio,”—that is a fixed ratio or proportion of proteids or muscle-forming food, to carbohydrates and fat, or heat-forming food. The German standard per 1,000 lbs. live weight, for cows giving a moderate flow of milk, is—24 lbs. dry matter, 2.5 lbs. protein, 13.4 lbs. heat formers—starch, fat, etc., and the whole, with a nutritive ratio (N. R.) of 1 : 5.4. Various other scientists have worked out similar standards.

In order to make use of this standard, it is necessary to have a table showing the composition and digestibility of various farm foods. Such a table will be found in works on feeding, animal chemistry, etc. There are a number of bulletins, which can be got free, that give tables showing the amounts of digestible matter in common foods found on a farm. Bulletin No. 206, published by the Ontario Dept. of Agriculture, Toronto, contains such information. Many people do not know how to make use of such a table as is given on page 10 of this bulletin. Suppose we take ration No. 2, as given on page 9, and make an application of the principles involved. We need to make a skeleton or blank table form, containing four columns as follows:

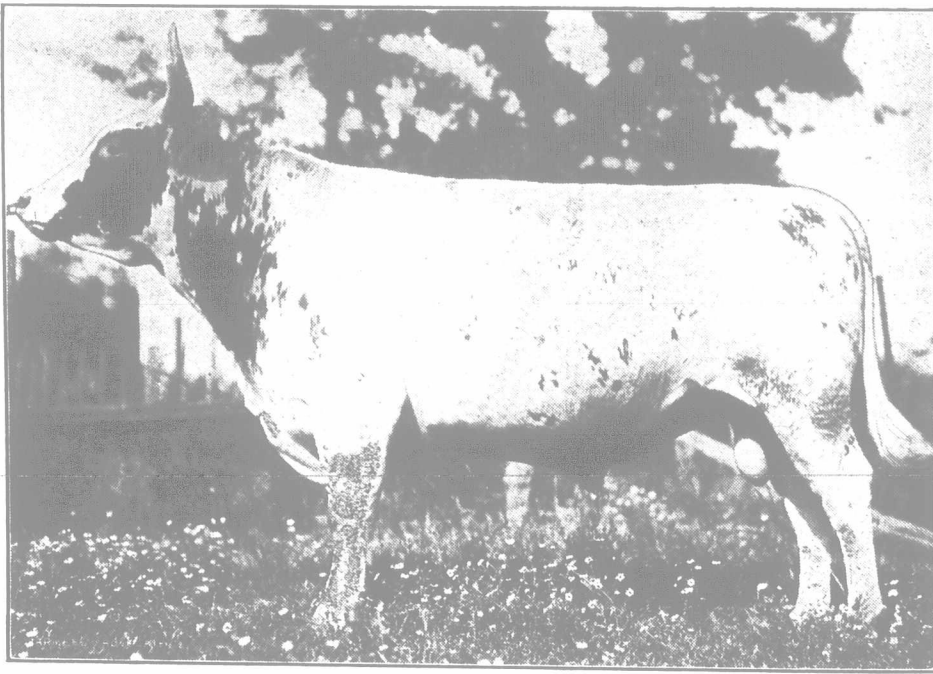
Feed.	Lbs. Dry Matter.	Lbs. Proteids.	Lbs. Carbohydrates and fat.
40 lbs. corn silage.....	8.40	.360	5.160
15 lbs. alfalfa hay.....	13.80	1.650	6.348
8 lbs. corn meal.....	2.67	.237	2.292
Totals	24.87	2.247	13.800

By the table on page 10 we learn that 1 lb. corn silage contains .21 lb. dry matter, therefore, 40 lbs. would contain 40 times .21, or 8.4 lbs., and this we set down in its place in the table. Referring again to the table we find that 1 lb. corn silage contains .009 lbs. digestible protein; 40 lbs. would contain .009x40=.36 lbs., which we

place in the table under the heading, lbs. protein. The table tells us that 1 lb. corn silage contains .129 lbs. digestible carbohydrates and fat; 40 lbs. would contain, .129x40=5.16 lbs., which we place under lbs. c and f. We do the same with each of the other two feeds given, add the figures in each column and get the results as shown. The ration contains 24.87 lbs. dry matter, 2.247 lbs. proteids, and 13.8 lbs. carbohydrates and fat, which corresponds fairly well with the German standard, except that it contains too little proteid or muscle-forming material. This ration would be improved by the addition of one or two pounds of cottonseed meal. On referring to the table in the Bulletin we find 1 lb. cottonseed meal contains .372 lbs. digestible protein, which added to the 2.247 lbs. protein already in the ration, brings it slightly above the German standard. The nutritive ratio of the original ration is 1 : 6.2, which is too wide according to the German theory, but after adding 1 lb. cottonseed meal, the N. R. is 1 : 5.4 or the same as the German standard.

For those who do not know how to determine “nutritive ratio” (N. R.), we may explain: to determine this, divide the total pounds of digestible carbohydrates and fat by the total pounds of digestible proteid material. The result is the number of pounds of heat formers (carb. and fat) for one pound of muscle formers (protein) in the ration. For instance, in the ration we have been studying, there were 2.247 lbs. proteids and 13.8 lbs. carb. and fat, 13.8÷2.247=6.2, therefore, there are 6.2 lbs. heat formers for each pound of digestible muscle formers; or, the nutritive ratio is 1 to 6.2, usually expressed 1 : 6.2.

With a careful understanding of the foregoing and a suitable table showing the digestible nutrients in farm feeding stuffs, any feeder can know whether or not he is feeding a “balanced



A Young Canadian Ayrshire.

ration,” and this knowledge he will find of use to him in the economic feeding of milk cows, though we do not think a feeder should blindly follow ration theories, but use them along with common sense. The latter is more important than any theory.

The second theory, also that of a German, is called the “starch value” theory of Kellner, in which the heat produced by one pound of starch is taken as a standard or unit. This theory has not been so widely accepted as the “balanced ration” theory and with good reason, because foods must perform other functions than produce heat in the animal body. It has been found in practice, that a cow requires considerable proteid material in order to give good results in milk flow.

The same objection may be raised to Armsby's (American “Therm Theory,” in which the heat required to raise 1,000 lbs. water 4 degrees F. is taken as a standard or unity, and all foods are compared with this standard as to relative values in milk and meat production.

The fourth theory is known as “The Feed Unit,” of Danish origin. The Danes are a very practical people. Instead of using proteids, carbohydrates, starch, or terms as a standard, they adopted a pound of grain, such as corn, wheat, oats, etc., and called this a “feed unit.” They compared all other feeds with this standard. This Danish standard is fully and ably discussed in circular No. 37, of the Wisconsin Experiment Station, Madison, published in June, 1912. Those wishing to know more about the Danish Feed Unit system are referred to this publication.

In the foregoing we have briefly discussed the various theories, or scientific phases of the feeding of dairy cows. Feeding is an important question during the winter, especially this coming

winter when feed is likely to be scarce and high in price, more particularly in certain districts on account of the drouth and ravages of the “army worm”; but as previously pointed out, these theories need to be largely used as guides to the practical feeder, and in no case should theories take the place of sound practice—they should supplement it. It is also true that when Science lags Practice marks time. These two need to march along together for best results. The scientist can learn much from the practical feeder, and the man feeding cows can learn much of value to him from the scientific man who might have difficulty in telling a manger from a gutter in a cow stable.

O. A. C.

H. H. DEAN.

Butter Prizes at the Toronto Exhibition.

Editor "The Farmer's Advocate":

Sometime ago I saw an article in your valuable journal, about the reason why the most of the prizes on butter at the Toronto Exhibition went to the Province of Quebec, by Prof. Dean, of the O. A. C., Guelph, but to my mind he did not give a very good and sufficient answer. Nearly all the creameries in Ontario are what are called “cream gathered creameries,” while in the Province of Quebec the milk is delivered at the creamery and is separated there, and the maker has the cream under his control until it is churned. On the other hand in Ontario, each farmer (or nearly so) has a separator and he separates the milk at home, and the cream is gathered about three times a week in the summer season, and about twice a week in the fall and winter. A great many of the farmers keep their cream in the cellar, and each lot of cream has a flavor of its own. It often arrives at the creamery in an advanced stage of ripeness, and the maker is unable to make as good butter as the Quebec man.

In years gone by when there was quite a quantity of butter exported from Montreal, Quebec creamery butter would bring about one cent per pound more than the Ontario creamery. To my mind the Ontario man makes just as much money out of his milk as the other fellow, as he has a much better quality of skim-milk.

During the summer season it takes 100 lbs. of milk to make about 4 lbs. of cream, or 4 cent per lb. additional makes only four cents per 100 lbs. of milk, and the fresh separated skim-milk is certainly worth more than five cents per 100 lbs. over and above the skim-milk, which he would receive at the Quebec creamery. If you will look up the records at both the Toronto and Ottawa Fairs for the past fifteen years you will see that Quebec Province has taken the majority of the prizes at these places during that time. I thought someone more capable than myself would have given the reasons for the superior quality of the Quebec butter over Ontario before now. I certainly think that the creamery butter of Ontario is much superior to the average dairy butter made at the different farms throughout the Province.

N. S.

P. MacFARLANE.

POULTRY.

Menu for Winter Eggs.

Judging by the scarcity of winter eggs on our markets it is evident that our producers have a good deal to learn regarding feeding, and other factors that influence winter egg production. The foundation for a good winter egg yield must be laid during the summer season, but this must be followed up by proper feeding, proper care, and proper housing. Granting that the stock has been raised under the proper conditions and is sufficiently far advanced or well matured to produce winter eggs, the method of feeding that is followed will necessarily play quite as important part in the production.

Before going into detail in regard to methods

of feed few th be cha duction course, hen to of her of Apr

We poultry advanc industr directio es al many i know

winner egg pro and I l amply selves. inducen

raising increas rate. rooster, heavier unless l

For ma hibition oughly During the xxh

side un way for bred-to heavier ced and

ignore proachin known b breeders and mat

find a t them th purposes Stock

to propo little s of feedin special l my expe

The c to layin not enou thrown a attempt

food, as if they first of a of cours

must b winter e into mou not grow the sam

pullets c by feedin 5 to 10 milk with

feather p April th matured Even Mat

for winte pullets s cember. In ord

duction i aim is al This mea or meat

to get de winter e to summ cerned, a

It has tions it eggs, sin available. rations a

wheat or the two I care to is always

illustrate care to scrap in

foods, an ing stock as to con

winter, in pounds of all. All

of table s quite hie essentially

manufactu be fed, an for the fa

Wheat morning a

of feeding laying hens, we wish to point out a few things, which to our way of thinking, must be changed before we can get high egg production on our farms. High egg production, of course, means winter egg production, in that a hen to be a heavy layer must lay the majority of her eggs from the first of October to the first of April.

We all grant that the breeders of pure-bred poultry have done a good deal for the general advancement and improvement of the poultry industry, but they have swung too far in one direction and have lost sight of the utility qualities almost entirely. Show qualities, in too many instances, are the outstanding features. I know for a fact that the great majority of our winners at poultry shows could have their annual egg production measured easily with two figures, and I have known instances where one figure was amply sufficient, as admitted by breeders themselves. Under these conditions there is very little inducement for the average farmer to go into raising pure-bred poultry so far as heavier or increased egg production is concerned, at any rate. If a farmer pays \$5.00 for a pure-bred rooster, what can he expect in the way of a heavier egg yield the next season? But very little, unless his own stock is of a very inferior nature. For many years the writer was a breeder of exhibition Barred Rocks, and therefore was thoroughly familiar with the fancy end of the industry. During recent years my experience has been with the exhibition and bred-to-lay stock raised side by side under the same conditions and fed the same way for egg production, and in every case the bred-to-lay stock gave from 25 to 50 per cent. heavier egg yields. These facts are too pronounced and the results too extreme for breeders to ignore them entirely. The day is rapidly approaching when farmers will demand stock of known and reliable high egg production, and the breeders who can see far enough ahead to select and mate for high egg production will, later on, find a better and more profitable trade awaiting them than they ever had when breeding for fancy purposes only.

Stock from bred-to-lay strains always responds to proper methods of feeding, whereas but very little seems to be accomplished by any method of feeding fancy stock. I do not refer to any special breeds in this connection. It has been my experience with six or eight different breeds.

The criticism that might be offered in regard to laying rations on the farm, are that there is not enough variety in them. Wheat or oats are thrown on the floor morning and night, with no attempt made at giving the fowls exercise. Green food, as a general thing, is lacking. Now, hens if they are to give any winter egg yield, must first of all be through their moult. Pullets will, of course, make the best winter layers. They must be fully matured, in order to produce winter eggs, and yet not too far advanced to go into moult during the cold weather. You can not grow meat, feathers, and produce eggs at the same time in any flock of hens. Immature pullets can be brought to maturity more quickly by feeding a soft bran mash once a day, adding 5 to 10 per cent. of beef scrap, or mixing buttermilk with the bran, to hasten development and feather growth. If pullets are hatched during April they should, with proper care, be fully matured by the time the cold weather comes. Even May hatched pullets can be brought along for winter egg production by proper feeding. The pullets should start laying in November or December.

In order to carry a uniform rate of egg production right through the winter months, our aim is always to balance up our ration properly. This means supplying grain, green food, animal or meat food and grit in the proper quantities to get desired results. After all, the secret of winter eggs lies in bringing conditions as near to summer conditions, so far as feeding is concerned, as is possible.

It has been stated that under college conditions it should be an easy matter to produce eggs, since everything that money can buy is available. This idea is wrong. The simpler our rations are the better our results will be. Plain wheat or wheat screenings and crushed oats are the two cheapest and best egg-producing grains I care to use. Our most economical production is always from the simple rations. To further illustrate the point, I might state that I do not care to feed much cut green bone or beef scrap in a laying ration. Both are high-priced foods, and should be fed sparingly even to laying stock, as the after effects usually are such as to condemn the practice almost entirely. Last winter, in a flock of 750 hens, we fed only 211 pounds of cut green bone and no beef scrap at all. All the other meat food fed was composed of table scraps, and yet our egg production was quite high all winter. Our own laying ration is essentially a farm ration, since we omit all the manufactured and costly constituents that might be fed, and this same ration we recommended for the farm flock.

Wheat should be fed in liberal quantities morning and evening. Wheat screenings are just

as good and more economical. Scatter in about eight inches of straw, making the hens work for what they get. In too many farm poultry houses the grain is simply thrown on the bare floor. Bury the grain and watch your hens work. Exercise is absolutely necessary for egg production. Instead of feeding the oats as whole oats or chop too fine. Do not grind them up or chop too fine. Simply run through a roller chopper, setting rolls close enough to bruise oats or break kernels, so as to expose the white with the hulls still adhering to the grain. Feed these in a self-feeding hopper, so the hens can get all they want at any time. This method of feeding the oats always ensures all hens having a full crop before going to roost. This way of treating the oats also makes them more palatable and more easily digested. Barley may also be fed along with the wheat, but it should not be fed alone. A good practice is to boil it and mix with a hot bran mash and feeding this once a day at noon. Table scraps may also be mixed in with the mash. Avoid feeding heavily on boiled potatoes, as they are too fattening. Buttermilk or skim milk, if available, should be given to drink. Personally I think there is nothing like buttermilk and crushed oats for winter egg production, and these foods should, by all means, be in all farm laying rations. Green food is the cheapest and probably the best of all vegetables. Sprouted oats are better, but it requires considerable labor to prepare them. Mangels or turnips are very good too. Clover or alfalfa, thrown in every few days, makes an excellent food. Coarse sand usually furnishes all the grit required. Old mortar or crockery, pounded up fine, will furnish considerable lime. Oyster shell is probably the best way of supplying lime.

Summing up the whole question of feeding, it remains for the farmer to make up the ration out of his own products as much as possible. Aim to give as much variety as possible. Change the feed occasionally, like feeding an oat chop mash one day and bran another, feeding roots hotted one day and raw another. Avoid condition powders of any kind. For 25 cents you can get as much Epsom salts and charcoal that will do

The second highest, 124 eggs each; the third highest, 115 each, and quite a few pens 110 eggs each. The heaviest laying hen laid 166 eggs in 10 months, the second heaviest 159, and quite a large number between 140 and 155. With better yarding facilities another season we hope to make considerable improvement in these records. (Prof. M. C. Herner, in Farmer's Advocate and Home Journal, Winnipeg, Manitoba.)

Wyandottes Won.

The full year of the International Egg Laying Competition, being carried on by the Philadelphia North American, was brought to a close a few days ago. The winning pen of five hens laid 1,180 eggs, and was a pen of White Wyandottes, owned by Tom Barron, Catforth, near Preston, Eng. Second stood a pen of single comb White Leghorns with 1,139 eggs. These were owned by Chas. Ream, Lancaster, Pa. Third in the list came Barron, with a pen of single comb White Leghorns laying 1,136 eggs. Only one other pen got above the eleven hundred mark, this was also a pen of White Leghorns belonging to Ed. Cam, of Houghton, near Preston, Eng., with 1,109 eggs. This has been a very successful egg-laying competition, the Wyandottes winning out at the very end. Of the Barred Rocks 937 was the largest total, the pen belonging to H. B. Cooper, Ford Road, Philadelphia. One pen of White Rocks went as high as 1,072 eggs. A second pen of White Wyandottes made as high as 1,084 eggs. The best pen of Rhode Island Reds, single comb, laid 1,043 eggs, while the best pen of rose comb Rhode Island Reds laid 886 eggs. The highest of the Orpingtons came in the Buff variety with 831 eggs. Anconas made as high as 912 eggs. Poultry keepers will be interested to know the results of the various breeds.

FARM BULLETIN.

How to Do It!

By Peter McArthur.

When Horace Greeley said in regard to gold

pavements, "The way to resume is to resume," he coined a phrase that may be used as a model for many others. The way to do a thing is to do it. All this wisdom is suggested by the way in which Ekfrid sent a car load of flour to the Belgians. As other municipalities may be in the same state of hesitation that we were in during the last month, I purpose to tell how Ekfrid turned the trick, and how easy it was. Almost every



Barred Rocks and Leghorns at Breakfast.

day some one would remark in one of the stores or in the post-office in Appin, "It's a shame that we are not doing anything to help the Belgians." Then there would be talk about the sufferings of this heroic people, and how much freedom-loving citizens of the Empire owe to them. But everything ended in talk. No one would make the start. Each man seemed to suspect that if he took action in the matter other people would suspect that he was trying to get some glory out of the work. This kind of suspicion was very foolish, of course, but it was strong enough to paralyze our good intentions. But one morning a man said to another, "We really must do something for the Belgians," and he walked across the street and expressed his conviction to one of the store-keepers. The store-keeper agreed, and they both went across the street again and both of them told the other store-keeper that we must do something for the Belgians. He agreed at once, and the snow-ball began to gather size. They stopped a man who was driving down street in a buggy and told him with new-found emphasis what our duty was in the matter of the Belgians. As he hadn't a word to say in opposition, but agreed with them heartily, they decided then and there to call a meeting in the town hall to discuss the matter. They asked the auctioneer at a sale to announce the meeting, and on the following evening about fifty farmers gathered to discuss the situation. At first they proposed to canvass the township for contributions of grain and other food products, but it was soon found that everyone was so unanimous about giving that they might as well do the matter promptly by asking the Council to act for the whole community.

more good than a few dollars' worth of any condition powder now on the market. Put powdered charcoal in the mash every day, and salts once a fortnight.

It is practically impossible to lay down any hard and fast rules for feeding laying hens, in that so much depends on what the farmer has on hand. All feed should be fed judiciously, throwing down a pailful of grain one meal and nothing the next, is a practice that should not be tolerated. It is extravagant, wasteful, and above all shows that you have no interest in chickens. As to quantities, a good rule to go by is to feed one handful of grain to every two hens twice a day; and another way to tell is when there is any grain left in the litter you are feeding too heavily.

Cleanliness is another important factor in getting winter eggs. Have the poultry house clean and congenial for the fowls. Keep the drinking pans clean. Feed clean food. Remove litter as soon as it becomes soiled and dirty, which is usually in two or three months, depending on the number of hens kept in the flock. Do not overcrowd, as it brings on disease. Have the house dry. Cold houses give excellent results, providing they are dry. Do not attempt to improve your house by making it warmer, as it usually results in dampness being more pronounced.

Our year's egg production goes to show again that the fresh air curtain-front house is a good house for this country. These houses are well lighted, dry, well ventilated and although cold in very cold weather they have proven ideal for this climate. The highest producing pens averaged 50 per cent. during the cold winter months, with zero weather in the house many nights in succession. The highest-producing pen on the plant laid an average of 142 eggs each for 10 months.

At the next meeting of the Council the im-

prompt delegation of citizens waited on their neighbors the Reeve and Councillors, and with all due formality we laid before them our suggestion that the Township of Ekfrid should buy a carload of the best flour and donate it to the Belgians. The members of the Council listened to us just as earnestly as if they had not already made up their minds to give the flour, and after due deliberation the proposal was placed in legal form and ratified. By doing this Ekfrid has set

an example to all the other townships that may be in a state of hesitation. And Ekfrid is not going to stop there. We are to have a Patriotic Concert to gather funds to buy clothing for the Belgian victims of the war. Now that they have started they are going to wipe out thoroughly any reproach that may seem to have attached to this particular community for not giving promptly and liberally, and nothing could have been more simple than the way in which it was done.

One man who had probably had a good breakfast and was feeling a little more courageous than usual simply changed a form of expression. Instead of saying, "We ought to do something," he said, "We must do something," and now the thing is done. If one man in every other township will get up enough energy to say "must" instead of "ought" every township will do its duty. Seeing that it is so simple there is no longer any excuse for delay. Do it now.

Vegetable Growers Must Co-operate and Grow Their Own Seeds.

The production of seed at home and co-operative buying and selling were two outcroppings which appeared most prominent at the tenth annual convention of the Ontario Vegetable Growers' Association, held in the Parliament Buildings, Toronto, on November 10th, 1914. Co-operation has been driven home to the growers for many years, and they now see its advantages, and know from experience the obstacles encountered when they become espousers of the cause. It is gaining ground. However, they proceed with it slowly, as it is wise to do, and come in to convention to learn from others, yet the troubled relations of nations have forced them to launch upon a new movement, regarding which one cannot help the other very much—that is to produce their own seed to meet the predicted shortage of 1916. Were it not for the interchange of thought, made possible through a gathering of this kind, growers might encounter some difficulty in meeting such unexpected conditions as are prophesied for the near future. Delegates from all the local branches attend this annual meeting, and carry home to their neighbors the mature fruits of the Central Association's work. The representatives seemed pleased with the results and the character of the convention, and well they might be, for the speakers were well chosen and their utterances to the point. Practical growers, experimenters, and teachers all mingled their ideas in such a way that the audience profited, and practice and science may go on for another year linked together with the one goal ahead. Such sentiment is for the good of the vegetable growers.

Opening the convention, the President, C. W. Baker, London, declared that the day of scientific farming is here. Growing must receive attention as usual, yet the art of packing and the science of selling are two branches that will require more attention in the future. The market is demanding neat packages of vegetables as it does of fruit, and sellers must meet these requests. The President believes in advertising and selling direct to the consumer as much as possible, and this may be accomplished through co-operation, uniform packages and established selling agencies. Mr. Baker alluded to the patriotism of his fellow members, and the open-hearted manner in which they contributed the best from their gardens to the victims of the war.

The report of the Secretary, J. Lockie Wilson, Toronto, made reference to the decrease in prices through an increase in production, but with it all stability of high prices for all the requirements of a market gardener. Another problem confronting the grower is the predicted shortage of seed, and in this connection Mr. Wilson said:

"For the spring of 1915 it is not anticipated that the shortage will be serious, as there is a considerable reserve crop from last year, unless, however, steps are taken in 1915 for the following year's crop of seed, prices are likely to be exceedingly high and the supply extremely limited. To give you an idea of our dependence on the European source of supply, last year the importations for the Dominion of beet and mangel seeds were 1,285,198 lbs., of which 452,721 came from France, and 448,022 from Germany. 32,966 lbs. of carrot seed and 126,687 lbs. of turnip seed were obtained from France, and 224,162 from Holland. The importation through the Toronto Custom House alone were 4,621 lbs. of radish, 1,864 lbs. of cabbage, 95 lbs. of cauliflower, 6,825 lbs. of garden beet, 920 lbs. of garden carrot, 1,202 of celery, and 1,900 lbs. of parsnip seed, the latter from Germany. The value of the beet and mangel seed imported into Canada from Europe was \$385,559, of carrots about \$16,000, and of turnips \$60,000."

Relative to this matter Mr. Wilson informed the growers that the Federal Government had authorized the payment of subventions to competent, bona fide growers of roots and vegetable seeds. This varies for the different varieties grown, and there is also a minimum amount that will be recognized. Space will not permit of a detailed list, but full information will be given by the Seed Commissioner at Ottawa.

Reports from many local branches were read, and the results of the Field Crop Competitions carried on for the past three years received favorable mention.

A suggestion was made by the Secretary to raise the membership fee of the local branches to \$1.00 each, but to allow their remittance to the

Central Association to remain as it is. Many spoke in favor of the change, but no definite action was taken.

CELERY BLIGHT CONTROLLED.

Knowing the ravages of celery blight the vegetable growers were interested in the experimental work carried on this past season by S. C. Johnson, of the Provincial Department of Agriculture. The blight is a veritable curse in many sections, and it is conservatively estimated that in the vicinity of Toronto alone \$10,000 are lost annually through this scourge. Mr. Johnson was able to co-operate with farmers who grew celery on a large scale, consequently his results are valuable, because they are based on field conditions. In no case did the experiment comprise less than 10,000 plants, and ranged up to 75,000. With one exception the outcome was pronouncedly favorable to the control of the blight, through spraying with Bordeaux Mixture and Ammoniacal Copper Carbonate. The latter has fungicidal properties, and was used because it does not leave a mark upon the plant. The plants were sprayed every ten days from the time they appeared through the ground until the first week in September, and some until ten days before the celery was sold or pitted. Check plots were left in each case unsprayed in order to compare the results from sprayed and unsprayed plants.

In one case near London the outcome was not favorable, as 75 per cent. of the plants were affected with blight. The cause of this Mr. Johnson has not been able to learn, but future experimental work, no doubt, will reveal the truth. In seven other fields the advantage of the spraying was so evident that little doubt was left in the minds of the growers as to its value in celery culture.

F. F. Reeves, of Hunter Bay, and R. H. Tier, Islington, corroborated Mr. Johnson in his advocacy of this method of controlling blight. It appears that the treatment is a preventive, not a cure, for greatest good accrued where the spraying commenced before the blight appeared. Subsequent spraying was not so effective. In fields formerly devastated by the disease from 75 to 98 per cent. of the crop was matured free from infection. Neighboring check plots, unsprayed, were badly damaged, and in many cases valueless. Out of 75,000 plants grown and sprayed by Chas. Dabbs, Mt. Denis, 98 per cent. showed no marks of blight, and demonstrated the possibilities of the work. One year's experimental work has considerable value, but should be substantiated by future trials. In them some unencouraging features may be explained away. The trials will go on.

From calculations based on a 1½-acre field it was ascertained that the cost per acre would amount to \$12.00, counting material and labor. This is a small amount compared with the income from an acre of celery.

GROWING SEED IN CANADA.

From experiences in Canada and in seed-growing sections of Europe, Paul A. Boving, Macdonald College, Que., explained the necessity of a home enterprise, and instructed his hearers in the art of producing seeds in their own gardens. "Necessity does away with reasoning," said Mr. Boving as he advocated home production. It is questionable whether it could be developed into a profitable industry when open to competition with seed-growing countries, for they have the advantage of cheap labor, but the shortage in 1916 may necessitate an attempt here in Canada. Conditions are favorable for growing almost all the varieties of roots and vegetables up to the stage of seed production, and the speaker advised the start.

Most of the plants grown by root and vegetable growers are biennials, or those that require two years to produce seed. The roots are planted the second year, and from them the seed develops. This characteristic presents some obstacles, chiefest among which is storing. Where a good cellar is available it is advisable to house them there, if possible in an upright position surrounded with peat, soil or moist sand. Failing this they may be pitted, but the growers should observe the rules of the pitting practice. The main young seed stalks start from the crown of the root, consequently it should not be mutilated during harvesting. The top should be

twisted off, or better still, cut from one to two inches above the crown.

Land intended for growing seed should be rich, well-drained and protected by some windbreak, as the seed stalks are tender and break in the wind. Liquid manure is a good fertilizer, but it should be supplemented with 300 to 400 pounds of acid phosphate per acre. Nitrate of soda should not be used to supply the nitrates. Growth will be too rank, and the seed stalks too tender. For this purpose ammonium nitrate, tankage or blood meal is preferable, as it causes more moderate growth and furnishes resistance to wind pressure.

For small roots 24 inches by 24 inches is a common distance, while large roots should be set 30 by 30. Three men, when used to the work, will set about 3,000 plants per day, one digging the holes, one placing the roots, and one planting, covering the root with soil from the hole ahead. They should be set so deep that the crown barely reaches the surface, and with long roots or on shallow soil it may be necessary to tilt them slightly. Small roots or "stecklings" are sometimes used, but growers will be obliged this coming year to use full-grown roots. They should fix a type in their minds, and plant only those individual roots that will likely produce their kind. During blossom season the insects so scatter the pollen that different varieties should be separated widely by distance, a corn field or a wood lot, else crossing may take place, and the product of the seed will not be true to type. Turnips will cross with rape or the weed known as bird rape; carrots will cross with wild carrots, so it may be seen that weeds should also be considered. Mr. Boving recommends a distance of from 100 to 250 yards apart for different kinds and varieties, and separated if possible by some high-growing crop or wood lot.

We have only given excerpts of this work, and we regret that more space was not available for a more complete reproduction of this admirable address. There is still the harvesting and threshing of the seed to be considered, and we shall endeavor to give our readers the benefit of Mr. Boving's advice in future issues.

As representative to the American Vegetable Growers' Convention, held in Philadelphia, Thos. Delworth, of Weston, brought home a volume of information which he unsealed to the Ontario growers. Press reports spoke highly of Ontario's delegate in Philadelphia, and the members at home were well pleased with what they learned from abroad. One idea communicated to the convention was the selling of fifty-cent packages of vegetables in the towns and cities by the growers in the States. The grower was in a position to give extremely good value for that money, as he retained the right to put in what vegetables as were in season and, to a large extent, to use his own discretion in what he should choose. This wavering of the right to choose on the part of the buyer is an obstacle, but some report very good results from the propaganda. Another feature in some quarters was the sale of a manure which was dried and ground. In this form this treated manure contains as much fertilizing value as five tons of well-rotted manure, or nine and a half tons of ordinary stable manure. This fertilizer could be purchased there for \$3.80 per ton, and looked like a reasonable way of adding humus while fertilizing the land.

The spirit of co-operation prevailed the entire program, yet the complete explanations of the movement came from F. C. Hart, Chief of the Co-operation and Markets Branch of the Ontario Department of Agriculture. Mr. Hart emphasized the wisdom of starting in a small way and working slowly, in order that the society might be sure of its ground. A co-operative association is not a scheme whereby one may get something for nothing; it is a business proposition, pure and simple. Owing to the nature of the union of men and their purpose, it is expedient to employ as manager one experienced in buying and selling; a successful grower alone has not the qualifications for managership, he must have the business experience and acumen. Mr. Hart advised that in the organization of any association, the members should have a clear-cut conception of what was to be attempted, and each patron should be bound to observe his obligations both moral and financial.

EXPERIMENTAL WORK.

The work conducted on the Jordan Experimental Farm was communicated by the Superin-

tendent, F. M. Clement. Experiments with peas, asparagus, onions and tomatoes are being carried forward with the object of improving varieties through seed selection. To date, the results have not been substantiated sufficiently through a number of year's trials to merit a definite report, but growers are looking forward to the outcome of Mr. Clement's work at the Jordan Farm. One important undertaking is the installation of a system of irrigation to arrive at an estimate of the value of such equipment in vegetable gardening. A detailed account of all costs in connection therewith is being compiled, and its publication will be of considerable economic value to intensive farmers.

Vegetable work is receiving increased attention at the Ontario Agricultural College. J. E. Britton, of that institution, told of the tests be-

ing made and the scope of the work. With tomatoes the Industry, Kondine Red and Allsa Craig are being tested under glass, and the Department at the College has a quantity of seed from these plants that they would gladly distribute to growers who would try them. Several years ago an effort was made to obtain if possible an indoor cucumber of the American type with the fruiting habits of the English varieties, which will set freely without being pollinated. Up to the present time these efforts have been rewarded by several promising strains, the type of which they expect to have fixed by another year. Other vegetables are being developed, and it will be wise for gardeners to keep in touch with the work in order to profit by the results.

Vegetable work at the Experimental Farms, Ottawa, was brought before the delegates by A.

J. Logsdail. True it is, climatic conditions at Ottawa are different from those prevailing in other zones of the Province, yet, in spite of that, valuable work is being done there, and Mr. Logsdail dealt chiefly with the breeding end of their endeavors. To show the tendencies of different characters to crop out in the progeny, the results of crossing corn were demonstrated by the ears themselves. This and other features of the work were extremely interesting to the growers.

At the evening session Hon. J. S. Duff, Minister of Agriculture, addressed the convention; Prof. Graham, of the O. A. C., revealed the relation between vegetable growing and poultry raising, and Prof. A. H. MacLennan illustrated gardening in all its phases by the use of slides.

Ontario Fruit Growers Talk Markets and Methods.

Culinary, not cultural, problems present the greatest obstacles to Ontario's producers of fruit. The growers' pulse was taken at the fifty-fifth annual convention of the Ontario Fruit Growers' Association, held on November 11th to 13th, 1914, at the Carls-Rite Hotel, Toronto. This examination revealed the condition that markets instead of methods, selling instead of growing, consumption rather than production were the important features of the case in hand. Let it not be thought that cultural methods were banished from the program, for such was not the circumstance. There was a time when producers were interested in new varieties, in different kinds of fruits, in soils, fertilizers, and implements. They are yet, but they are interested in so far as they will help to please the taste of the consumer or lead him to reach out in a greater degree of appreciation for the Canadian product. How to reach the homes and the store rooms of the World's consumers, and encourage them to a greater indulgence in the fruits of the orchard or vineyard, was the tenor of discussion which continued for two days. Some talked "over-production," others used the less grating and more pleasing term "under-consumption," but it all meant the same—more co-operation, more education along marketing lines, more advertising or educating the consumers to cease abstinence from what is good, that markets may be built up and extended upon which the fruit grower may bring as his offering the best of his kind, which at the present time he is producing at a beggarly profit. Urban people who are so wise about rural conditions, but who usually exhibit greater wisdom in the execution of their own affairs, may smile at the intimation of small margins previously mentioned, but if they care to dive more deeply into this report they may arrive at a saner understanding of what it costs the farmer to produce. Amelioration is sure to be brought about between shipping point, and the ultimate destination of the product. Its character or its scope we dare not predict.

This was the fifty-fifth convention of the Association, yet we say advisedly that considering the vastness of the fruit-growing industry in Ontario the attendance could not be considered representative of the enterprise. Prof. Crow realized the nature of the situation, and brought the attention of the delegates to the fact. There are in Ontario over fifty co-operative associations, yet only seventeen are affiliated with the Central. In the local branches there are, at a conservative estimate, 2,500 members, and it is not unreasonable to expect 500 or 1,000 at a convention of this kind. The problem, as we stated before, is marketing, and in the vortex both the local branches and the Central are engaged. Their interests now are one, and every district, zone, community and hamlet should send its man in order that the growers may present a more formidable front to the obstacles or assailants of the industry. The Association has been effective and has accomplished much, because those who have stood by the work have been broad minded and far seeing. They must have support, however, and "it is up" to the growers generally to enlist in their own protection.

Robt. Thompson, of St. Catharines, Chairman and President of the Association, reviewed, in a few words, the results of the season as to crop and market conditions. He expressed gratification for the results achieved through the advertising propaganda carried on by the Federal Government this year, and advised his hearers to throw off any spirit of depression that might come over them in consequence of one season's dullness, but rather to prune, spray, cultivate and spare no pains to make next season's crop measure up to the standard. A touching reference was made to the esteem in which the late Alex. McNeil was held as Fruit Commissioner, but the meeting and President united in voicing their pleasure that such a satisfactory choice had been made in Donald Johnson to fill that position.

For the first time in thirteen years P. W.

Hodgetts, Secretary of the Association, was absent from the convention. An illness which has confined him to his home prevented his appearance, but the report was compiled and the official work conducted by E. F. Palmer, of the Provincial Fruit Branch. The Central Association now has a total membership of 1,477, which is a large increase over that of only a few years ago. Ninety-one of this total are not members of any local or branch association, and regret was expressed that out of over fifty branch associations in the Province only seventeen were affiliated with the Central.

D. Johnson, the Dominion Fruit Commissioner, brought to the convention a Canada-wide conception of the fruit situation. This augmented by a visit to the orchard lands of the Western States enabled him to convey to Ontario growers some idea of the future relative to production and marketing; with reference to this survey Mr. Johnson remarked:

"In the famous Annapolis Valley of Nova Scotia not more than 50 per cent. of the apple trees are bearing, and those that are bearing are still young and far from yielding their maximum amount of fruit. The orchards are situated in a valley some 100 miles long, and an average of about six miles wide. In this Valley apples are the main product of the land, and the good care that the growers are giving their trees assures us that Nova Scotia will yet produce twice as much, and perhaps four times as much, before many years. New Brunswick is also planting, and on the sloping bank of the St. John River are thousands of acres of young orchard that are not yet producing. Quebec is forging to the front once more, and many acres of Fameuse and McIntosh Red are there producing an apple of superb quality and appearance. With conditions in Ontario we are all more or less familiar. We know that in some districts plantings have greatly increased, while in others San Jose scale has wiped the orchards out of existence; but I think you will agree with me that one-half of our 10,000,000 apple trees are not yet bearing. It is only necessary to drive up and down the concessions of the fruit-producing districts to be convinced that our orchards are just beginning to produce. British Columbia was a great surprise to me. I had often heard of the orchards there, but when brought face to face with them it was a revelation. I traveled hour after hour through solid orchards, kept in a state of perfection seldom seen in Ontario. It is true that they are only producing some 1,000 carloads of apples this season, yet this is only a beginning, as two-thirds of the trees are under five years of age, and the other third practically only beginning to bear. The North West States of Washington, Oregon and Idaho are in a like position, producing now some 15,000 cars. In view of these facts, I can only ask you as I have asked myself time after time: What of the future? The answer, to my mind, is the extension of markets and the use of modern advertising to increase consumption both at home and abroad, and, also, the adoption of some cheaper method of handling the fruit from producer to consumer in order to give the great bulk of our population a chance to eat apples, which is of course only another method of increasing consumption."

Speaking more particularly of the disposal of fruit, organized community effort received considerable commendation. Co-operative societies have had their ups and downs, but their record for 1914 is most striking. The history of the movement for the last few years has proven that the local apple buyers were unable to take the risk of handling fruit to the same extent that an association could. The risk this year was altogether too great for them, and they did not appear at all. The result was that a large percentage of the fruit which they formerly handled was not harvested after it had been produced. On the other hand the co-operative organization stood its ground, and growers who were fortunate enough to be members of these associations were able to market their apples through the so-

ciety, either by f. o. b. sales or on consignment, in carload lots, in such a way as to make a fair profit on the season's operations.

The Commissioner expressed the belief that fifty per cent. of our urban people are scarcely touching apples at all, and those who are using them are not eating half as many as they should. On these grounds the Government carried on an advertising campaign for seven weeks, with the result that the Commissioner's Department received 36,000 letters in 36 days enquiring where apples might be gotten and how they should be served. Wholesale and retail dealers all over Canada claimed that consumption had been increased through these efforts. The speaker was also informed in Washington that a large association, by the expenditure of ten cents per box in advertising on a certain number of carloads of apples, increased the net profit 25 cents per box, or, in other words, an expenditure of 10 cents per box brought them in 35 cents. On these grounds he concluded that the setting apart of 5 or 10 cents per barrel for advertising purposes would have brought the names of growers and associations prominently before the public, and would have returned a good reward for the expenditure.

How to bring the product of our orchards to the consumer at the least possible cost is another matter requiring the most careful consideration. Mr. Johnson stated without hesitation that at least twice as many apples could have been used this year had transportation charges and the producer's receipts been the only cost to the consumer. Only recently the City Council of Ottawa imported a carload of apples from Western Ontario in bulk form, and placed the contents of one barrel in the cellar of the consumer for \$1.30. A single notice in the paper was sufficient to sell the shipment before it arrived. The producer got a fair price for his apples, and the consumer got his fruit at less than half what he was paying for expensive packages when he bought through the regular channels of trade. In another instance the growers in Prince Edward County were paid 25 cents per barrel on the trees. The fruit was picked and loaded by the buyer in bulk form on the cars, piling them some 2 1/2 feet deep. They were handed over to the retail trade in Ottawa for \$1.00 per barrel, and were distributed to the consumers for from \$2.00 to \$3.00 per barrel. The fruit arrived in good condition and was just the class of apples that a great majority of the people want, but it should have been handled more directly to the users. Mr. Johnson is very optimistic regarding the moving of apples in bulk form, especially in a season of heavy yields such as 1914. In the former instance where the city handled the apples there will probably be a rebate on that price, for they were handled more cheaply than was expected. What effect this system of moving apples may have on the trade remains to be seen, but the Commissioner considers it a suggestion that will assist in placing the grower's product before the consumer at a much-reduced cost.

A LESSON IN MARKETING.

"We have been boosting and boasting," said Prof. J. W. Crow, of the Ontario Agricultural College, but we have arrived at the condition in the fruit industry where it is advisable to pay more attention to the plantation now out than to planting more trees. Production has reached a high mark and the grower must extend the market, but the power of advertising is very great, and it is the only means the producer has at his disposal whereby he may increase the consumption of fruit. Prof. Crow gave expression to this last statement, using as an illustration the results that accrued from the advertising of certain articles of food. So well were they known by the public that a retailer was obliged to stock them even sometimes at a small profit. It is not always nor often advisable for the grower to become a selling agent as well; they are two different professions and require different abilities. The grower should, however, keep the consumer informed what varieties are reasonable

and what the prospects are. In seasons of an abundant crop, the users expect a lower quotation. They buy early and consume more, thus starting the crop moving, with the result that it is usually handled at an early date and prices rule high at the end of the season. When the crop is light a high quotation is sent out, consumers delay their buying, apples go into storage and eventually rule low. This has actually occurred time and time again, and the greatest profits are not always made in season of shortage.

System in selling is emphasized in the appearance of the Southern-grown fruit on our markets. During the last fiscal year the importations of bananas into Canada were valued at \$2,663,453; lemons and limes, at \$973,531, and oranges and grapefruit at \$3,630,329. Prof. Crow estimated that this valuation of oranges and grapefruits represented in the vicinity of 16,000 carloads, which enormous trade was attributable, in part, to the advanced methods of the growers and shippers. True it is, bananas have a high nutritive value, and oranges are uniform, presenting a small degree of waste, but apples are superior to the latter fruit so far as actual nutrition is concerned. To meet this stern competition apple growers must pay special attention to their article, but Prof. Crow's contention was that the injunction to pack a better article was ineffective, because it did not get at the root of the trouble. The greatest saving and improvement must first occur in the orchard through the elimination of a high percentage of culls. Even the manager of a co-operative association does not have the power in his hands to cull the pack or enforce its being up to the standard of the society. Most managers would find themselves replaced if they turned back a member's offering, and to insure the stability of an association and the reputation of its pack only those growers who are known to be advanced in their methods and honest in their dealings should be admitted to membership.

The speaker was firm in his belief that the greatest change must come about in the orchard itself. There must be an elimination of culls and an improvement in the fruit. A discussion arose over the value of thinning apples, and its relative merits in this direction. After considerable figuring Prof. Crow was able to show the delegates where there would be a profit of 23½ cents per barrel through thinning. This does not include the cost of thinning, but the expedition with which the crop can be handled, at the latter part of the season, will counter balance, to a large extent the actual cost of the thinning, thus leaving a considerable part of the 23½ cents per barrel with the grower. The same matter arose later, and under a different heading in this report some very accurate figures may be gleaned from actual experiments relative to thinning.

FLAWS IN ORGANIZATIONS.

F. C. Hart, Chief of the Markets and Co-operation Branch of the Provincial Department of Agriculture, brought some points very emphatically before the convention that were of interest to co-operative associations in general. One was the false economy of trying to run the organization too cheaply. Some, he remarked, will not advertise, and they lose sight of the business aspect of the proposition they have in hand. In illustrating this point he referred to the "Sunkist Orange" so common on our markets, which is only one example of what an association has done through united effort and advertising to place their product on every market of the world. It was, furthermore, pointed out that the members must capitalize their own business. The selling of shares and the practice of using notes for security were mentioned with preference given to the latter plan, for in this case an association is not obliged to raise interest on the money. The notes are simply held in reserve until more finances are required, when the banks will advance the money on the security offered by these notes.

As a safeguard for the society, in order to carry it over rough places and meet emergencies a reserve fund was highly recommended, and Mr. Hart expressed himself as firm in the belief that every association should be obliged to retain a reserve fund.

Another feature in connection with co-operative associations is the auditing of their books. True, it is, most of the associations have their appointed auditors, yet Mr. Hart believes that an auditor, well acquainted with the fruit business, would be a valuable adjunct to his department. Such an accountant could review the books of any association, and perhaps point out some weak places in their system of records and suggest improvements. The books comprise a very important end of the organization, and, generally speaking, do not receive the attention and skill they should.

CHERRY FRUIT-FLIES.

The attention of cherry growers was directed by Lawson Caesar, the Provincial Entomologist, to the work of an insect which has acted as a serious deterrent to the production of cherries in the Niagara District. The insect is known as the Cherry Fruit-Fly, and its work resembles very

much and has often been taken for that of the Plum Curculio. The crops of some entire orchards in the Niagara District have been rendered practically valueless through the depredations of this little fly.

The reason that the Plum Curculio has so often been blamed for this work is that the small maggot or larva which is one stage of the life history of this fly, works within the fruit and is similar to the larva of the Plum Curculio. There is considerable difference both in the adult and in the other stages of these two insects. The larva of the Cherry Fruit-fly is found near the pit where it has rasped the pulp away and devoured the juice of the cherry. There is no crescent mark on the outside of the fruit, but often small vents may be seen which are made for the express purpose of supplying a liberal amount of fresh air. Oftentimes there is a slight depression above where the maggot is working, but otherwise its presence would not be detected until the fruit is picked and being preserved.

The adult is a small fly about two-thirds the size of a house fly. Owing to the peculiarities of two different species Prof. Caesar has seen fit to call them the white banded and black bodied Cherry Fruit-fly. This is on account of one species having four white bands on the body of the female and three on that of the male, whereas the bodies of the other species are dark in color. The wings have peculiar markings of dark and light colors. The fly itself is very tame, and can be approached and studied while on the fruit or leaves.

The Cherry Fruit-fly passes the winter as a pupa in the ground. It is a little, brown, straw-colored, oval case buried about an inch or an inch and a half beneath the surface. The adults emerge from these in June and early July. Those of the black-bodied species begin to appear the first week in June in the Niagara District, the other species about the end of the second week. The majority of the adults of the other species is out about June 14th, and of the white-banded species about June 22nd. The flies feed for about ten to fourteen days before they begin to lay eggs. It is very important to know this, for upon that peculiarity is hinged the whole matter of control. Their mouth parts are similar to those of the house fly. They gather up small particles of food through a sucking tube, as it were, and when solid particles cannot be taken in this way, they excrete a small amount of saliva to bring it into solution. When the fly is old enough to lay eggs she selects for the purpose unripe cherries or those just beginning to color. The eggs hatch in about five days, and tiny larvae or maggots at once work their way down to the pit where they live upon the juice. In two weeks or a little less, on an average, the maggots are full grown. When a maggot has reached its full size it works its way out of the fruit, drops to the ground and pupates for the winter.

Owing to the time and peculiarity of the feeding habits of the adults, they are easily controlled by spraying with a solution of 2½ or 3 pounds of arsenate of lead in forty gallons of water. To this should be added nearly one gallon of cheap molasses (black strap). They are very much attracted by this sweetened material, and the spray should be applied to the under-surface of the leaf as well in order that it will not wash off with the first rain. During the first season one spraying will not control the insect, but a second spraying about ten or twelve days later on the Montmorency, Morello and other late sour and sweet cherries will practically exterminate the insects that year.

Prof. Caesar laid stress upon the injury that could be brought about by this insect, but was also very emphatic in his statements that the pest was one of the most easily controlled of any the orchardist has to contend with.

PEACH CANKER.

An important disease of peach trees, known as Peach Canker, was thoroughly discussed by W. A. McCubbin, in charge of the Dominion Field Laboratory of Plant Diseases at St. Catharines. Prepared slides of specimens were thrown upon the curtain, showing the disease in all its developments, and it is impossible in a report to do justice to the address. As to the character of the disease Mr. McCubbin said: "Although this disease cannot be considered as of so serious a nature as Yellows and Little Peach, it is still sufficiently important to warrant attention. The damage done by cankers each year in the peach districts of Ontario is far greater than is generally known. Not only is there a great destruction of individual limbs by them, but whole trees are often destroyed by cankers developing on the trunk or around the crotch, and it is quite common to see trees of which a half or a third has been lost by the formation of a canker on one of the main limbs near the trunk."

The canker itself is a roughened, diseased condition of a twig, branch or the trunk which destroys the growing tissue and leaves the affected parts roughened and unsightly. In the early stages of the disease a gum is exuded, but that is not

indicative of canker, for this takes place at any cut, bruise, crack or injury in a healthy tree. In spite of the fact that grubs are frequently present in the gum or exudate which surrounds a canker, they are not the primary cause. Spores of different forms of fungus are considered the real factor in promoting the injury. Much experimental work has been done by Mr. McCubbin in his efforts to ascertain the cause of canker in peaches, with the result that Brown Rot, such as attacks plum and peach fruits, causing them to dry up and remain on the trees as "mummied" fruit, and another fungus, known technically as cytospora, are largely responsible.

In treating peach canker it is necessary to clean out all dead and dying wood, for in a large percentage of cases the disease begins at dead twigs. It would be impossible, of course, to remove all the dead twigs within the tree that die from natural causes, but where they show signs of canker on large branches or the trunk it is well to take them out. For similar reasons mummied fruit should be cleared from the tree.

It would be absurd, of course, to try to treat cankers on the smaller limbs, but where a canker involves the trunk or main limbs it is well worth while to get it to heal up. The main object is to put the canker into such a shape that the callus around it will grow sufficiently hard and mature to resist the winter. The best way to do this is to clean out all the gum, dead wood, and bark, to allow access of the sun and air and to keep it as dry as possible. After a rain is a good time to do this, as the gum is then soft, and it should be done early enough in summer so that the wood will ripen before fall. After cleaning it is well to wash or brush out the canker with an antiseptic solution (corrosive sublimate 1-1000), and when dry to give it a coat of ordinary lead paint. The corrosive sublimate destroys all fungi in and about the canker, and the paint prevents them from invading and rotting the dead heart wood afterwards.

This treatment costs for labor and material about 5 cents per canker, and has given excellent results in the experimental work carried on during the last three years by Mr. McCubbin, as well as in actual practice by some of the Niagara peach growers themselves.

PRECOOLING OF CANADIAN FRUITS.

Edwin Smith, who is now in charge of the Grimsby Cold Storage explained the precooling system and what it meant to the fruit growers of Canada. Precooling is not a new thing, for as far back as 1872, Parker Earle, of Cobden, Ill., cooled his fruit before sending it to Chicago. The results justified the practice, but it was not commonly known of until Harold Powell, of the U. S. Department of Agriculture did more experimental work in shipping peaches from Georgia to New York in 1904. The favorable outcome of these investigations acted as an impetus to tender fruit transportation, especially that of the orange. Interest in precooling in Canada has led to the erection of the plant at Grimsby which is carrying on experimental and investigation work. It was only initiated during the summer of 1914, and since there were no peaches much of its usefulness was not realized. However, the growers were anxious to test its efficiency, and 35 carloads of tender fruits were precooled and shipped West at freight rates. For preparing tender fruits for shipment, for storing berries and such in case of a lagging market or demand or for storing fruit in order to maintain an even supply on an otherwise glutted market, there is no doubt as to the necessity and efficiency of such a plant. Mr. Smith dealt fully with the different systems in vogue, but space will not permit of their reproduction here. The speaker also described the necessity of precooling and said:

It must be understood that to precool fruit it is not always necessary to have an elaborate and expensive plant. Anything that lowers the temperature of the fruit previous to shipment tends to check its ripening processes and postpones decay. At Summerland, B.C., a type of plant is being experimented with that costs from \$1,500 to \$3,000 and is giving splendid results. At Mission and Hatzic, B.C., the provincial Dept. of Agriculture has carried on experiments to show the beneficial results of using the cold night air that they have in that region, and also by picking raspberries in the early morning while the dew is yet present and removing the moisture by fanning in a Dehydrator before shipping. Such an appliance costs but from \$25.00 to \$50.00, depending on the size and so successful has it been that the growers have become enthusiastic about it and are picking in the rain and making very successful shipments after dehydrating. The practice of wet picking is not to be encouraged in regions where plenty of dry weather is to be had. Mr. J. O. Wigen of Wyndale, B.C., cools his strawberries by placing them in a cooling house situated in a mountain "draw" or ravine, through which currents of cold air pass during the night. This practice coupled with his admirable cultural and harvesting methods gives him a wonderful reputation in all his markets and he thus commands high prices.

AIMS OF THE VINELAND EXPERIMENT STATION.

Fruit growers must keep in touch with experimenters and their experimental farms. The station at Jordan Harbor or Vineland is now directed by F. M. Clement who explained its purposes, aims and methods to the convention. Growers present who have had an opportunity of seeing the farm this summer expressed their approval of its management and the work being done. Mr. Clement pointed out that the main object of the farm was to experiment and in this connection told of the tests now being carried through. ...

More than 140 varieties of peaches in the variety test section looks like an interesting and instructive experiment, but yet not nearly so interesting as more than 1,040 seedlings of Early Crawford parentage at present showing various degrees of hardness or thrift. No two are alike. In some, the growth is vigorous and the trees give fair promise of being equal to or better than their parents. In others, the growth is weak and being claimed by disease. More than 54 varieties of grapes make a nice collection and a very attractive exhibit when neatly arranged but they are not nearly so instructive or interesting as 5,000 seedlings of known parentage growing in the nursery plots. The same might be said of strawberries. The 92 varieties yield a fund of information but not nearly so much as the 7,500 individuals growing in hills near them. The aim is not only a study of old varieties and old methods, but the principles underlying the production now commonly in practice.

An experiment conducted this year in the thinning of apples is of special interest. Forty-six trees in our old orchard are admirably adapted to such an experiment. The varieties are largely Baldwins and Greenings and this year as a whole they were heavily loaded. Twenty-six of the trees were selected at regular intervals and thinned, care being taken to leave the fruit well scattered over the tree and in as perfect balance as possible. An average of 3,191 apples were removed from each tree. An effort was made to leave only one apple to a spur and often not that if there was any likelihood of the fruits touching each other when they had attained full size. The work was done from the 8th to the 16th of July when the fruit was about the size of shelled walnuts and smaller. Thinning shears procured at a cost of 31 cents a pair were used to cut the stems rather than pulling off by hand. Five and three-quarters days for two men or 11½ days for one man were required to do the work at a cost of \$1.75 per day. This is an average cost of 77.4 cents per tree. One fourth of this time was used in picking up and counting the apples, which is equal to 19.3 cents a tree or 58.1 cents net a tree for thinning as it is done commercially. The 26 thinned trees yielded a total of 48.7 barrels of firsts including fancy, 51.1 barrels of seconds and 20.5 of culls. The culls included all the windfalls. This gives an average of 2.46 barrels per tree which are worth \$1.90 f.o.b. or \$4.66 per tree f.o.b. The 20 unthinned trees yielded 25.4 firsts, 23.6 seconds and 23.7 culls including windfalls. This again is an average of 2.46 barrels per tree. At \$1.90 the return per tree is exactly the same for thinned as unthinned. The firsts sold the seconds but on an estimate of \$2.25 for the firsts and \$1.70 for seconds there is a return of \$5.20 for the thinned trees and

\$4.86 for the unthinned trees, a gain of 34 cents per tree in favor of the thinned. A fairly accurate record of the time required to pick and pack the thinned trees gave again an average of six minutes per tree in favor of the thinned trees man. This at \$1.75 per day is worth 7 cents, making in all a gain of 41 cents in favor of the thinned. The cost of thinning was 58.1 cents per tree or, all told, making a cash loss of 17.1 cents per tree.

Three other factors must be considered. (1) A share of the firsts, were fancy and might have been sold for more money if sold alone. (2) It is doubtful if it is good policy to put seconds on the market at all this year when there is an abundance of first and fancy. Their value is really less than has been given them. (3) The effect on the crop for another year. This latter factor cannot be answered now but the experiment is laid out to extend for a period of years and will be reported on from time to time.

DIRECT TO THE CONSUMER.

W. H. Bunting of St. Catharines, spoke on a matter that is engaging the attention of all growers viz.: how they may sell direct to the consumer. Mr. Bunting does not consider the commission man as a robber, thief or an obstacle. He is a necessity in present-day systems and although the grower may be obliged to safeguard his own business, yet the commission house will continue to do business in much the same manner for many years to come. A large trade has been developed by Mr. Bunting, direct with city consumers and even this year when the press made it so widely known that no peaches were to be had in the Niagara District, orders for peaches still came in. The speaker was obliged to inform his patrons that he had no peaches, but lots of other fruits, "just as good." The service rendered by the express companies often militates against the sending of small shipments in that way, but if the grower continues to give the buyer something a little better than he expects his trade will grow in spite of obstructions and obstacles in the way. The press should be used to inform the public what the grower has, then with honest dealings the producer may expect to do business.

THE RETAILERS' POINT OF VIEW.

The retailers' point of view was explained to the Convention by D. W. Clark, of the city of Toronto. Mr. Clark has been engaged in the retail business over thirty years and after listening to the growers and their complaints for a while it is quite a different proposition to hear the retailer explain his difficulties. According to Mr. Clark it costs all the way from 12 cents to 18 cents to turn over one dollar's worth of produce. On the average it costs 15 cents to sell one dollar's worth of produce and after that the profit depends upon the price. It is explained that the service required by the consuming public is a very large factor in the prices of fruit consumed. The commission system was commended because there the retailer could see what he was buying and if he was not suited at one place he might buy it elsewhere. Were he buying direct from some growers their stuff would be quite satisfactory some days whereas on other days it would not be up to the standard. The grower often complains of the retailer, the wholesaler or the transportation companies yet Mr. Clark made

mention of a few growers who were small enough to only fill their boxes half full of fruit, to harvest immature stuff and in other ways injure their own business.

Orchard heaters for preventing injury from frost were brought to the attention of the growers by M. B. Davis, of the Central Experimental Farm. As yet this work is in the experimental stage, but Mr. Davis fully interpreted the extent of their efficiency and cost of operation. Two men can care for two or three acres a night, depending on the facilities they have established, and \$10.00 per acre each night will, in most cases, supply the fuel.

G. E. McIntosh, of Forest, who looks after the transportation interests of the fruit growers, discussed the business methods employed by fruit men, and asserted that the lax methods of business employed by Ontario growers act as a great hindrance to him and to the executive in placing claims against transportation companies. They are not prepared to back up their complaints with figures, and many serious accusations might be carried through to a more favorable consummation were the growers prepared to state their case more plainly with facts and figures. The speaker also described his idea of complete organization through local branches, district organization, all leading up to a central co-operative association.

Relative to the cost of production the speaker had interested himself in a four-acre apple orchard, with the object of ascertaining the exact cost of production per barrel of apples. His exhaustive and accurate accounts led him to conclude that a barrel of apples could not be produced less than \$1.36 per barrel, which was the actual cost during the year in which he made his calculations. Mr. Peart, of Burlington, at this point made mention that in their appraising in that district they had come to the conclusion that it costs \$1.00 per barrel to grow the apples on the trees, and it costs another dollar to pick, pack, haul and load them on the car, thus making a total cost of \$2.00 per barrel at the producer's end.

For sixteen consecutive years records have been kept of the amount of apples produced on 3,000 apple trees in the orchards at the Central Experimental Farm. Prof. W. T. Macoun, Dominion Horticulturist, in a brief paper before the Convention explained the records of many of these trees, but since this work will be published in a very short time in bulletin form we shall not dilate upon these records.

Sealed Cars May Go Through.

The order of November 9th, prohibiting the importation into Canada from the United States and also dressed meat has been amended as follows:

Provided dressed meats, either fresh or cured, in car lots en route from one United States point to another may be permitted to pass through Canada in bond in sealed cars, provided also that the steps and running-boards of such cars have been disinfected to the satisfaction of an inspector of the Department of Agriculture at the Port of entry.

Potato Embargo Lifted.

The United States' embargo on Canadian potatoes has been lifted and these may go into that country subject to inspection.

Toronto, Montreal, Buffalo, and Other Leading Markets.

Toronto.

Receipts at the Union Stock-yards, West Toronto, on Monday, Nov. 16, were 281 cars, comprising 5,322 cattle, 3,435 hogs, 4,167 sheep and lambs, and 230 calves.

The bulk of the cattle were common and medium, all of which were of slow sale, excepting canners and cutters, and these were being readily taken. Choice butchers', \$7.50 to \$8; good, \$7 to \$7.40; medium, \$6.50 to \$6.75; common, \$5.75 to \$6.25; cows, \$3.50 to \$6.75; bulls, \$5 to \$6.75; feeders, \$5.50 to \$6.75; stockers, \$4 to \$5; milkers, \$6 to \$10; calves, \$3.50 to \$10. Sheep, \$2.50 to \$5.75; lambs, \$6.75 to \$7.75, and extra quality light lambs, \$8. Hogs, \$7.75 fed and watered; \$8 weighed off cars, and \$7.40 f. o. b. cars.

REVIEW OF LAST WEEK'S MARKETS

The total receipts of live stock at the City and Union Stock-yards for the past week were:

	City.	Union.	Total.
Cars	69	604	673
Cattle	804	7,119	7,923
Hogs	685	7,888	8,573
Sheep	3,530	8,380	11,910
Calves	95	603	698
Horses	—	2,798	2,798

The total receipts of live stock at the two markets for the corresponding week of 1913 were:

	City.	Union.	Total.
Cars	61	782	843
Cattle	1,247	14,660	15,907
Hogs	151	7,792	7,943
Sheep	984	10,569	11,553
Calves	53	1,142	1,195
Horses	—	54	54

The combined receipts of live stock at the two markets for the past week show a decrease of 170 carloads, 7,984 cattle, and 497 calves; but an increase of 630 hogs, 357 sheep and lambs, and 2,744 horses, compared with the corresponding week of 1913.

There was a liberal delivery of cattle at Toronto for the past week, but on account of the United States market being closed because of the foot-and-mouth disease, trade was in an unsettled condition, especially on Monday. During the week there was about a dozen loads of heavy steers suitable for export to the United States market. These cattle were not extra choice, but are the best that are now being brought forward. They had to be sold at a decline of about 25c. to 50c. per cwt., as the demand for them recently has not been very great. The principal demand recently for a class of light butchers' heifers and steers that weigh from 600 to 800 lbs., that can be sold at a price that will meet the call for cheaper beef. Canner and cutter cows, as well as bologna bulls, sold readily at prices equal to, if not a little higher, than

have been paid before this season. Prices for all classes, excepting the heavy steers, have been equal to the values given in our last report. Two loads of choice heifers, 1,100 lbs. each, sold at \$7.50, which is higher than has been quoted for several weeks. Three of the best loads of steers, for which \$8.50 was asked on Monday, were sold on Wednesday at \$8 per cwt.

Butchers' Cattle.—Choice heavy steers sold at \$7.50 to \$8; two "baby-beef" steers, 700 lbs. each, sold at \$8; choice heifers, \$7.25 to \$7.50; good steers and heifers, \$7 to \$7.40; medium, \$6.50 to \$6.75; common light steers and heifers, with good flesh, but not fat, \$5.50 to \$6.25; choice cows, \$6.50 to \$6.75; good cows, \$6 to \$6.25; medium cows, \$5.25 to \$5.75; canners, \$3.50 to \$4; cutters, \$4.25 to \$5; bologna bulls, \$4.50 to \$5.50; good to choice butcher bulls, \$6 to \$6.75, and once in a while \$7 was paid.

Stockers and Feeders.—Angus Sutherland, of Woodstock, bought a good load of dehorned 1,050-lb. steers at \$6.70, which was the top price for choice feeders, and they were a good lot; steers 800 to 900 lbs. sold at \$6 to \$6.30; medium steers, \$5.25 to \$6; stockers, common to good, ranged from \$4 to \$5.

Milkers and Springers.—The supply of choice milkers and forward springers was not greater than the demand, but there were too many late springers offered. The market was about steady for the

choice cows, but decidedly easier for the common cows and late springers. The range in prices were from \$40 to \$115, the bulk of sales being made between \$70 to \$90 for the best cows.

Veal Calves.—The demand has fallen off for calves, as poultry prices are low on account of heavy supplies of fowl, which has taken the place of veal to a large extent. Choice calves, \$9 to \$10; good, \$8 to \$9; medium, \$7 to \$8; common, \$6 to \$7; inferior, grass calves, \$3.50 to \$5.50.

Sheep and Lambs.—Receipts have been fairly large, and prices were firmer as a rule for lambs, and steady for ewes. Sheep, ewes sold from \$5 to \$6; heavy ewes, \$3 to \$4; culls, \$2 to \$3.50; choice lambs of about 82 lbs. weight, sold from \$8 to \$8.80; good lambs, \$7.60 to \$7.75; heavy lambs, \$7 to \$7.25; culls, \$5.50 to \$6.50.

Hogs.—The hog market gained strength as the week passed, and the following prices were paid: \$7.40 f. o. b. cars; \$7.75 fed and watered, and \$8 weighed off cars.

BREADSTUFFS.

Wheat.—Ontario, No. 2, \$1.10 to \$1.12, outside; Manitoba, at bay ports, No. 1 northern, \$1.26; No. 2, \$1.22½, new crop.

Oats.—Ontario, No. 2 new, white, 49c. to 50c., outside; Canadian Western oats, No. 2 new, 61c.; No. 3 new, 58½c., track, bay ports.



Sale Notes

We collect or discount sale notes for farmers.

Notes left for collection are secure against fire or burglary, and the makers are notified of the due date.

When paid, the money goes to your credit without any trouble on your part.

We shall be glad to furnish you with the note forms free of charge.

The Bank of Nova Scotia

Capital and Reserve \$17,000,000
Total Assets - - - \$80,000,000

BRANCHES OF THIS BANK
in every Canadian Province, and
in Newfoundland, West Indies,
Boston, Chicago and New York

Rye.—88c. to 84c., outside.
Buckwheat.—68c. to 70c., outside.
Barley.—Ontario, No. 2, 68c. to 70c., outside.
Corn.—No. 2 yellow, 85c.; Canadian corn, 82c., Toronto.
Peas.—No. 3, \$1.25 to \$1.30, car lots, outside.
Flour.—Ontario winter wheat, 90 per cent., \$4.50 to \$4.70, seaboard, Montreal or Toronto freights. Manitoba flour—Prices at Toronto are: First patents, \$6.70 in cotton, and \$6.60 in jute; strong bakers', in cotton, \$6.20; in jute, \$6.10.

HAY AND MILLFEED.

Hay.—Baled, car lots, track, Toronto, No. 1, \$15.50 to \$16.50; No. 2, \$13 to \$14.
Straw.—Baled, car lots, \$7.50 to \$8.
Bran.—Manitoba, \$23 to \$24, in bags, track, Toronto; shorts, \$25 to \$26; middlings, \$27 to \$28.

COUNTRY PRODUCE.

Butter.—Receipts have remained about steady; prices steady. Creamery prints, 29c. to 31c.; creamery solids, 28c. to 29c.; separator dairy, 27c. to 28c.
Cheese.—New, 16c. for large, and 16½c. for twins.
Eggs.—New-laid, 40c. per dozen, by the case; cold-storage eggs, 30c.
Honey.—Extracted, 11c. to 12c. per lb.; combs, per dozen sections, \$2.50 to \$3.
Beans.—Primes, \$2.75 to \$2.80; hand-picked, \$2.90 to \$3.
Potatoes.—Canadian, car lots, per bag, track, Toronto, 55c. to 60c.; New Brunswicks, 65c. to 70c. per bag, track, Toronto.
Poultry.—Live-weight prices: Turkeys, 14c.; ducks, 10c.; hens, 7c. to 10c. per lb.; spring chickens, 10c. to 12c.; geese, 8c. per lb.

HIDES AND SKINS

No. 1 inspected steers and cows, 14c. to 14½c.; No. 2 inspected steers and cows, 13c.; city hides, 14c. to 14½c.; country hides, cured, 15½c. to 15½c.; calf skins per lb., 16c.; lamb skins, 90c. to \$1. horse hair, 40c.; horse hides, No. 1, \$3.50 to \$4.50; tallow, No. 1, per lb. 5½c. to 7c.; wool unwashed, coarse 17½c.; fine, unwashed, 20c.; wool washed, combed, coarse, 26c.; wool washed, fine, 28c.

FRUITS AND VEGETABLES.

Cold weather is causing light supplies of Canadian fruits, but foreign fruits and vegetables are being brought forward in larger shipments. Apples, Canadian, \$1 to \$1.25 per box, and \$1.25 to \$3 per barrel. American apples sell at \$3 per box, bananas, \$1.25 to \$1.75 per bunch;

Casaba melons, \$3.50 per case; citrons, 4c. to 5c. each; cranberries, \$6.50 to \$7 per barrel, and \$2.50 per box; grapes, Canadian, 17c. to 20c. per six-quart basket; grape fruit, Florida, \$2.75 to \$3.25 per case; limes, \$1.25 per hundred; lemons, Messina, \$4.15 to \$4.75 per case; pears, Canadian, 20c. to 35c. per case; pine-apples, Porto Rico, \$4.25 to \$4.50; quinces, 50c. per basket. Vegetables—Beets, 60c. per bag; Brussels sprouts, Canadian, 35c. per basket; cabbages, 25c. to 40c. per dozen; carrots, 60c. per bag; Canadian celery, \$3.50 per box of 5½ to 6 dozen each; cauliflower, 50c. to 70c. per dozen; onions, Spanish, \$3 to \$3.25 per crate; Yellow Danvers, \$1 per 75-lb. sack; lettuce, 20c. per dozen; mushrooms, 50c. per lb.; parsnips, 65c. per bag; spinach, 75c. bushel box; turnips, 30c. to 35c. per bag.

Montreal.

Live Stock.—The cattle market held fairly steady last week so far as prices were concerned, but it was noticeable that demand showed a slight improvement. This applied particularly, perhaps, to choice steers. The supply of these was very light, and as a consequence basket; tendency of prices was fairly firm. At the same time, choice stock could be had at a full cent less than some time ago. Best Ontario stock was quoted last week at 7c. to 7½c. per lb., while fine stock sold at 6½c. to 6¾c., and good at 6c. to 6¼c.; medium ranged from about 5½c. to 6c., and common sold down to 4½c. per lb. Butchers' cows ranged generally around 6c. for good down to 5c. for common, while bulls ranged at much the same price, a few bringing 6½c. to 6¾c. per lb. Lambs were fairly good, and prices were moderately firm, at 7½c. to 7¾c. for Ontario stock, and 7c. to 7½c. for Quebec. Sheep sold at 4½c. to 5c. Calves showed very little change. The common ranged from \$3 to \$6, and the best up to as high as \$10 each. Hogs were moderately firm, and prices ranged around 8c. per lb., weighed off cars. Some predict an advance.

Horses.—There was almost nothing going on in the horse market, and the market was not very firm. Trading was mostly at \$100 to \$200 each. Dealers quoted heavy draft horses weighing from 1,500 to 1,700 lbs., at \$225 to \$300 each, and light draft, weighing from 1,400 to 1,500 lbs., at \$150 to \$200 each. Lighter horses ranged from \$125 to \$150. Broken-down, old animals, were quoted at \$75 to \$100 each, and fancy saddle and carriage horses sold at \$300 to \$400 each.

Dressed Snow.—The weather was still mild, but snow had fallen, and the general tone of the market had slightly improved. No changes in prices had taken place. Abattoir-dressed, fresh-killed hogs sold at 11½c. to 11¾c. per lb.

Potatoes.—The potato market was practically unchanged, prices being 60c. per bag, carloads, ex track, single bags being 75c. to 80c.

Honey and Syrup.—Honey was slightly dearer. Maple syrup in tins was 60c. in small tins, and up to 80c. in 11-lb. tins. Sugar was 9c. to 10c. per lb. White-clover comb honey was 16½c. to 17½c. per lb.; extracted, 12c. to 13c.; dark comb, 14½c. to 15c., and strained, 7½c. to 8½c. per lb.

Eggs.—During the past week the demand for cold-storage eggs for export continued, and this compelled householders to increase their living expenses. Receipts were large for the time of year. Prices held firm on fresh-laid eggs, being 38c. to 40c. per dozen, while selected cold-storage stock sold at slightly higher than a week ago, at 31c. to 32c. per dozen. No. 1 cold-storage was also higher, at 29c. to 30c., and No. 2 at 25c. to 26c. per dozen.

Butter.—Creamery held very steady in price. Demand was good. Choice stock was quoted at 27½c. to 28c. per lb. here, while fine was 27c. to 27½c., and seconds 26c. to 26½c. Manitoba dairy was 24c. to 25c., and Western dairy, 25c. to 26c. per lb.

Cheese.—September-made Ontario cheese was sold at 15½c. to 15¾c. per lb. for either white or colored, and October makes were 1c. below these figures. September Western cheese was 15½c. to 15¾c., and Octobers were at a slight discount on these prices.

Grain.—Demand for oats continued good, and prices were again higher. Canadian Western were quoted at 62½c. per bushel for No. 2; 60c. for No. 3; 59½c. for No. 1 feed, and 58½c. for No. 2 feed ex store.

Flour.—Prices of Ontario flour were a little lower in some instances, but generally steady. Ontario patents were \$6 per barrel in wood, and straight rollers \$5.50 to \$5.60. Manitoba first patents were \$6.70; seconds being \$6.20, and strong bakers' \$6 in jute.

Millfeed.—Prices were again higher, both for November and December delivery. Bran was \$2 per ton up, at \$25 in bags; middlings, including bags, \$30; mouille was scarce, and very firm, at \$35 to \$36 per ton for pure, and \$30 to \$32 for mixed, these prices being higher than a week ago.

Hay.—The hay market was decidedly firmer. No. 1 pressed hay, Montreal, ex track, was \$20.50 to \$21 per ton; No. 2 extra was \$19.50 to \$20; No. 2, \$18.50 to \$19.

Hides.—Beef hides were higher, at 16c., 17c. and 18c. per lb., for Nos. 3, 2 and 1, respectively. Calf skins were 16c. and 18c. for Nos. 2 and 1, respectively. Lamb skins were \$1 each, and horse hides ranged from \$1.75 for No. 2, to \$2.50 each for No. 1. Tallow sold at 1½c. to 3c. for rough, and 5c. to 6½c. for rendered.

Buffalo.

The quarantine against foot-and-mouth disease resulted in the leading American live-stock markets being closed the past week. The last outbreak of this dread disease in 1908, cost the American Government something like \$300,000, and the present siege will run many times that amount, so general has it been in its appearance in different States. Between fifteen and twenty States have reported the appearance of the disease, communicated by live stock being shipped from infected and exposed sections into clean parts of the country. The foot-and-mouth disease is something practically new for America to deal with. Confined to a limited area six years ago, it was extinguished within a comparatively short space of time. The Federal Government has been working along with the State authorities, and there is every reason to believe that the spread is becoming much localized, and there is reason to conclude that the leading markets will be opened again for business next week. Business will be limited, however, as regulations at this writing confine shipments to the States in which the stock-yards are located, and no interstate traffic can be had from States where the disease has been discovered and the State quarantined. It will probably be the policy of the Federal Government, however, to release counties which have been free of the disease, and in this manner of removing the embargo on a county at a time, or a group of counties, to gradually get the entire area released, provided there are no new outbreaks, which seems now probable.

WHOLESALE PRODUCE MARKET.

Butter.—Creamery, prints, 37½c.; creamery, extra, tubs, 36c.; dairy, choice to fancy, 33c. to 34c.; dairy, fair to good, 28c. to 30c.; crock butter, fancy, 28c. to 30c.

Cheese.—New, fancy, 17c. to 17½c. fair to good, 14c. to 16c.

Eggs.—White, fancy, 45c.
Dressed Poultry.—Turkeys, choice, per lb., 21c. to 23c.; fowls, fancy, per lb., 17c. to 17½c.; chickens, fancy, per lb., 17c. to 17½c.; ducks, per lb., 19c. to 20c.

Live Poultry.—Turkeys, per lb., 19c. to 22c.; fowls, choice, per lb., 19c. to 18c.; chickens, choice to fancy, 17c. to 18c.; geese, per lb., 12c. to 14c.; ducks, per lb., 12c. to 14c.

Potatoes.—Home-grown, per bushel, 40c. to 46c.

Cheese Markets.

Montreal, finest Westerns 17½c. (Best Easterns, 17½c. Waterbury N. Y. 14c. London 14 13-16c. Belleville, white 14½c. Victorville, 14c. New York, N. Y. specials 14c. to 15½c. white 15½c. colored, average fancy 14½c. to 14¾c. white 14c. to 15½c. skims 13c. to 13½c. U.S.A. N. Y. 13½c. Brockville, 14 13-16c. Vass 13 14 11-16c.



INCORPORATED 1864

Lay the foundation of an enduring prosperity

Canadians everywhere are taking advantage of the present turn of events.

Factory wheels are beginning to spin with the manufacture of goods that cannot now be imported from Europe.

Farmers individually realize that the Empire will need their grain and cattle as never before.

They have accepted the responsibility, and even now are planning to have increased acreage under crop for 1915.

You can do your part by "cutting out" needless extravagances that melt your surplus earnings.

Don't be stingy, but keep down expenses.

You can't find a safer place to deposit your savings than with the staunch old Huron & Erie. Your account is invited, whether large or small.

The Huron & Erie Loan & Savings Company

Main Office:
442 Richmond St.

Market Office:
4-5 Market Square
London, Ont.

T.G. MEREDITH, K.C.
President
HUME CRONYN
General Manager

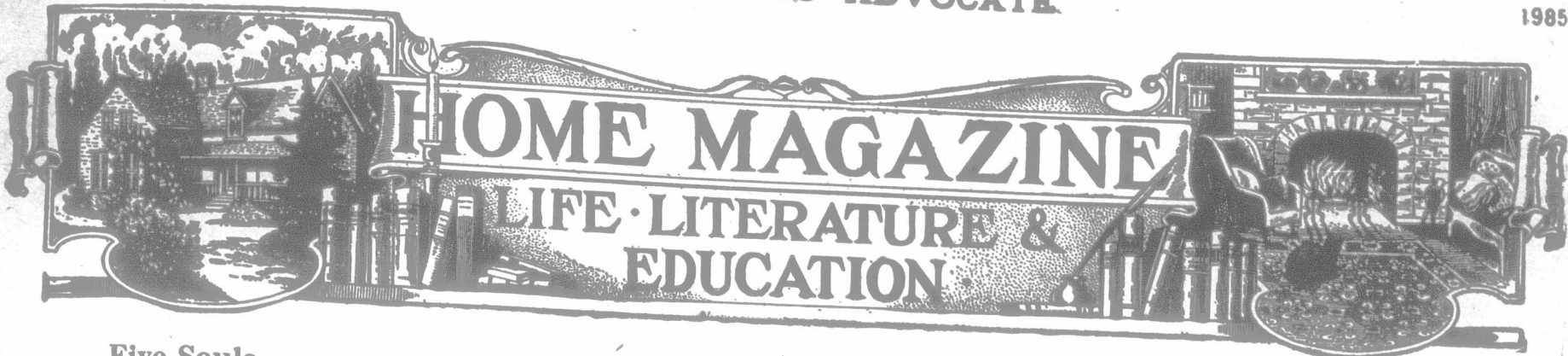
Chicago.

The yards were closed all week on account of the outbreak of foot-and-mouth disease. They re-opened Monday, November 16th.

Trade Topic.

"MUSIC AT LAST."

The art of recording and reproducing things visible has been perfected through the ages, but the sister art of recording and reproducing sound was only born some 37 years ago, when Thomas A. Edison brought out his first phonograph. Since then it has been simply a case of development, phenomenally rapid, and the climax has been reached in the recently-perfected Edison Diamond Disc and Amberola Phonographs. The Edison Phonograph gives us "Music at last."



Five Souls.

First Soul.

I was a peasant of the Polish plain;
I left my plough because the message ran—
Russia, in danger, needed every man
To save her from the Teuton; and was slain.
I gave my life for freedom—This I know:
For those who bade me fight had told me so.

Second Soul.

I was a Tyrolese, a mountaineer;
I gladly left my mountain home to fight
Against the brutal, treacherous Muscovite;
And died in Poland on a Cossack spear.
I gave my life for freedom—This I know:
For those who bade me fight had told me so.

Third Soul.

I worked in Lyons at my weaver's loom,
When suddenly the Prussian despot hurled
His felon blow at France and at the world;
Then I went forth to Belgium and my doom.
I gave my life for freedom—This I know:
For those who bade me fight had told me so.

Fourth Soul.

I owned a vineyard by the wooded Main,
Until the Fatherland, begirt by foes
Lusting her downfall, called me, and I rose
Swift to the call—and died in fair Lorraine.
I gave my life for freedom—This I know:
For those who bade me fight had told me so.

Fifth Soul.

I worked in a great shipyard at the Clyde,
There came a sudden word of wars declared,
Of Belgium, peaceful, helpless, unprepared,
Asking our aid: I joined the ranks, and died.
I gave my life for freedom—This I know:
For those who bade me fight had told me so.

W. E. Ewer, in "Nation."

The Militant Idea.

TREITSCHKE, NIETZSCHE AND BERNHARDI.

"It is impossible," said one the other day, "to form an absolutely unbiased opinion about anything." Broadly speaking, perhaps, the contention was right; there may be people in the world so lifted above personal interest, above family ties, above even patriotism itself in the usual acceptance of the word, as to be qualified to think without prejudice,—and these are the truly great souls,—but they are few indeed, and far apart. Perhaps never in the lifetime of the modern thinker has he found it harder to conclude without prejudice than in regard to the great catastrophe which has come upon the world, or into which the world has blundered, during this year of 1914. It is hard indeed to get hold of enough of the tangled ends to afford a clear clue to the causes of it all, or to descry whether insidious and hidden wires lie underneath the chaotic mass. It is harder still to foretell where the end may be, or whether the ultimate result shall be long drawn woe to this "unhappy planet," or distant good to be worked out according to the slow grinding of the mills of fate in the great scheme of evolution.

—So the thinker . . . In the meantime the unthinking go on, happy in the consciousness of a clear vision, patriotic—chauvinistic, jingoistic, perhaps,—it does

not matter,—ready to die for "the flag" and "the Empire," and a principle.

German, Frank, Belgian, Briton,—all are alike. The German of the rank and file was ready to fight, to begin with, because of his fear of great, populous, ever-extending Russia, and fights now as a wild animal brought to bay because the "Fatherland," dear to him as home country is to all of us, is hemmed in on every side by foes; the Frenchman fights because of his long-standing dread of German power and the old bitterness that has never died out since the Franco-Prussian war and the loss of rich Alsace-Lorraine; the British subject because of Britain's obligations in the Triple Entente

of that of any nation in the world. For what nation—with the exception, indeed, of Canada and the United States in their relations towards each other—can declare that within it the military spirit has no place at all?

In the clearer light of a more advanced day, it is to be hoped, militarism will appear in its true colors, as weakness, not strength, and the finger of the future historian will point back to the armed policy of the world of 1914 as a pitiful relic of medievalism, and to the well-worked-out "system" of Germany as the one blot on an otherwise cultured, and clever, and wonderful people. "Germany lapsed," they will say, "for the Ger-

a coming pressure of surrounding nations, a necessity of so populous and land-girt a country as Germany for expansion and sea-coast? Did commercialism loom large in the dusky but all-pervading background of things?

Whatever be the reason, the consensus of opinion of the war critics of to-day seems to point to three men as the great propagandists of the militaristic idea of Prussia, an "idea" which, filtering down from the circle about the Kaiser, has colored the teaching and life of the Universities, and so on, permeating, or directing, or overruling the thought of the masses. These three men are Treitschke, Nietzsche, and Bernhardi, the one a political historian, the second a dreamer, and the third a military man with a brain military by tendency and training.

As the war goes on the questioning outside of Germany as to who these men are and what they have done becomes more insistent, and so a brief sketch of each may not be out of place.

• • • • •

Heinrich von Treitschke was born in Dresden in 1834, and died in Berlin in 1896. He was the son of an officer in the Saxon army who eventually became military governor of Dresden, but Treitschke himself was prevented from entering the service by deafness. Instead, he studied at the Universities of Leipzig and Bonn, and subsequently, by his lectures as Professor of History and Politics at Freiburg, Leipzig, Kiel, Heidelberg and Berlin, did much more for the military development of the country than he could have done in any official capacity in the army.

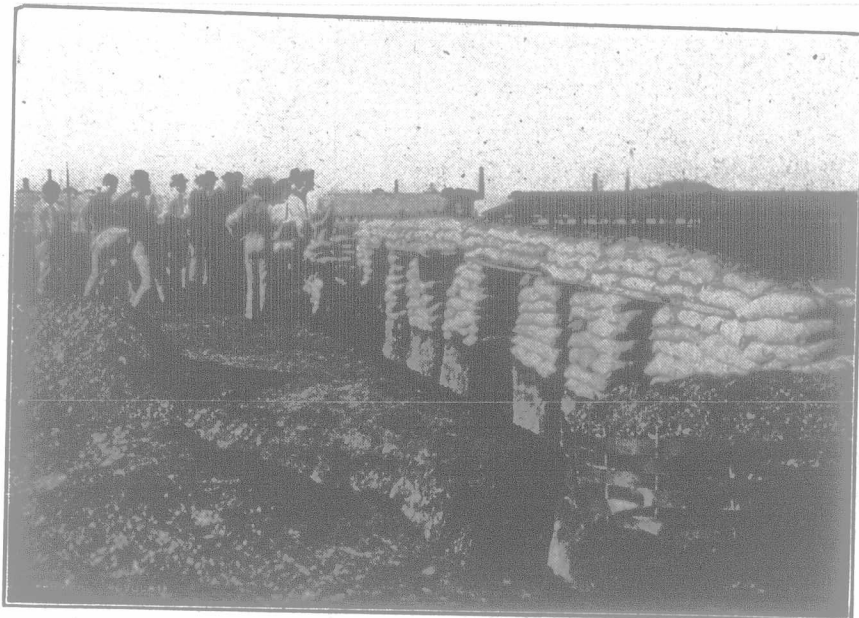
To begin with, Treitschke was a strong Liberal, whose pet scheme was to see Germany a single united state with a parliamentary government, but in 1866, at the outbreak of the war, his sympathies with Prussia were so inflamed that he went to Berlin, became a Prussian subject, and took the position of editor of a Prussian paper in which he published violent diatribes against the Saxon royal house. In 1871 he became a member of the Reichstag, also editor of *Historische Zeitschrift*, and henceforth he appears as the chief upholder of the House of Hohenzollern. His greatest literary achievement was, however, his "History of Germany in the Nineteenth Century," of which five volumes only appeared, his death preventing the completion of the monumental task.

To quote from *Britannica Encyclopedia*: "Treitschke did more than anyone to mould the minds of the rising generation, and to promote the rising power of militarist Germany. He supported the Government in its attempts to subdue the Socialists, Poles and Catholics, and also sympathized with the attacks on the Jews which began in 1878." In 1879 he was the first to accept the new commercial policy of Bismarck.

At all times Treitschke was an inveterate hater of the British, whom he regarded as the greatest stumbling-block in the way of the propaganda which he sought to establish for the spread of German culture—to his mind the only true culture—over the world.

Yet he did not write for the world. He was no citizen of all lands as was the great Goethe before him. He was Prussian to the core. "Foreign critics do not like my books," he said once when the matter of his indifference to non-German readers was broached to him; "That is natural. I write for Germans, not foreigners." His doctrines, then, were to be imposed,—and by Germans.

In the words of Professor Cramb, "Treitschke has become the Bible of modern Germany," a popularity probably due



Toronto Exhibition Park a Military Camp.

Firing trench, with one-man recesses and sand-bag loop-holes. A different scene from that in Fair time.

and the clear postulate that Germany must not be permitted to sweep across "neutral" Belgium and obtain a foothold on the sea so near to Britain's shores. . . . Each has his reason, more or less clearly defined.

And yet the consensus of opinion, judged from the writings of the sages who at this time venture forth to record their findings in regard to the Great War, seems to be that the conflict upon the part of the Allies is being waged against the "spirit" of militarism.—Perhaps it would be truer to say "German" militarism, hated because the most systematized and most formidable

many succeeding 1871 was not the Germany that produced a Kant, and a Hegel, and the great Goethe."

So mushroom a growth indeed has been the rise of militarism in Germany!

Was the momentum set by Bismarck's "iron hand"? Did German successes during the Franco-Prussian war, ending in the horrible carnage of Sedan, the winning of Alsace-Lorraine, and the rich indemnity of two hundred millions sterling wrested from the helpless French populace so inflame the German mind that it must needs, like Alexander the Great, wish for other worlds to conquer? Or did far-seeing minds "simply foresee



Helping the Red Cross by Selling Cookery to Automobile Parties.

to the fact that his teachings have been caught up and exploited by many militarist disciples, among whom Bernhardi is a leader.

Of more widespread fame, beyond the boundaries of Germany at least, was Nietzsche, "philosopher," who was born near Leipzig in 1844, and died in 1900. He, too, studied at Bonn and Leipzig. In 1869 he became Professor of Classical Philology at Basel, but in 1876 eye and brain trouble caused him to give up that work. During the next ten years he lived at health resorts, dashing off from time to time, and usually in the face of keen bodily pain, the brilliant and fascinating, if often irrational and emotional essays which have made his name famous. Towards the end of 1888 he was pronounced hopelessly insane, and remained so until his death.

Anarchistic, individualistic, opposed to democracy, gifted with fine powers of expression, now emphatic, now romantically indefinite, Nietzsche was able to enchain the fancy, even where he could not command the reason, and, indeed, he has threatened to become, even outside of Germany, the center of a cult as well as a subject for a vast army of critics. Perhaps the fact that his philosophy was, after a fashion, altruistic, accounts in part for his popularity, and yet that altruism was to be reached by far-fetched and devious ways, long removed from the sympathetic and humane as touching people in their relations with contemporaries. He looked to a future of "overmen" or "supermen," and held that to the coming of that race everything must be sacrificed.—Darwin's "survival of the fittest" carried into the ranks of men. Weak individuals and weak nations must go down.

... And following upon Treitschke and Nietzsche has come General von Bernhardi, who by his lectures and writings, especially his books, "Germany and the Next War," published a year or so ago, and "How Germany Makes War," has sought to confirm and extend among his countrymen the militarist idea.

By reason of it, all Germany has become one vast armed camp,—among the armed camps of all the nations the most persistent and the most thoroughly imbued with reliance upon the arts and mechanisms of war.

Somehow, Europe, with Germany as the pivot, has swirled into the Great Conflict. Day by day thousands of the best of all nations are being ground under the wheels of the all-crushing, relentless Juggernaut, nor is even the beginning of the end in sight.

Ultimately, will the world, sickened of blood, unite to crush forever all possibility of the rising again of the militarist idea anywhere? Or will the old menace go on, this nation, and that, and the other, arming to the teeth, while the working-people stagger beneath the burden of a useless taxation?—One thing, at least, seems clear: It can never again be said that arming for war is a guarantee of peace.

Perhaps one feels helpless in the face of insuperable questionings, yet the mind of man still looks upward. What better can it hope than in the words recently expressed by a writer in a contemporary magazine, the Toronto Globe:

"Surely out of all this diabolical disillusionment concerning our national defenses, this trust in facts be they never so strong, and armies be they never so brave, and navies be they never so big, there will come home to all our nations the primary truth all history teaches: that there are no sure defenses for the nations in the new day of civilization except the democracy of Good-will: no impregnable fortifications except Brotherhood: no irresistible armaments except Service: no prevailing diplomacy except Truth. Call this Utopia? It is indeed Christian civilization. Its opposite, as the nations of Europe now know, is—Hell."

Only through service can man attain greatness, and until he has made himself a servant, he cannot even become a king.—E. Cowley.

It is no proof of a man's understanding to be able to confirm whatever he pleases; but to be able to discuss what is true is true, and that what is false is false, this is the mark and character of intelligence.—Emerson.

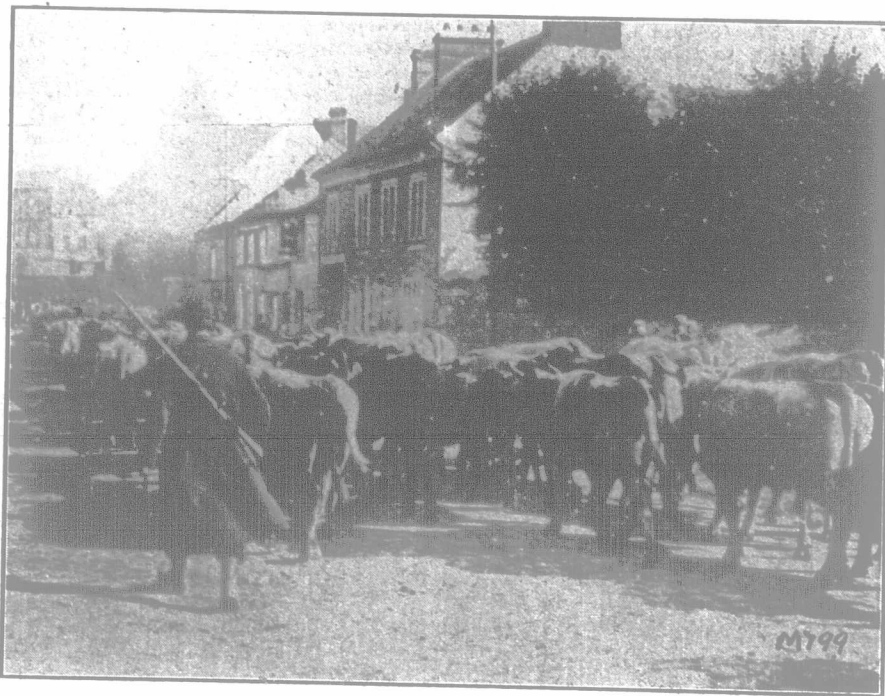
Women's Institute Convention, London.

THE FIRST HELD IN WESTERN ONTARIO.

Following upon the heels of the "first Women's Institute Convention held in Eastern Ontario," at Ottawa, came "the first held in Western Ontario," in London, voted an immense success, not only by the delegates, but by the Superintendent himself, Mr. G. A. Putnam, who has now more conventions to his credit than he has fingers and toes. The weather was favorable—no weepy days—and, doubtless, much of the satisfactoriness of the occasion was due to the excellence of the hall in which the meetings

deed, for here and there throughout the audience might be seen women knitting busily, listening while fingers flew. Incidentally it might be mentioned that a man who came in on one of the trains to London on the first morning, saw about twenty women, all knitting, and apparently of one party. On enquiring who they were, he was informed that they were delegates of the Women's Institute, en route to their "parliament" in the Forest City. Truly, as Mrs. Boomer emphasized in her welcoming address, when urging affiliation with the local National Council, "combined forces may accomplish much."

Mrs. McTurk, of Lucan, in a very happy reply to the address of welcome, noted,



Following in the Wake of the Army.

The French Army's food supply on the march. Copyright, Underwood & Underwood.

were held, the Auditorium of the Y. M. C. A., a theater not too large for such gatherings, and especially built as regards acoustics and seating.

At the various sessions the following ladies presided with much tact and capability: Mrs. McKay, Ailsa Craig; Mrs. Coultts, Thamesville; Mrs. Dawes, Belmont, and Mrs. Hagan, Luton.

Throughout, as might be expected in this strange and awful year, from the opening address of welcome from Mrs. Boomer (read by Mrs. Sage), to the very close, the patriotic note rang steady and clear, the best kind of patriotism, too, which concerns itself with the question, "What can we do to be of service?" And the word was helped out by the

as did also Mr. Putnam subsequently, that the magnificent work the Women's Institute is doing for the aid of the wounded, the soldiers in the field—who need so many socks and warm clothes, poor souls!—and those rendered homeless and helpless by the war, has served, of itself, to mark out the Women's Institute as one of the most influential organizations in the Province.

Mrs. McKay, Ailsa Craig, after sketching briefly the development of the Institute, touched upon a point that should sink deep into the hearts of us all, and especially at this time,—that we should look to it that our ideals be kept high and sane, far above the danger of being swamped by materialism. Perhaps, before



German Lookouts Guarding Camp while Foraging Expedition Prepares Food.

A scene in the German ranks showing the lookouts guarding a temporary camp where food is being prepared by a number of foragers. Note the man at left is wearing the Iron Cross. The soldiers in center are plucking and preparing chickens for food.—Underwood & Underwood.

the war, we were becoming too materialistic, too anxious to possess "things"; now it is ours to learn the lessons of self-sacrifice. Women, she said, can work out the problem of high ideals. She hoped that, recognizing the importance of children, the Convention would discuss the interest women should take in the rural schools.

Mr. Putnam began his address on "The Future of the Institute," by the remark that the audience before him was the most attractive and agreeable he had ever seen; then "spoiled it all" by declaring that he had said the same thing in Ottawa, and would also say it in Toronto. His speech is usually a sort of rudder, heading the Institute on the way which it should keep during the year. So far the chief shoal which he is anxious for it to avoid seems to be the question of Woman Suffrage, seething among the women as may be seen by the applause whenever it is remotely touched upon, but a question which it seems to him wiser to leave to organizations formed for the purpose. Among the schemes which, he suggested, might be more efficiently worked out by the co-operation of the Women's Institute, were: The promotion of more practical work in connection with the schools; the extension of social service, especially in the work of placing unemployed girls—of whom there are so many because of the closing of factories since the war began—in country homes; a movement for bringing the producer in the country and the consumer in the city closer together. He believed, also, that it would be possible for the Institute and its sisters to establish a series of libraries across the continent. Service must be the watchword of the organization. In connection with Red Cross work, he was pleased to say that the women of the Institute had already contributed \$25,000 in cash, besides innumerable sales of clothing, etc., to the general fund.

Reports from the various branches brought the usual quota of stories of good work done,—medical inspection of schools introduced, rest-rooms and libraries established, school-fairs instituted, hospital wards endowed, etc.—with an invariable report of work done, and money raised for the Red Cross. This is a work that must still go on, as long as the war lasts. It takes no little to supply even the meagerest comforts for millions of men exposed to every hardship. Without them our soldiers must suffer horribly. Even at best they must suffer. This should never be forgotten. One branch, by the way,—Rodney—mentioned that paring bees had been held in that district, and apples dried to send to the Belgians.

Mrs. Coultts, of Thamesville, at the evening session, noted the necessity of bringing all work, domestic included, up to the scientific standards of the day. The dominant note of the Twentieth Century, she pointed out, is social reform,—citizenship. "No one can be entirely happy until all are happy," as Herbert Spencer has said. Women's contribution to social service has broadened out until her sphere is the world, and so she must be concerned with war, "the most anti-social of all the works of Satan." She found comfort in the reflection that brute force has never for long been the dominant force.

THE INSTITUTE AS A LEADER IN LOCAL EFFORT.

Mrs. Dawson, Parkhill, gave an illuminating talk on "The Institute as a Leader in Local Effort." The very fact that this subject had been put on, she said, cut a notch showing that the Institute is beginning to show maturity. During the course of the association the women had gone on thinking of anything else rather than leadership. From "recipes" they had branched out to questions of sanitation, food-values, all subjects that come up in connection with the making of better homes. Why better homes?—For the sake of the child. And so there came to be study of the child himself, then of the community as a fitting environment for him, and finally woman found that her work had broadened out to touch all questions affecting public welfare. In Ottawa and Toronto two things had occurred during the past two weeks: A regulation looking to government medical inspection of schools

NOVEMBER
(not con
books, s
been iss
... Th
been tr
business
women
found, a
"make s
To be
If you
must be
ty.—It
the high
of arme
themselv
Yet th
in the
themselv
to usual
hand. I
turned.
stood st
to this?
too often
necessitie
her famil
time of
devote t
This is a
keep on
realize t
ever tak
mother.
stitute in
growing,
co-operat
Mrs. D
that the
the Insti
the natio
somehow.
will be f
whole rur
When vot
that coun
the "quan
British ju
sons,—B
womanho
ADDRE
Sir Ade
Cross and
"Electric
question i
he said,
supplanted
Every man
help in th
healing th
back to h
speaking,
international
at the her
in cash,
The Home
Red Cross
So far th
supplied f
Adam sug
the Empl
might be
by putting
farmers wh
Coming
for the fa
e more g
lightening
more pleas
dren in th
death of p
should be
have a ric
producing
in our own
The telep
rural life
solve much
to a time,
when there
radial rail
formed son
centers for
farmers,
County hav
privilege of
invaluable
the installi
working wa
power wou
claimed, bu
ship council
ing as they
However,
ing outfits,
being sent
early revolu
Concluding
would be pl
Province to
scheme

(not compulsory), had been placed on the books, and a book on child-culture had been issued. These were merely echoes.

Thus, unconsciously the women have been trained for leadership, and their business ability developed. Everywhere women of executive ability have been found, and women of vision who can "make a dream come true."

To be a leader means to be lonely. If you are going to be a leader you must be exalted above the crowd,—lonely.—It means self-sacrifice, patriotism in the highest sense. It needed the tramp of armed men to make the women find themselves.

Yet the greatest work of the Institute in the future will be for the women themselves. At marriage, a farm girl is usually better educated than her husband. In 25 years the tables are often turned. "He" has advanced, "she" has stood still, or even retrograded. Why is this? The man reads; the woman too often lets herself be sacrificed to the necessities of the present, and so, when her family is raised and there comes the time of opportunity which she should devote to the state, she is not fitted. This is all wrong. Every woman should keep on growing mentally. She should realize that for the child nothing can ever take the place of the intelligent mother. Hence the big work of the Institute is to see that women keep on growing, and to teach them self-reliance, co-operation, and democracy.

Mrs. Dawson concluded with a plea that the foreign woman be brought into the Institute and taught. The future of the nation demands that she be taught somehow. Often in one "foreign" home will be found as many children as in a whole rural-school section in some places. When voting-day comes, it is quantity that counts, and the foreign woman has the "quantity." She should be taught British justice and fair play to teach her sons,—British ideals, moreover, of womanhood.

ADDRESS BY SIR ADAM BECK.

Sir Adam Beck spoke first, on "Red Cross and Local Relief Work," then on "Electricity for the Farm." The war question is not a question of peace, he said, but whether liberty may be supplanted by militarism or despotism. Every man and woman in Canada can help in the work of relieving distress, of healing the wounded, and bringing men back to health. Up to the time of speaking, the Red Cross—whose work is international—had received from Canada, at the headquarters in London, \$195,000 in cash, besides socks, garments, etc. The Home Relief League, allied with the Red Cross, looks to families of soldiers. So far the local society in London had supplied fifty families with clothing. Sir Adam suggested that in connection with the Employment Bureau the Institute might be able to give substantial help—by putting the Bureau in touch with farmers who need help.

Coming to the question of electricity for the farm, the speaker recommended a more general use of electricity for lightening labor and rendering farm life more pleasant. There are too few children in the schools, he said, there is a dearth of parents in rural districts, there should be more people on the land. We have a rich land, and yet we are not producing anything like what we require in our own country.

The telephone has done much to make rural life less lonely; good roads will solve much of the problem, and he looked to a time, in the near future, possibly, when there will be a general system of rural roads. A Commission was formed some time ago to arrange for centers for distribution of power to farmers. Dozens of farmers in Oxford County have availed themselves of the privilege of electricity, and are finding it invaluable for dairying operations, for the installing of vacuum-cleaners, self-working washing machines, etc. Electric power would be more widespread, he claimed, but for the fact that the township councils have not been as enterprising as they should be in the matter.

However, demonstration outfits—threshing outfits, circular saws, etc., are now being sent out, and he looked to an early revolution in the matter.

Concluding, Sir Adam said that he would be pleased to go anywhere in the Province to explain the working of the scheme.

INFECTIOUS AND CONTAGIOUS DISEASES.

Dr. Amyot, Provincial Board of Health Laboratories, Toronto, Ont., followed with a comprehensive address on "The Transmission of Contagious and Infectious Diseases." The spread of these diseases is due to micro-organisms. These may be bacteria (not all of which are harmful, and many exceedingly useful), yeasts or moulds; but all are infinitesimal in size. Typhoid bacteria, for instance, are so small that a billion can be crowded on the head of a pin, while among the protozoans some are so small that an ultra-microscope is required to see them. After citing the uses of various helpful bacteria and moulds, Dr. Amyot turned to those by means of which diseases are distributed. Some of the organisms cause disease by producing a special kind of poison. There are no new diseases at all. Mummies buried 6,000 years ago show evidences of tuberculosis; typhoid has been one of the diseases of armies and communities since records were kept; but it

Such organisms are not originated in dirt, but are kept alive by being passed on by human contact. There is always a great increase in diphtheria in the fall after school begins.

Scarlet fever, measles, common colds, and tonsillitis, are all spread in the same way. "Scales" do not carry the disease.

Typhoid germs occur a little in mouth secretions, but are in myriads in intestinal secretions. If these are carelessly disposed, they may be carried into wells, or flies may walk over them and carry the bacteria to foods. Anyone nursing typhoid patients should give great care to the cleanliness of her hands. A typhoid patient may carry organisms for months, even years. As the germs will live for three days outside of the body, they may be carried in streams for 75 miles, and so the disease is spread.

Dysentery, which in an army kills 40 per cent. of those attacked, is one of the diseases which our soldiers at the front have to face. Typhoid fever is fatal to ten per cent., Asiatic cholera to



Guarding the Welland Canal.

is only since the perfecting of the microscope that we understand infectious diseases due to organisms. We know now, chiefly due to Pasteur's investigations, how many diseases are so transmitted.

Diphtheria organisms may be on any part of the body, but appear usually in the throat. The bacteria are very small, and multiply in the secretions of the mouth even days before the symptoms appear. They form a local poison that breaks down tissue to form food for the bacteria, and the poison is absorbed and acts on nerve-centers, muscles, heart, etc. Sometimes the organisms are found in the mouth as long as three months after the disease has been apparently cured. They may be transferred by coughing or sneezing, which send them floating upon the air. Sunlight, it is true, will kill them in about half an hour. They may also be transferred on the fingers, e. g., by a hand-shake, or the nurse may transfer them to food, hence the necessity of disinfectants on the hands and sterilizing of dishes.

about 80 per cent. Infected food will spread these diseases. Bubonic plague, which attacks animals as well as men, is disseminated by fleas and body-lice (which overrun every army), which often derive the germs in the first place from rats. Typhus spreads in the same way, while malaria, carried by mosquitoes, may trouble our soldiers in Egypt and Africa.

Inoculation has been found helpful in certain diseases, and all of the soldiers who have left Canada have been inoculated against typhoid.

Incidentally, Dr. Amyot mentioned a fact that should make the needles of the sock-makers in Canada fly faster, viz., that the feet of the first of the wounded brought to London for treatment were worn to the bone from long marches. "The soldiers were walking on their bones," he said.

The evening closed with a series of moving pictures—object-lessons to show the need for pure milk, the care of babies, and dental and medical inspection of schools.

SECOND DAY'S SESSIONS.

Reports from various branches on this second day added to the lists of work already given: steps taken to prevent cigarette selling, sanitary drinking fountains placed in schools, cemetery work, aid for children's shelters.

Miss Hotson, of Parkhill, presented plans for the establishment of Chautauqua Reading Courses, enumerating four books prescribed for this term's work: "Among English Hedgerows," "Through England with Tennyson," "Democratic England," "Your Child Today and To-morrow." A weekly magazine, "The Independent," is also part of the course.

Mrs. Wilson, Parkhill, outlined the progress, so far, of that much-needed innovation, "Medical Inspection of Schools."

PATRIOTISM AND CITIZENSHIP.

Mrs. Parsons, of Cochrane, gave a patriotic address. After tracing briefly the development of Britain into the British Empire, she desired to leave three thoughts with those who listened.

- (1) The idea of sacrifice. "Have you given until you felt it?" At this time luxuries for ourselves must be omitted. We must spend, but in a different way. In Temiskaming, since the war began, she had seen the widow's mite given over and over again. The call will come again and again. Our duty cannot end until the peace of the world is restored.
- (2) The idea of Service, which grows out of Sacrifice. "How can I BEST serve?" We should ask. We should look at the Hindu—turned back from our Western shores last summer—and at the recently divided Irish, take our lesson from them and sink our little differences in common service for the big things. Be keenly alive, she warned, to the very latest from the scene of war, and send whatever is most needed. (3) Sympathy.—Don't keep back your sympathy. Give it to the mother-hearts wrung with grief. . . Mrs. Parsons concluded with an appeal to help those who need work in Canada by buying things made in Canada.

"THE MOTHER AND THE CHILD."

Dr. Backus, Aymer, followed, also with a touching reference to the war. "We are waiting and listening for something definite. This only we know; the world is filled with mourning."

The cause of the war has been due to weakness in the management of national affairs. Quoting Schopenhauer, the speaker noted the fact that in Germany motherhood is looked upon as of but little importance.

Passing to generalities she said that the only way to make this world gentle is through knowledge of woman; now, more than ever before, this knowledge is necessary. Because of the war, a great many of the fathers of the future will be weakened, and children will have to depend upon their mothers for physical stamina. In one way, Nature will bring partial compensation; women will have to do work that they never did before, and so develop strength. By Nature's way, however, children usually receive their physical strength from the father.

All the facts relating to the mother and the child should be known to the mother. The reticence of education on this point is regrettable, and the speaker thought the Women's Institute would do well to call the attention of educationists to the lack. Everyone is not fitted for motherhood; the feeble are propagated, and, still worse, the feeble-minded. Women have the power to give to the world a godly and superior race, or a cowardly and inferior one. Through knowledge they are able to do this, hence the necessity that they be taught, and the young men, too. So far we have made all too little progress in the matter of how we can produce the best humans; there has been a little murmur of eugenics, but, unfortunately, it has not been popular,—a little god called Cupid has "kicked things over."

It is only fair that the girl should be taught every responsibility before she marries. She should know that a mother can influence her child pre-natally. If the mother's pre-natal thoughts are exalted, the child will inherit the tendency to think noble thoughts; if the mother's thoughts are low or petty, the child will inherit those tendencies. Dr. Backus referred to the Hannah, Elizabeth and Mary, of the Bible, and to the mother of the poet Gray, who, before the birth

of her son, spent many hours weekly in the churchyard at Stoke-Poges, thinking and admiring nature,—so paving the way for the writing, in days to come, of the famous "Elegy."

The nursing child, moreover, drinks in the mother's temperament and emotion.

If young women in selecting husbands would think of them as fathers, they would be more likely to select the physically strong and mentally and morally efficient.

The mother's first duty is to her child. It should come before husband, house or society.

.....

Miss Armstrong, of Regina, gave an interesting account of the work of the Home-makers' Clubs—sisters of the Women's Institute—in the Far West, and of how much they have meant to the women on the lonely prairies.

Mrs. Courtice, of Wallaceburg, followed with a speech on "How to Maintain Interest in Institute Meetings," which captured the audience by its practicability and its humor. She dwelt upon the necessity of choosing a president who has the ability of drawing out the best efforts of all. Every institute should have a library in process of growth—a point emphasized by the remark that "some people think more of scrubbing the last inch of dust out of their houses than of sweeping the dust out of their brains."

... In giving papers and addresses, care should be taken to have them to the point—not ramblingly. . . . Incidentally, "The Advocate" and a few more enjoyed it when Mrs. Courtice declared that "Last year we ran our branch on the Bible and 'The Farmer's Advocate.'"

Mrs. Amos, Exeter, carried on the same subject. A flower-show, combined with an exhibit of curios, had been found attractive in the Exeter branch. This winter the ladies who belong to it are undertaking a study of the countries covered by the war.

Dr. Helen MacMurchy, Toronto, chose for her subject, "The Domestic Help Problem," interpreted by her as "The New Houseworker." Domestic work should be more scientific, and house-keeping given more honor. "In regard to the houseworker," said the speaker, "don't you think we are about at the stage that nursing was before Florence Nightingale?" The houseworker should be trained, and her training should be recognized.

There is room for a great deal more scientific information than we have at present. The Board of Health of Ontario is about to issue a book which she would recommend, "Best Foods to Buy During the War." Dr. MacMurchy advised those who kept help to see to it that the maid was given a place to entertain her friends.

UP-TO-DATE POULTRY-RAISING.

Prof. Graham, of the O. A. C., Guelph, spoke on the above topic. Breeding, he said, is the foundation. Fowls have been bred for table use, and bred to lay, even to laying in the winter when eggs are high in price. The reason why so many people fail to do well with a very large flock is that such a flock requires a "city board of health"; it is hard to watch all conditions. "Don't inbreed," he warned. "That is all right for experiment, but too expensive for private flocks."

To get lots of eggs in winter, eggs must be hatched before the 24th of May. Farmers think that if a hen lays in winter she will not in summer, but there has been nothing in the experiments to show that she can't lay right along.

Warmth in housing is not necessary. A single ply of boards with the south open is sufficient. The very worst thing for a hen is bad air. Fresh air without direct draft over the birds is a necessity.

Hens should be kept dry and given all the sunlight possible. They should not be overcrowded; allow more than four square feet to the hen.

There is no one best food. If there is one that is better than the rest it is sour milk. Never use sweet milk, which is bad for the hen's digestion. If you can't get sour milk, use one teaspoon of hydrochloric acid to the gallon of drinking water and keep it in a wooden tub. All drinking vessels should be kept scrupulously clean.

Birds need grain food, animal food (milk will take the place), and vegetable food. About one-third of the day's rations should be vegetable, hence in

winter give cabbage, mangels, potatoes, and beets. Give all the whole grain they can eat, scattered in straw. Vegetables may be fed raw or cooked, but June or July hatched birds should be filled with cooked roots once a day to make them grow. Grain food may consist of corn, wheat, and crushed oats. Mix a handful of whole wheat and corn for every two birds, and give vegetables for dinner. If you have no sour milk, give a little cooked beef scrap. Dry, crushed oats, may be kept in the hopper all the time.

Don't feed little chickens until they are 72 hours old, then "keep them hollering." Don't kill them with kindness.

Be always on time in attending to fowl, and, if you keep Leghorns, speak before you open the door.

.....

After a parting word from Mr. Putnam the Convention closed, and the delegates adjourned to the Alexandra school, where tea was served by the National Council of Women, thus bringing to a close a very successful session of the first annual "Women's Parliament" held in Western Ontario.

Hope's Quiet Hour.

God With Us in the Fire.

Thus saith the LORD Fear not: for I have redeemed thee, I have called thee by thy name; thou art mine. When thou passest through the waters, I will be with thee when thou walkest through the fire, thou shalt not be burned.—Isa. 43: 1, 2.

"The changeless clasp of an Almighty hand Upholds us wheresoe'er our way may wend; Love, that we slowly learn to understand, Leads us, by day and night, o'er sea and land, On to our journey's end."

When the angry king of Babylon had thrown the three faithful servants of God into a burning fiery furnace, he was astonished to see that the fire had no power to injure them, and that One like the Son of God walked with them in the midst of the fire. How often it is so. God is always sitting as a Refiner and Purifier of His precious silver and gold. When a trustful soul is placed in the furnace of sorrow or pain, the changeless clasp of an Almighty hand sustains him—the hand of One Who has Himself endured the fiercest fire

"The loneliest can never be alone, The everlasting arms are round us thrown, Whether we wake or sleep."

Henry Van Dyke tells a story of a young man who bartered the great word "GOD" for earthly prosperity and happiness. The price was paid in full. He became wealthy and famous, married a beautiful and loving wife, and they rejoiced together over the growing beauty of their son. But there was one thing lacking in their sweet cup. It tasted flat and insipid, and they did not know why. God had been blotted out of their memory, and their happiness rested on a very insecure foundation.

An accident brought their loved child to the very door of death, and they knew of no strong Helper and Comforter. In that time of terrible anxiety and pain they made the Great Discovery—they found God in the furnace of affliction. Having found Him, they knew that His presence and fellowship meant infinitely more to their hungry hearts than all earthly happiness

That story has been often repeated. Men and women have devoted themselves to the pursuit of earthly gain, allowing the remembrance of God to be crowded almost entirely out of their hearts. The Love of God has sought them tenderly and gently for years, but His friendship has been offered in vain. Then the burning pain of sorrow has come in like a flood, and earthly happiness has gone down under it with a crash. God says: "Behold, I have refined thee, but not

with silver; I have chosen thee in the furnace of affliction. For Mine own sake, even for Mine own sake, will I do it." Let us remember that God wants to make our souls pure and beautiful, purging us from selfishness, pride and worldliness, not for our own sakes only, but also for His sake. He cares for our friendship, and will not be satisfied until He has won our love.

May I quote from an article about "Our Parish," which appeared in a British paper about two months after the war began?

"We were yet to learn the meaning of a word. It is in the darkness that the stars appear and the immeasurable abysses of the infinite universe, and it was when the dusk sank into the deep night that the word rose high in the firmament of life and burned red into our souls. And that word was 'GOD.' It seemed so incredible to us that we should need that old word. We were so powerful and so rich! Our faith was strong, but it was in the 'reeking tube' and in the 'smoking shard,' and in the number of our Dreadnoughts. Then all these things seemed to fail us. A nightmare seemed to fall on us—a nightmare which lifted not night or day. Our soldiers were driven back, back, back. They fought by day and marched by night, and we heard in the night watches the beating of their wearied feet, blood-stained. Was there to be no end to that tramp, tramp of men yielding before death? Was the Empire, reared by the heroism of generations, to crumble under our feet? The ghastly deeds of shame—were they to come to our doors? We looked at our children, and they could not understand the light in our eyes. These deeds of hell—they might occur even now under the shadow of our hills. It was then the word began to blaze in the heavens. And the word was—'GOD.'"

Men may forget God in the ease of comfortable existence; but danger threatening those they love, with terrible silence and long uncertainty making the heart sick, will break down swiftly the barrier between man and God, and bring the most sceptical people to their knees.

We cannot shut our eyes to sorrow now. The rich cannot harden their hearts by selfish luxury and pleasure, forgetting the hard lot of the poor. The officers and privates share privations and hardships in the trenches and on the battlefields, and their wives and mothers at home are drawn together by their common anxiety and sorrow. Family squabbles, and small quarrels of neighbors, are burned out in the fire of a world's agony. We clasp hands as comrades, and try to inspire our fellows with courage and good cheer. In the thick darkness we grope like children for our Father's hand, and if we seek earnestly we cannot fail to find Him.

This great testing-time has not been all sad. It has been like a bugle-call to those who were drifting along in purposeless fashion, rousing them to effort and courage. Man has always been a fighting animal. Even in a game he finds real joy in overcoming difficulties. The life which is most depressing is one of monotonous grayness, where the years seem stale and unprofitable, and "nothing happens." Courage is apt to rise with danger, and obstacles only provoke a determination to overcome them. There is an old saying that the happiest days make no history. That may be so, but sweetness cloy after a time, and men living in luxury rush off to the woods to enjoy the unwonted pleasure of "roughing it." At any rate, we find ourselves living in times when history is being made with furious intensity. We can't escape from the situation, but we have the power to sink under it or rise above the present anxiety. God is a very present help in trouble. Let us keep fast hold of our trust in Him, knowing that the furnace cannot injure us, but is intended to burn away all dross and alloy of sin. (Isa. 1: 25.)

A change is good for everybody. We are so apt to sink into a rut and stand still, like the Pharisee in the parable because he was in such a complacent condition of prosperous self-confidence. It is possible to get spiritual indigestion—as well as physical—by living too luxuriously. I heard the other day of a nervous woman who was suffering because she always went out in an auto-

mobile and could not be induced to take exercise. Loss of property is unpleasant, but it often proves a salutary though bitter medicine, bracing both body and soul.

There is a story of a man, suffering from indigestion, who consulted a doctor and was asked what he was accustomed to eat for lunch. "Bread and cheese" was his answer. The doctor said: "Try a chop." The patient obeyed, and soon recovered. Some years afterwards he went to the same doctor, complaining again that he was suffering from indigestion. "What do you take for lunch?" asked the doctor. The patient declared that he always took a chop. "Try bread and cheese," said the doctor.

"Why, you said that was the cause of my indigestion!" exclaimed the astonished patient.

The doctor then explained that the indigestion was caused by "sameness" of diet—he needed a change.

Perhaps the Good Physician sees that we need a change of diet. The prophet Ezekiel told the Israelites that they had become more corrupt than the wicked people of Sodom. He explained the cause of Sodom's iniquity: "Pride, fullness of bread, and abundance of idleness was in her and in her daughters, neither did she strengthen the hands of the poor and needy. And they were haughty, and committed abomination before Me: therefore I took them away as I saw good." In the R. V. the words "prosperous ease" are substituted for "abundance of idleness."

It may be that God found it necessary to destroy for a time the fullness of bread and prosperous ease which weakened the health of His loved people.

Our business is to accept chastening as a cup from the hand of Love, pressing closer to the Son of God and becoming more like Him as we are passed through the fire of affliction. He was perfected through sufferings (Heb. 2: 10) and it is enough for a disciple to be as his Master. He did not escape the Cross, but went forward bravely to meet it. Let us try to live bravely, for the joy set before us enduring the Cross and despising the shame.

"We only pray that Thou wilt make Our souls by worldly loss, More like to Thine, that we may share The blessings of Thy Cross."
DORA FARNCOMB.

"Life Itself is Good"

Wise are we if we do not allow any one thing, little or big, or still bigger, to disappoint or to cloud or sour our lives and thereby to neutralize our energies, or even our hopes or our ambitions. To skim the cream off of today instead of crying over the spilt milk of yesterday is ever the way of the wise. Only the fool, or the temporary fool, gives himself to the latter. To cry over the spilt milk is the chronic tendency or habit of the unwise and the weak, never of the wise, the alert, the brave and the intrepid. "We take too little views," said Phillips Brooks. "It is not the events of life, nor its emotions, nor this nor that experience, but life itself which is good."

The amount of cream that appears in our lives depends, after all, more upon our mental habits and those types of thoughts that we choose and live most habitually with than upon anything else. These are our private property, and it is ours to regulate them as we will.

He who has the quest of the good in his heart relates himself thereby with all the higher powers and forces of the universe, and they aid him at every turn. The one who cultivates and lives always in the optimistic, cheerful, hopeful, helpful habit of mind and heart can never fail. We may, therefore, miss this or that that was a part of our dream, but above and beyond this and a thousand times more important is life, character, the distinctive homely qualities of a high-grade, useful and noble manhood or womanhood. Such a life lived bravely through to the end can end only in triumph—and even its failures are in the end but parts of its triumph.—Ralph Wildo Trine, in Woman's Home Companion.

NOVEMBER
Fas
HOW
Order by
argument, a
least ten d
state in
Price ten c
numbers ap
cost, the
must be se
ment, "T
Home Mag
to sign yo
terms. Ma
When ord
Send the
Name
Post Office
County
Province ..
Number of
Age (if chil
Measurement
Date of issu



8456 Gathered
34 to 42 b



8373 A
8401

8373 A
8401 Tun

Fashion Dept.

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. Price ten cents PER PATTERN. If two numbers appear for the one suit, one for coat, the other for skirt, twenty cents must be sent. 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 (if child or misses' pattern).....
 Measurement—Waist, Bust,
 Date of issue in which pattern appeared.



DESIGN BY MAY MANTON.

8444 Doll's Coat and Hat, 18, 22 and 26 inches high.



DESIGN BY MAY MANTON.

8435 Doll's Oliver Twist Suit, 18, 22 and 26 inches high.

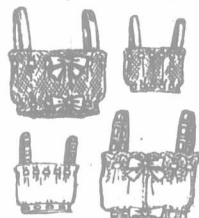


8486 Gathered Blouse, 34 to 42 bust. 8439 Blouse with Cape Effect, 34 to 42 bust.



DESIGN BY MAY MANTON.

8315 Boy's Suit with Coat Effect, 4 and 6 years.



8278 Corset Cover. Small 34 or 36, Medium 38 or 40, Large 42 or 44 bust.



DESIGN BY MAY MANTON.

8373A Fancy Blouse with Cape, 34 to 42 bust. 8401 Tunic Skirt, 24 to 32 waist.



DESIGN BY MAY MANTON.

8027 Child's One-Piece Dress, 2 to 6 years.



DESIGN BY MAY MANTON.

8447 Russian Coat for Misses and Small Women, 16 and 18 years.



ONE DAY SERVICE
 We will ship your parcel within one day of the time we receive your order. **WE PAY DELIVERY CHARGES** on every article catalogued, to your nearest Post Office. A post card will bring our big catalogue to you free. **THE ROBERT SIMPSON COMPANY LIMITED TORONTO**

"Even a Single Hair Casts Its Shadow"

There is scarcely any facial blemish which is greeted with such disfavor by the sex feminine as the appearance of

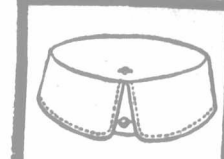
HAIR ON THE FACE

It coarsens and ages the face, besides giving it a masculine character. Constant tampering stimulates and thickens the growth. There is positively and absolutely no permanent treatment but Electrolysis. We employ skilful and experienced operators only. Satisfaction assured in each case. Over 22 years established. Consultation invited in person or by mail. Booklet "F" mailed on request.

Hiscott Institute
 61 College St., Toronto

Chiclets

REALLY DELIGHTFUL
THE DAINTY MINT-COVERED CANDY-COATED CHEWING GUM



CHALLENGE COLLARS

Acknowledged to be the finest creation of Waterproof Collars ever made. Ask to see, and buy no other. All stores or direct for 25c.

THE ARLINGTON CO. of Canada, Ltd.
 88 PRINCE AVENUE TORONTO

All "ARLINGTON COLLARS" are good, but our **CHALLENGE BRAND** is the best **MADE IN CANADA**

6 H. P. GASOLINE ENGINE BARGAIN

I have a 6 H.P. Gasoline Engine, good standard make, Brand New, never out of the crate, has latest improvements including Hopper Cooled, High Tension Magneto, etc. This Engine can be bought for \$100 less than regular price. Must be spot cash. Apply:—

Box A, Farmer's Advocate, Toronto

EUREKA FEED

With Molasses

A low priced feed of good value for young growing cattle.

Write for full particulars and prices. **THE CHRISHOLM MILLING CO., LIMITED TORONTO**

Richards
QUICK NAPTHA
 THE **WOMAN'S SOAP**



THE WONDER BAKER **THE WONDER WORKER**

Reservoir and Glass Oven Door

"OTHELLO" TREASURE

Write for Booklet and address of nearest agent.

THE D. MOORE COMPANY LIMITED

Hamilton, Ontario

News of the Week

The revolt raised by General De Wet in South Africa has been effectually crushed.

The Crown Prince of Germany has been appointed Commander-in-Chief of the armies opposing Russia in East Prussia.

Field Marshal Earl Roberts died in France, on November 14, of pneumonia. He had gone to see the Indian troops, when stricken down suddenly by the disease. Lord Roberts was born in Cawnpore, India, 82 years ago.

War has been declared in Mexico again between the Carranza and Villa elements, and American troops have been recalled from Vera Cruz, leaving Mexico to settle her differences as she chooses.

During the past fortnight there have been victories and losses to record in connection with the Great War, but, on the whole, the situation stands firm for the Allies. At present the most important battlefield is in the East, where the Russians are pressing forward over a line of 300 miles, with Dantzig apparently as a main objective. In Belgium the lines still stand firm, and the Germans have been obliged to evacuate the left bank of the Yser. Dixmude, on the other hand, has been taken by the enemy. The navy has to record the loss of the gunboat Niger, torpedoed north of the Straits of Dover, on November 12, and of the super-Dreadnought Audacious, which, it is now believed was blown up by a mine off the north coast of Ireland on October 27. It is reported that all on board except two were saved. These losses, however, have been amply compensated for by the destruction of the famous Emden, by the Australian cruiser Sydney, off Cocos Island, on November 9.

that treasured local lyric, "I'm Afraid to Go Home in the Dark." It is not known as yet whether or not he is an Englishman by birth. At any rate, he has been spending six months of every year in London or thereabouts, doing odd jobs in vaudeville. The other half of the year he has been living in New York. The song was finished early in 1912. It was submitted to publishers, and accepted by an English firm, but it was not published in America at that time. And, in fact, when it was brought out in London, a little later, it failed to arouse much enthusiasm. It was only after the war began, and the weary marches were forced, that some one in the ranks started this little ballad of the music-hall and found in it all the requisites of an immortal war-song.—Literary Digest.

On November 10th, U. S. S. "Jason"—a "Christmas Ship"—sailed from New York laden with Christmas gifts for the children of Europe orphaned by the Great War. The gifts were sent in from all parts of the United States, and the organization was due to, and carried out by, the Child Federation of Philadelphia, the Christmas Ship Society, the War Children's Christmas Committee, and the New York World.

Royal Amenities.

Ambassador and Mrs. Walter H. Page have a negro mammy in North Carolina whose devotion to "her white folks" is very strong. They left her behind them when they went to represent this country at the court of St. James, but "Aunt Mary," as she is called, was kept fully informed as to their movements, the fetes in their honor, and such momentous things. In one of the letters, Mrs. Page wrote that the Queen of England had been very kind to her, and Aunt Mary, in a glow of gratitude, decided that she ought to do something to show her appreciation of the Queen's consideration. After much thought, she decided that a ham, cured according to the choicest old Southern recipe, would be an appropriate gift to royalty; so she smoked the ham, rubbed it with spices, wrapped it in a local newspaper along with a picture post card labelled "To the Queen, from Aunt Mary," crated it, and sent it off. Of course, word of it reached the Queen, and she declared herself delighted to receive the gift, and sent her thanks to old Aunt Mary.

The Windrow.

The King and Queen of Belgium have distinguished themselves during the war by remaining on or close to the firing line, the King with his soldiers, the Queen superintending the organization of hospitals and ambulance corps which pick up the wounded. The Queen is the daughter of an eminent surgeon, and well acquainted with the nature of the work which she has been doing.

A device for recording telephone conversations has been perfected by Thomas A. Edison.

In view of the thousands of Belgians and others rendered homeless by the wars, it appears that the great Old-Country landlords have a splendid opportunity to do real service for suffering humanity by making over portions of their too large estates to men in need. Will any of them do it? We quote from an item which appeared in a contemporary magazine a year or so ago: "The extensiveness of the lands held by some of the Old-Country land-owners is always a subject of interest to colonialists who, from an average of one hundred acres, manage to wrest a living with a little to spare. The Norfolks, the Bedfords and the Westminsters, have the largest rent-rolls in Great Britain, but the late Duke of Sutherland was the largest land-owner. It used to be said that he could travel in a straight line for fifty miles without leaving his own property. A story told in regard to him is worth repeating: When the Shah of Persia was on his famous visit to England, in the reign of Queen Victoria, he was so impressed by the splendor of the Duke's entertainment that he privately advised the Prince of Wales to have him executed as soon as he succeeded to the throne. 'He is too rich to be safe,' he said, 'Kill him.'"

"It's a Long Way to Tipperary," the marching song of the British army, was written in New York three years ago. It was originally intended for a little vaudeville skit. The composer of it, Harry Williams, is also the composer of

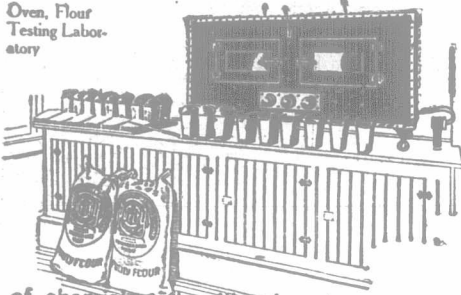
A few months after this someone asked the old mammy, half as a joke, what she would do if the Queen made her cook extraordinary at the court. The old woman shook her head emphatically. "Ah wouldn't do it; Ah wouldn't do it," she declared. "Ah wouldn't do it, not even for det Miss Queen. De first time Ah cooked somepun she didn't like, she'd up an' say, 'Take dat old nigger out an' chop her haid off!'"—Woman's Home Companion.

To Cure Corns.

When corns are very bad it may be necessary to call in the aid of a chiropodist, but much may be done in the way of alleviating this very real trouble by home treatment. Begin by softening the skin with vaseline or cold cream, rubbing it thoroughly for some considerable time. The next night remove all the hard skin you can, soften the corn by soaking in warm water, and rub it carefully with pumice stone, finishing the process by a rubbing with vaseline as before. Repeat this treatment every night, or at least every second night. The use of pumice stone is also to be recommended for the hard skin which forms under the tread of the foot and sometimes at the inner side of the sole on the ball of the great toe. This hardened skin is frequently as painful as corns, and when a thick ridge forms near the toe it throws the foot out of balance when walking, and causes great discomfort. This is not always understood, but anyone who takes the trouble to remove the skin by persistent rubbing with pumice stone when the feet are washed in the morning or evening, as they should always be, will at once feel the comfort of this treatment.

Cheap, Nutritious Food

Oven, Flour Testing Laboratory



White flour is the cheapest and most nutritious of all foods. Compared on a money basis, the energy or heat producing ratio of flour and beef is about 10 to 1 in favor of FLOUR.

PURITY FLOUR is oven-tested at the mill. The combined skill of chemist and miller has been exerted to make PURITY Canada's standard flour. This careful supervision assures the housewife of a pure and honest product.

PURITY FLOUR

More Bread and Better Bread

WANTED

Ambitious young farmers to handle our lines in their neighborhood, a splendid opportunity to make money during your spare time this winter. Write now for full particulars.

M. JACKSON
49 Stuart St., Hamilton, Ont.



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

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

FARMS WANTED—Want to purchase a farm of from one hundred to two hundred acres. Must be in fair state of cultivation and situated within eight miles of Toronto. On or close to Dundas Road in the vicinity of Islington or Dixie preferred. Will pay cash for right place. Apply Box No. B, Farmer's Advocate, London.

FARM FOR SALE—Two hundred acres, ten miles from the city limits, in the township of Toronto, three miles north of Dixie—One of the best stock or dairy farms in Ontario. Large bank barn with stables fitted up in most modern fashion. Four acres of orchard in full bearing. Price twenty-five thousand dollars—Half cash, balance may remain on mortgage. Will exchange for good central city property. Apply Box No. B, Farmer's Advocate, London.

FARM for sale or exchange—300 acres in Elgin Co.; good level land, no hills or stones, mostly all under cultivation; about 12 acres hardwood bush; on good gravel road, 5 miles from good market; good brick house and bank barns; small farm of about 100 acres considered in exchange. Apply Box W, Farmer's Advocate.

WANTED—Position on farm by trustworthy, reliable married man (middle age); life experience in raising all kinds of stock; skilled feeder and fitter. Apply Box X, Farmer's Advocate, London.

POULTRY AND EGGS

FOR SALE—Pure bred Collie pups, choice stock, heelers; 10 champions in 5 generations. A. B. Van Rhoricon, Morganston, Ont.

FOR SALE—Pure bred Mammoth Bronze turkeys good, healthy, strong-boned birds, bred from hens eighteen to twenty pounds; mated to Bell's first-prize yearling Tom, Guelph, 1912. Prices reasonable. Correspondence a pleasure. George Nell, Tara, Ont.

MAMMOTH Bronze Turkeys—Bred from prize winners; good healthy stock. Cullis & Lean, Cameron, Ont.

MAMMOTH Bronze Turkeys, Barred Rocks Rhode Island Red Cockerels, Pekin Ducks and Embleden Geese. Atton Stevens, Lambeth, Ont.

PURE BRED single comb white leghorn cockerels, 2, 3, and 5 dollars each. F. W. Siegner, Tavistock, Ont.

PURE BRED Bronze Turkeys. Fine, healthy, strong, heavy-boned birds. Bred from Bell's, Gould's and Snettingers famous toms and hens. Satisfied customers, everywhere. W. T. Ferguson, Spencerville, Ont.

SINGLE COMB White Leghorns, great layers of large white eggs, early hatched vigorous Cockerels, \$1.50 each. Henry McIntyre, R.R. No. 3, Esauville, Ont.

WANTED—New Laid Eggs. Highest price paid for strictly fresh supply. J. D. Arsenaull, 142 Sanguinet St., Montreal.



Come again, Pie Time, and often.
For wholesome, digestible, "eats"
give us PIE.

At its very best wrapped in a FIVE ROSES
crust.

Upsets Pie Prejudice without upsetting the
Eater's Insides—FIVE ROSES flour.

Great for Pie Crust—top and bottom.

And Puff Paste and Difficult Things.

Close-grained—melting—even textured.

Flaky, too, and crinkly—crisp yet tender.

Put into your bake things the rare nut like
sweetness of Manitoba wheat kernels.

All soppy with the rich red juice of the
cherry—or lemon pie—or apple—or healthy
custard—meat, maybe, or mince.—

Put the FIVE ROSES "crust end" about 'em
See the hungry wedges fade behind busy
milk teeth.

At Pie Time—

Use FIVE ROSES.

Five Roses Flour

Not Bleached



Not Blended

LAKE OF THE WOODS MILLING COMPANY, LIMITED, MONTREAL

The Beaver Circle

Our Senior Beavers.

[For all pupils from Senior Third to
Continuation Classes, inclusive.]

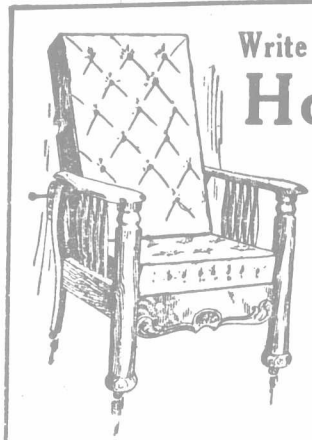
Four-footed Little Friends.

By Jake H. Harrison.

The world is full of little friends,
Four-footed though they be,
And I would have the whole of them
Quite unafraid of me;
I long to have them love me well,
An easy thing, I find,
If I will love them in return,
And always treat them kind.

I know some rabbits in the woods
That I my friends have made,
And when they see me passing by
Are not one bit afraid;
They watch me as I walk along,
While they, in bunny fun,
Will frisk about my woodland path,
Or rabbit races run.
And then there are some squirrels, too,
That live among the trees
Along that winding woodland path,
Which I by slow degrees
Have taught that I would be their friend;
And now they chatter loud
Whenever I go by their home,
And seem to be quite proud!

I long to have them all to live
In kindly brotherhood,—
The men who tend the teeming fields
And creatures of the wood;
Their source of life must be the same,
God made them all, we know—
Four-footed friends would all be tame,
If men would kindness show.



Write for Adams' Guide to Economy in Buying Home Furnishings

Hundreds of photographic illustrations of the best
selected values in Furniture, Rugs, Draperies,
Electric Fixtures, Stoves, Sewing Machines, etc.,
are shown in this book, which is known as

Catalogue No. 7

This catalogue, which is sent free to any address,
tells you just what each article will cost delivered
freight paid by us, to any station in Ontario.

THE ADAMS FURNITURE
CO. LIMITED, TORONTO

Funnies.

A school inspector having been told
that a certain class was very dull, de-
cided to test them himself. Asking the
lads to give him a number, and one of
them calling out "seventy-two," he
wrote on the blackboard "27." No re-
mark coming from the class, he asked
for another number, and he was given
"forty-eight." This he wrote on the
board "84," and turned to observe any
signs of intelligence. None were appar-
ent. "Certainly a very dull lot," he
thought, and once more asked one of
them to give him a number. Then came
a raucous young voice, "thirty-three.
Nah let's see if yer can muck abaht with
that!"

TOO MUCH.

One day a Scottish boy and an Eng-
lish boy who were fighting were separat-

ed by their respective mothers with diffi-
culty, the Scottish boy, though the
smaller, being far the most pugnacious.

"What garred ye fight a big laddie like
that for?" said the mother, as she wiped
the blood from his nose.

"And I'll fight him again," said the
boy, "if he says Scotsmen wear kilts be-
cause their feet are too big to get into
their trousers."—Tit-Bits.

Senior Beavers' Letter Box.

Dear Puck and Beavers,—This is the
first letter I have written you. I like
reading the letters of the Beaver Circle
very much. Here is a story I have
made up all myself. It is a story of a
piece of coal.

The first I remember was that I was
just a little seed hanging on a limb of a
great tree. All around me were other
great trees. After a while I fell off the

limb, and fell into a muddy place under
the tree. I soon grew in that place.
After a few years' growth, I could see
that it was all swamp around me. I
grew and grew, and became as big as
my mother. Soon after I got my full
growth, some of the oldest trees died
and fell. Three hundred years after-
wards I fell, too, and turned into vege-
table matter. Soon all the trees fell
and turned into vegetable matter. Thou-
sands of years afterward there came a
great flood. Along with the flood came
sand and clay and covered me up. Lit-
tle by little the soil over me hardened
until it turned into rock. While this
rock was hardening I turned into coal
and was all black. Many thousand
years I lay there undisturbed. One day
I heard a noise above me, and soon I
saw men who had come to see if they
could find coal here. When they dis-
covered us they said, "Isn't this fine
coal!" So they went to work and got
a whole lot of men and blew a large
portion of us up with some stuff they
called dynamite. They got steel tracks
and put cars on them. They shovelled
me up and put me into these cars.
When they were full they pushed us all
out and dumped us into larger cars called
coal cars. In a few days a big black
thing called an engine pulled us away
from where we were into a city and
switched on another track beside a big
building. Then I was shovelled down a
coal chute into a coal bin. Then I was
shovelled into a big furnace and burned
to ashes. This is the end of my story.
Yours respectfully,

GEORGE HOWELL.

Jerseyville, Ont.

Dear Puck and Beavers,—Well, I guess
I will have to introduce myself to you,
Beavers. I like reading the letters in

Buy High-Grade Flour

MAKE the best bread and pastry you've ever tasted. Prices of flour and feeds are listed below. Orders may be assorted as desired. On shipments up to 5 bags buyer pays freight charges. On shipments over 5 bags we will prepay freight to any station in Ontario east of Sudbury and south of North Bay. West of Sudbury and New Ontario add 15 cents per bag. Prices are subject to market changes. Cash with orders.



Cream of the West Flour

the hard wheat flour that is guaranteed for bread

GUARANTEED FLOURS	Per 98-lb. bag
Cream of the West (for bread)	\$3.50
Queen City (blended for all purposes)	3.00
Monarch (makes delicious pastry)	3.00

FEED FLOURS	
Tower	1.80

CEREALS	
Cream of the West Wheatlets (per 6-lb. bag)	.35
Norwegian Rolled Oats (per 90-lb. bag)	3.20
Family Cornmeal (per 98-lb. bag)	2.90

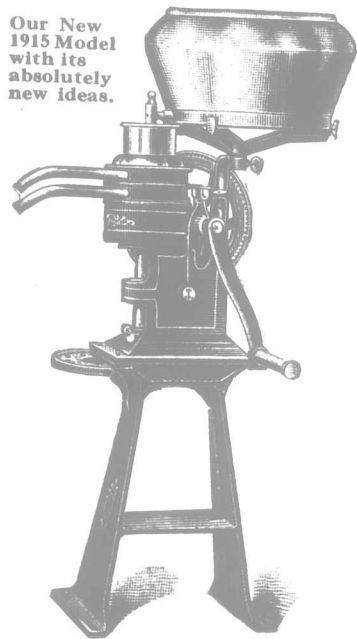
FEEDS	Per 100-lb. bag
Bullrush Bran	\$1.25
Bullrush Middlings	1.35
Extra White Middlings	1.45
Whole Manitoba Oats	2.00
Crushed Oats	2.05
Chopped Oats	2.05
Whole Corn	1.90
Cracked Corn	1.95
Feed Cornmeal	1.90
Whole Feed Barley	1.90
Barley Meal	1.95
Oatmeal	2.15
Geneva Feed (Crushed Corn, Oats and Barley)	2.05
Oil Cake meal (old process)	1.80

Special prices to farmer's clubs and others buying in carload lots.

The Campbell Flour Mills Company Limited
(West) Toronto

TRUE ECONOMY

Our New 1915 Model with its absolutely new ideas.



is the first stepping stone to independency. Don't take a step backwards by buying without seeing our new 1915 model demonstrated.

It's a wonder—at saving money and labor—several exclusive features—tested.

Write for agent's name or full particulars to-day.

Raymond Manufacturing Co. Limited
GUELPH, ONTARIO

Get the agency in your district if not already covered. Write now.

MADE IN CANADA

the Circle very much, and so I thought I would write one, too. I live about two miles from the village of Rockton. We have the rural mail delivery going past our place. I go to school every day I can, but I have two miles to go. Now I will tell you about my pets. I have a cat named Tib and a dog named Touser. We have five little kittens just beginning to play. We are going to give them away when they are big enough. Hoping this will escape the w.-p. b., I will close with a few riddles.

When is a farmer cruel to his corn?
Ans.—When he pulls its ears.

What else besides a young horse goes faster after it is broken? Ans.—A \$10 bill.

What can be found where it is not?
Ans.—Fault.

When is a pocket like the moon?
Ans.—When it's full.

Why does a cow cross the road?
Ans.—Because she can't go around it.

VERA ARNOLD (age 11, Sr. III.).

Dear Puck and Beavers,—I have just finished reading your Circle. My father has taken "The Farmer's Advocate" for a number of years, and I enjoy reading your letters. I go to school every day, and like my teacher fine; her name is Miss Watson. I like reading very much. Some of my favorite books are: "Bessie Among the Mountains," "Bessie on Her Travels," "A World of Girls," "Elsie's Children," and a great many others. As my letter is getting long, I think I will close, wishing your Circle every success.

P. S.—I would be very much pleased if some of the Beavers of my age (11) would write to me.

NORA BELL (age 11, Sr. IV.).

Freeman, R. R. No. 1.

Honor Roll.—Gordon Wetheral, Bertha MacEachern, Shirley Spence.

Junior Beaver's Letter Box.

Dear Puck and Beavers,—This is my second letter, Puck. I wrote one a long time ago, and I had to wait a long time to see it in print. I do hope I will see this one in print. I go to school every day and am in the Second Book. My teacher's name is Miss M. Maxwell; I like her well. I have two sisters and one brother. They are all younger than I am. My little sister Phoebe and I have a mile to go to school. I am what you call a bookworm. I have read a few books, such as "Little Chatterers," "Kindergarten Stories," and "Morning Talks," "Little Bear," "Robinson Crusoe," "Little Men," "Mother Bhaeur," and many others. I have a few pets, a dog named Minto; a kitten, White Nose. The kitten will come to me when I call it. Well, Puck, I will leave some room for the other Beavers. Good-bye.

ETHEL A. RATHWELL (age 7).
Naran, Ont.
P. S.—I wish some of the Beavers my own age (seven) would write to me.

Dear Puck and Beavers,—As I have been reading the other letters, I picked up courage to write. My brother has taken "The Farmer's Advocate" for a number of years. For pets I have three dogs. Their names are Maxey, Major, and Collie. I have two kittens; their names are Tommy and Nell. I have one colt; his name is Tommy. I have five brothers and two sisters. Well, I guess I will close for this time, as it is my first letter to your Circle.

JENNIE O'BRIEN (age 10, Jr. III.).
Northumberland County.

Dear Puck and Beavers,—I live on a farm of about 95 acres, situated 5 miles from Brantford. Fairchild's creek runs part-way around our farm. My father has taken "The Farmer's Advocate" for about 12 years, and we all like it very much. I am very fond of reading, and enjoy reading the Beavers' letters. Some of the books I have read are, "Left in Charge," "Lilla's Experiments," "Alice in Wonderland," "Archie's Mistake," "The Little Woodman," and many others. I go to Pine Grove School. My teacher's name is Miss Graham; I like her very much. I will close, hoping this letter will luckily escape the w.-p. b. Your friend,

ETHEL GEDNEY.
(Age 9, Book Jr. III.)
Paris, Ont., R. R. No. 4.

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 real name will not be published. (3) When enclosing a letter to be forwarded to anyone, place it in stamped envelope ready to be sent on. (4) Allow one month in this department for answers to questions to appear.]

After-convention Echoes.

Dear Friends of the Ingle Nook,—Some one—I forget who—has spoken of the usefulness of the man who has made "two blades of grass grow where one grew before," and surely the Superintendent of the Women's Institute, in looking back over the development which that organization has made, must feel superlatively the satisfaction of that man. Most certainly he has been very instrumental in making three conventions necessary where not even the germ of one existed not so very many years ago, for it is not only the stress of economy in war-time, but also the very considerable proportions to which the Association has grown, which have necessitated the division this year into three places of meeting—Ottawa, London, and Toronto.

It has not been possible for me to attend the Ottawa and Toronto branches personally, but "The Advocate" has been most ably represented at both, in Ottawa by Mrs. Laura Rose Stephen, who is well known throughout all Canada; and in Toronto by Mrs. Dawson, of Parkhill, one of the most gifted among the Women's Institute speakers, as those who listened to her powerful address on "The Institute as a Leader in Local Effort," given in the Auditorium in London during the Convention, must know. Mrs. Dawson's report, by the way, will appear in next week's issue.

I am sure, however, that both of these reporters have found the difficulty that I have found in trying to give a clear account of the London Convention.—It is necessary to condense, but where shall it be done? Were it only possible to give the great majority of the addresses verbatim, one could be satisfied.

You will remember, in Goldsmith's "Deserted Village" the picture of the "gaping rustics ranged all round" about the village schoolmaster, marvelling "that one small head could carry all he knew." I can assure you that, at convention after convention, personally and figuratively, I have been in the position of the "rustics," positively "gaping" with wonder at the way in which the women of the Women's Institute—who, many of them, have occasion to "speak" not more than once or twice in the year—can get up and, not only manage meetings, but also deliver addresses,—fluently, thoughtfully, logically, often eloquently, with an eloquence that verges at times even upon the poetical. If stage-fright exists there is little evidence of it. There are no repetitions, no stumblings; there is little beating about the bush or waste talk. Practice, it is true, though only occasional, and in little local branches, has done something, but surely the great secret lies in the fact that these women recognize that they have found a great and serious work to do. There is no talk of dress, no talk of balls and teas, no gossip—subjects all too long regarded as belonging peculiarly to the province of women,—but everywhere a vast reaching out to uplift and to save. It is the note of Service that rings high and clear. It is the spirit of Sir Galahad. If there are shining Knights in the world there are shining Ladies too, albeit their glistening robes are often enough covered by the brown of a kitchen apron,—shining Ladies who are ready to cry, like that fair white Knight, "If I lose myself I save myself!"

Will the delegate who sent some money across the hall to me during the last session, kindly mail me her address at once? There was a misunderstanding, due to a connection with the "Women's Patriotic Paper," and I have an apology to make to her. . . . By the way, members who bought copies of that paper at the door may be interested to know that the proceeds amounted to considerably over \$1,000, which sum will be added to

Other De-
de of paper
dress with
When en-
place it
on. (4)
answers to

choes.

Some-
of the
as made
ere one
Superin-
tute, in
ent which
ust feel
of that
een very
conven-
the germ
y years
ress of
the very
ve neces-
to three
on, and

to at-
branches
has been
Ottawa
is well
and in
arkhill,
ng cold
ose who
on "The
Effort,"
on dur-
Mrs.
will ap-

of these
that I
ear ac-
—It is
shall it
to give
es ver-

smith's
of the
about
veling
all he
at con-
y and
osition
aping"

h the
—who,
speak"
a year
meet-
ently,
s even
s exist-
re are
re is
waste
only
nches,
great
omen
great
s no
teas,
arded
vince
reach-
s the
and
ahad.
world
their
vered
shin-
like
my-

While we are on the subject, perhaps you would like to read a parody sent to "Ingle Nook" by a young student at the Parkdale Collegiate Institute, where, it is to be inferred, the girls have found work to do.

NOVEMBER 19, 1914
the fund for the relief of the Belgians. Much credit is due to Mrs. Boomer, who conceived the scheme, and to Miss Armstrong, who undertook the work of editing the paper,—also to the Boy Scouts who so energetically circulated it—that such a satisfactory sum has been collected.

And this brings us back to The War, the subject that cannot long remain apart from our thoughts. What a fine thing that the Women's Institute was so completely organized when the sudden and urgent call for help came!—A letter from Mr. Putnam, telephones set busy, and the thing was done,—women in every part of Ontario working for dear life, making pillows, shirts, socks, everything that might help to alleviate distress, and make a little easier the hard lot of those who are fighting the world's battles at the front, or suffering from wounds in the hospitals. Nor can there be any surcease from such work as long as the war lasts. It is ours to give of our labor, of our money; it is all we can do, and the need is and will be, so great. Think of it—the number of socks alone needed to keep comfortable hundreds of thousands of men, on their long marches, and in the wet, cold trenches! One pair, in marching time, could scarcely last longer than a week. Just here, may it be said that the home-knit ones are infinitely preferred to the machine-made. The latter are hard, and the mud cannot be rubbed from them as easily as from the home-knit.

Those long cuffs, too, with a hole for the thumb—what a boon to men handling cold rifles! And how very quickly they will wear out! Surely there can be no respite for women who can knit so long as the need lasts.

Someone has asked me for detailed directions for knitting socks "with heels." Unfortunately, I am just beginning to learn this art myself, but I am doing my best to find someone who knows and who will undertake to write out directions at once. Those whom I have heard from so far say that it is "impossible" to write instructions so that they can be followed, and that it will be better for the enquirer to find someone in her own neighborhood who will give her the needed help. But I do not despair. Yet another is on the trail, writing down the steps as she knits, so I hope to give full directions at an early date. They may set a whole army of women knitting,—who knows?

In the meantime, an energetic Red Cross worker has handed me a copy of the instructions given to Red Cross workers for making bed-socks—these, I suppose, for use chiefly in the field hospitals.

Directions:—Cast on 56 or 58 stitches and knit ribbed for 8 inches, then knit garter stitch until foot is finished, 11 inches when toed off, and sew together. Knit on two needles, bone or celluloid, with very soft yarn.

The sizes given for making ordinary socks are as follows: Cast on 28 stitches on each of the three needles. Knit leg ribbed. Length of leg down to heel 12 inches, about 15 or 16 inches from top of sock to bottom of heel when finished. Foot should be from 10 to 11 inches in length. Wash socks, press with a warm iron, and send to the nearest Red Cross station. The Women's Institute, of course, wherever established, knows where to despatch such things. Now I hope these directions will be comprehensive enough to be followed by all who can knit at all. We shall hope for detailed instructions for turning the heel, etc., later.

JUNIA.
THE CHARGE OF THE KNITTING BRIGADE.
(With apologies to Tennyson and "The Charge of the Light Brigade.")
Half a stitch, half a stitch,
Half a stitch onward,
In the Assembly Hall
Toil'd the One Hundred.
"Forward the Knitting Brigade!
Charge for the wool!" she said;
Straight at those skeins they made,
Dash'd the One Hundred.

THE FARMER'S ADVOCATE.

"Forward the Knitting Brigade!"
Was there a girl afraid?
Not tho' each unskill'd maid
For a while blundered;
Theirs not to make reply,
Theirs not to reason why,
Theirs but to knit or die!
So at that wool four-ply
Charged the One Hundred,
Balls to the right of them,
Balls to the left of them,
Balls all about them,
Flying unnumbered!
Gallant the charge they made,
Dauntless and undismay'd;
Fearsome and fast the raid
Of the One Hundred.
Clicked all their needles there,
Clicked as they turned in air,
Jabbing a finger bare,
Letting fall stitches where
Someone still blunder'd:
Stitches "two plain, two purl,"
Knitted each zealous girl,
Ninety-nine hundred!

Wristlets to right of them,
Wristlets to left of them,
Wristlets all round them,
Lying unnumber'd!
Back from the charge came all,
None did in battle fall,
Answered the muster-call
All the One Hundred.
When can their glory fade?
O, the wild charge they made!
All the school wonder'd.
Honor the charge they made!
Honor the Knitting Brigade,
Noble One Hundred!

DENNIS O'DONOVAN.

Parkdale Collegiate Institute, October 9th, 1914.

PAINTING BEDROOM.

Dear Junia,—Will you kindly inform me, through your valuable book, what is the best color to paint the woodwork in a bedroom, the door, window facings, and baseboard? The wall and ceiling are plastered white. Many thanks.
MR. P. MCG.

Ivory-white is very nice for bedroom woodwork, or, if you choose, any of the "wood" stains,—weathered oak, fumed oak, walnut, or mahogany. Choose a color that will harmonize with the paper you intend to use.

BLACKHEADS.

"Worried" wishes to know a cure for blackheads. Try the following: Scrub the face well every night with warm soft water and castile soap, using a soft brush to make the work more thorough. Rinse with clear soft water, and apply the following lotion: Boracic acid, 1 dram; spirits of rosemary, 1 ounce; water, 3 ounces. Apply with friction. This treatment must be kept up regularly for some time. You must not expect the blackheads to disappear all at once, as the skin ducts have been stretching for months, perhaps for years, by the secretions.

QUILTING FRAMES.

To E. E. M., Peterboro, would say that we have heard of no improvement in quilting frames beyond the iron clamps usually sold for the purpose.

CARE OF HAIR, ETC.

"Woodland Whispers" writes asking for cure for dandruff and warts; also whether "Coronation Braid" is too young looking for a girl of nineteen.
For the cure of dandruff we quote from "Family Physician": "For the removal of dandruff it is necessary, not only to keep the scales brushed out of the hair, but also to correct, if possible, the unhealthy action of the sebaceous glands. The hair may be brushed gently with a soft brush, and then washed with a little soap and water. After this, the yolks of two eggs may be thoroughly rubbed into the scalp. The repetition of this process daily is often of itself sufficient to remove the difficulty. If the scales still form, the following may be substituted for the eggs: Tannic acid, 1 dram; simple ointment, 1 ounce. Mix, and rub thoroughly into the scalp.
Rub the warts night and morning with a piece of sal-ammoniac moistened with water.
By all means wear a Coronation Braid if it is becoming to you. It should

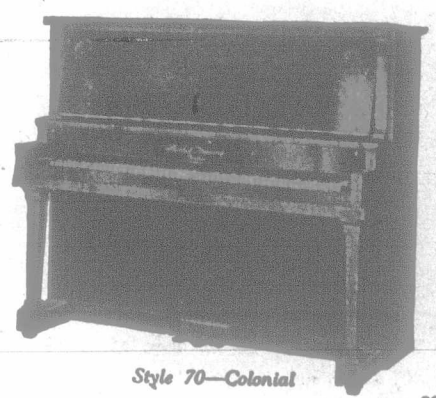
Be Just to Yourself

First Investigate This \$100 Saving

AFTER you've bought a piano is the wrong time for finding out that you might have got as good or better for one hundred dollars less. If by cutting down every working expense and by installing labor-saving machinery throughout, we are able to sell you a piano equal to the best instrument made and save you \$100, should you not, in all justice to yourself, at least ask us to prove it? When you are assured that the Sherlock-Manning 20th Century Piano is one of the world's best and that you can buy it at a saving of \$100, we know that you will buy it in preference to any other, being convinced that it is indeed

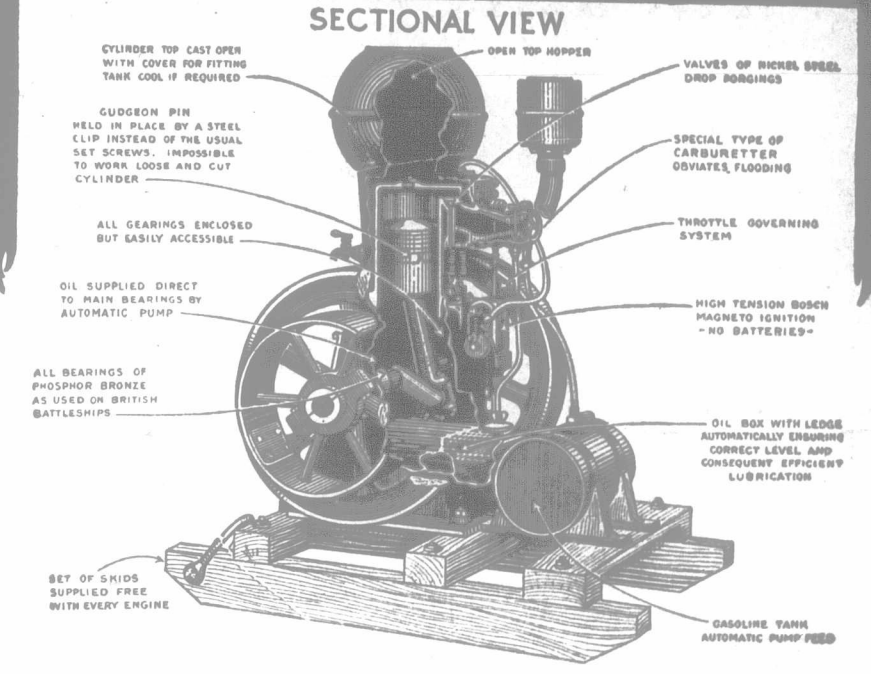
"Canada's Biggest Piano Value"

We offer these facts as first evidence: A ten-year guarantee goes with every piano sold. You will find in any Sherlock-Manning Piano the famous Otto Higel Double Repeating Action, the world's best make of felt hammers and the highest grade of wire strings that money can buy. Only high-grade instruments have these standard parts. There are no better made. Furthermore, we have one of the most complete plants in the Dominion and employ highly-skilled workmen in every branch. Many of Canada's wealthiest citizens own Sherlock-Manning Pianos; many of our foremost educational and musical institutions use them exclusively. We want to mail you a copy of our handsome art catalogue L, beautifully illustrated and free. Write to-day to Dept. 4 and ask for it.



The Sherlock-Manning Piano Co.
LONDON (No Street Address Necessary) CANADA

LISTER GASOLINE ENGINE



Labor saving, money saving and time saving features found in no other engine.

Write for Catalogue G which also gives particulars of
LISTER LIGHTING PLANTS, MILKING MACHINES,
GRINDERS AND MELOTTE CREAM SEPARATORS
R. A. LISTER & CO. LIMITED
58-60 Stewart Street :: TORONTO
Branches at Winnipeg, Man. and 82 Water St., St. John, N.B.

"Eastlake" Metallic Shingles

have a reputation unsurpassed among roof coverings for durability, ease in laying and sterling weather proof qualities. Write for illustrated price list.
Metallic Roofing Co., Limited, Manufacturers, Toronto

When writing advertisers, kindly mention "The Farmer's Advocate."

Farmers Behind New Company

A new condition of affairs has been introduced in the sheet metal business in Canada, by the erection of one of the most modern factories at Sarnia, by the Sarnia Metal Products Company, Limited, for the manufacture of the following lines of sheet metal building materials: Plain Galvanized Iron, Corrugated Iron, Plain Black Iron, Metal Sidings, Eave Troughs, Conductor Pipe, Valleys, Culverts, etc.

The above concern is the outcome of an investigation as to the cost of manufacture of sheet metal building materials, conducted by Lloyd Lott, formerly connected with The Sarnia Fence Company, at the request of many leading farm organizations throughout the Dominion of Canada.

The system of marketing used is rather unique in itself, for it is the first time that a company has been organized to manufacture commodities used by the farmers whose output, not only as to the quality of the materials used, but the price at which they are selling, is under the control of the farm organizations themselves, with which we will be under contract to supply their entire requirements.

It is no surprise to us that this arrangement and idea of selling has caused much consternation among the other sheet metal manufacturers in Canada, and it must be remembered that the success of this enterprise will depend largely upon the support that is given our company by the individual farmer himself. Every farmer, whether he belongs to a farm association or not, should take into consideration the fact that it will be folly for him to purchase his requirements from any other source, except our company, unless he himself favors the ordinary methods such as are used, selling through dealers, jobbers, etc.

We have in our possession and are sending to all interested persons, copies of confidential letters that have been mailed by some of our competitors in the sheet metal business to dealers

throughout Canada. These letters prove very interesting reading and give in a concise way some idea of the methods that are being used to keep our company and the farmers from making a success of their direct policy. It is hoped that you as a farmer are sufficiently interested in the welfare of the co-operative spirit that is sweeping from one coast of Canada to the other, and will be alive to the situation and do everything in your power to assist in our business in your locality. If you have not a local association to bring this matter before, we will gladly send you a number of circulars for distribution among your neighbors, who we feel, when they know the situation, will help us in the great fight it is necessary for us to put up in order to make our direct policy the success it should be. Might also say that we are working in line with the views of the United Farmers' Co-operative Company Ltd., whose head office is at Toronto, Ont., the Manitoba Grain Growers' Association, Winnipeg, The Saskatchewan Grain Growers' Association, Moose Jaw, and the United Farmers of Alberta, Calgary. Any of the above farm associations, who represent the majority of the organized farmers in Canada, will gladly outline in a general way the spirit with which they are co-operating with us.

Many unscrupulous statements have been made about our company and its products, and in justice to not only ourselves but to the farm associations in Canada as well, we would ask you to let us send you immediately the circulars mentioned above that outline in a clear way both sides of the case, and shows in a general way what opposition we have.

Thanking you in anticipation of hearing from you at once, we remain,

Yours co-operatively,

The Sarnia Metal Products Co., Ltd.,

LLOYD LOTT,
President.

Harab FERTILIZERS

Write for FREE Fertilizer Booklet and prices.

THE ONTARIO FERTILIZERS, LIMITED
West Toronto, Ont.

GENERAL Business College

STRATFORD, ONT.

Canada's best practical training school—with Commercial, Shorthand and Telegraphy departments. Students enter each week. Write for our free catalogue. D. A. McLachlan, Principal.

Westervelt School
Y.M.C.A. BLDG., LONDON, ONT.
BUSINESS AND SHORTHAND
Students assisted to positions. College open Sept. 1st. Catalogue free. Enter any time
J. W. Westervelt J. W. Westervelt, Jr., C.A.
Principal 18 Vice-Principal

Alma (Ladies) College
Attractively situated. Picked faculty.
For prospectus and terms write the Principal
R. I. Warner, M.A., D.D., St. Thomas, Ont. 64

Mention this Paper.

suit admirably a girl with a non-deplume so charmingly suggestive as "Woodland Whispers."

COOKERY QUERIES.

Dear Junia,—I have long been an interested reader of your columns, but as yet have never asked any help. May I now?

Can any of the Nookers give me any recipes for cake, pudding or pie, in which maple syrup can be used in place of sugar? Sugar is so high-priced now that I hate to use much of it. One hears of eggless, butterless and milkless cakes—why not sugarless ones?

I never have success in baking with sour milk or cream. Lately I used a cookie recipe calling for 1 cup lard, 2 of sugar, 1 of milk, and 2 eggs. I used a cup of sour milk, and a level teaspoon of soda, and the cookies plainly tasted of the milk. What was the cause?

I often have thick, rich, sour cream. In using it in cakes, do I omit the shortening altogether, and how much soda should be used?

How can I keep cookies crisp? Mine are when I remove them from the oven, but in a short time they get soft. I keep them in a covered tin can.

Is there any way of cleansing granulated sugar in which the mice have been, to make it fit for use? If butter can be clarified, why can't sugar?

Later on I am going to ask further help, but I will not now. Thanking you in advance, I remain, ARONACLE.
Oxford Co., Ont.

Can anyone send recipes for making cake with maple syrup? By the way, why not serve the syrup by itself with "Johnny" cake, muffins, or rolls. Nothing can be nicer. However, I suppose there are occasions when "cake" is necessary.

Perhaps the teaspoon you used in measuring the soda was too large; there is such a difference in the size of teaspoons. Try a smaller quantity next time.

Very little shortening is needed when thick, sour cream is used. For tea biscuits it may be omitted altogether. You will have to experiment with the soda and the size of your teaspoon for measuring. If your cakes have tasted of soda, or looked too yellow, reduce the quantity.

It is hard to keep cookies crisp, but the crispness may be restored by placing them in the oven for a few minutes, spread on a pan.

We know of no method by which you can clean the sugar.

By the way, I have just found a recipe for "Maple-sugar Spice Cake."

Here it is:
Maple-sugar Spice Cake.—Mix 1 cup grated maple sugar with 1/2 cup sweet cream. Sift 1 teaspoon baking-powder with a coffee-cupful of flour, adding a teaspoon of cinnamon and half teaspoon allspice. Add the yolks of 3 eggs beaten very light, with the addition of 1 tablespoon cold water, then mix in the flour, and, lastly, the whipped whites of the eggs. Bake in layers and put together with any filling liked,—custard in which desiccated cocoanut has been mixed, is nice.

WANTS TO ADOPT BELGIAN CHILD.

Could you kindly inform me, through your valuable paper, where one should write to wishing to adopt one of Belgium's poor orphans?

FARMER'S WIFE.

Apply to the Secretary of the Children's Aid Society nearest you. There are societies in Montreal, Toronto, London, Owen Sound, and other places in Ontario.

The Scrap Bag.

MOISTURE IN THE AIR.

Don't forget to keep the water-pan in the furnace filled with water. The air of rooms is likely to become much too dry in winter unless care is taken.

TO SEPARATE POSTAGE STAMPS.

Place stamps that have become glued together under a thin piece of paper, and run a hot iron over this. The stamps will come apart easily, and the mucilage will not be soaked off, as it would be if the stamps were soaked in water.

TO REMOVE VASELINE STAINS.

Soak the material in wood alcohol, rub out, then wash in hot soapsuds, and, if the goods are white, boil them. Do not use the alcohol near a fire as it is very inflammable.

FROSTED WINDOWS.

To prevent windows from becoming frosted in cold weather, wipe them once a week with a cloth dipped in alcohol.

FROZEN POTATOES.

Should potatoes chance to be frozen, they may be rendered fit for use by soaking them in water for three days before cooking.

TO PREVENT TINWARE RUSTING.

Rub it over, especially the seams, with fresh lard, then heat it thoroughly in the oven before it is used.

HINT FOR KNITTERS.

When knitting mittens, when you arrive at the place where the stitches have to be taken off from the needles for the thumb, use a light wire hairpin to take the stitches from the needles; after all are on the pin, bend the end so the stitches cannot slip off. Then proceed with the hand. When ready to take them up again, they can be readily slipped on the needles from the hairpin, and with much less trouble than would be the case if they were on a cord.

Our Serial Story.

PETER.

A Novel of Which He is Not the Hero.

By F. HOPKINSON SMITH.

Copyrighted by

Charles Scribner's Sons.

Chapter XIX.

When the pain in Jack's heart over Ruth became unbearable, there was always one refuge left—one balm which never failed to soothe, and that was Peter.

For though he held himself in readiness for her call, being seldom absent lest she might need his services, their constrained intercourse brought with it more pain than pleasure. It was then that he longed for the comfort which only his dear mentor could give.

On these occasions Mrs. McGuffey would take the lace cover off Miss Felicia's bureau, as a matter of precaution, provided that lady was away and the room available, and roll in a big tub for the young gentleman—"who do be washin' hisself all the time and he that sloppy that I'm afeared everything will be spilt for the mistress," and Jack would slip out of his working clothes (he would often come away in his flannel shirt and loose tie, especially when he was late in paying off) and shed his heavy boots with the red clay of Jersey still clinging to their soles, and get into his white linen and black clothes and dress shoes, and then the two chums would lock arms and saunter up Fifth Avenue to dine either at one of Peter's clubs or at some house where he and that "handsome young ward of yours, Mr. Grayson—do bring him again," were so welcome.

If Miss Felicia was in town and her room in use, there was never any change in the programme, Mrs. McGuffey rising to the emergency and discovering another and somewhat larger apartment in the next house but two—"for one of the finest gentlemen ye ever saw and that quiet," etc.—into which Jack would move and which the good woman would insist on taking full charge of herself.

It was on one of these blessed and always welcome nights, after the two had been dining at "a little crack in the wall," as Peter called a near-by Italian restaurant, that he and Jack stopped to speak to Isaac Cohen whom they found closing his shop for the night. Cohen invited them in and Jack, after following the little tailor through the deserted shop—all the work people had left—found himself, to his great surprise, in a small

room with a and w angle of the of a s a fashi

Peter enough one of terior great i that w

mounte was wi listened on even dent c

this lif some y ter's m was, m

Cohen fitted shelter with hi tings an looking

bushy t speaking as man

Once bustled drawing a vase fragran two big to the with v

within a wise dis of the This do of his d

"Yes! Isaac C two wes glimpse should r an auth

tures.— his saf old mar too. A not onc

him hav word r and he l press of Can you

boy—eve I have l word eli before t of all, f whom i loose."

"And "Imme "And Jew?"

Jack ha "Never to his cr "Why? "Beacu him and years l

ever sou Jack s and setti his chair "Sour never dic

"You c know hin But you you, if y now I th

shall kn that he among th ly the b

whose cl puses he he somet out of P here—his yours."

"All in Peter." terest di "I am

penny, my h the slat clean."

"But y Uncle Pe "And s them dirt very grea

room at the rear, which Isaac opened with a key taken from his vest pocket, and which even in the dim light of a single gas jet had more the appearance of the den of a scholar, or the workshop of a scientist, than the private office of a fashioner of clothes.

Peter only stayed a moment—long enough to borrow the second volume of one of Isaac's books, but the quaint interior and what it contained made a great impression on Jack,—so much so that when the two said good-night and mounted the stairs to Peter's rooms, it was with increased interest that the boy listened to the old fellow who stopped on every landing to tell him some incident connected with the little tailor and his life: How after his wife's death some years before, and his only daughter's marriage—"and a great affair it was, my boy, I was there and know,"—Cohen had moved down to his shop and fitted up the back room for a little shelter of his own, where he had lived with his books and his personal belongings and where he had met the queerest looking people—with big heads and bushy beards—foreigners, some of them—speaking all kinds of languages, as well as many highly educated men in town.

Once inside his own cosy rooms Peter bustled about, poking the fire into life, drawing the red curtains closer, moving a vase of roses so he could catch their fragrance from where he sat, wheeling two big, easy, all-embracing arm-chairs to the blaze, rolling a small table laden with various burnables and pourables within reach of their elbows, and otherwise disporting himself after the manner of the most cheery and lovable of hosts. This done, he again took up the thread of his discourse.

"Yes! He's a wonderful old fellow, this Isaac Cohen," he rattled on when the two were seated. "You had only a glimpse of that den of his, but you should see his books on costumes,—he's an authority, you know,—and his miniatures.—Oh a Cosway, which he keeps in his safe, that is a wonder!—and his old manuscripts. Those are locked up too. And he's a gentleman, too, Jack; not once in all the years I have known him have I ever heard him mention the word money in an objectionable way, and he has plenty of it even if he does press off my coat with his own hands. Can you recall anybody you know, my boy—even in the houses where you and I have been lately, who doesn't let the word slip out in a dozen different ways before the evening is over? And best of all, he's sane,—one of the few men whom it is safe to let walk around loose."

"And you like him?"

"Immensely."

"And you never remember he is a Jew?" This was one of the things Jack had never understood.

"Never,—that's not his fault,—rather to his credit."

"Why?"

"Because the world is against both him and his race, and yet in all the years I have known him, nothing has ever soured his temper."

Jack struck a match, relit his cigar and settling himself more comfortably in his chair, said in a positive tone:

"Sour or sweet,—I don't like Jews,—never did."

"You don't like him because you don't know him. That's your fault, not his. But you would like him, let me tell you, if you could hear him talk. And now I think of it, I am determined you shall know him, and right away. Not that he cares—Cohen's friends are among the best men in London, especially the better grade of theatrical people, whose clothes he has made and whose purses he has kept full—yes—and whom he sometimes had to bury to keep them out of Potter's field; and those he knows here—his kind of people, I mean, not yours."

"All in his line of business, Uncle Peter," Jack laughed. "How much interest did they pay,—cent per cent?"

"I am ashamed of you, Jack. Not a penny. Don't let your mind get clogged up, my boy, with such prejudices,—keep the slate of your judgment sponged clean."

"But you believe everybody is clean, Uncle Peter."

"And so must you, until you prove them dirty. Now, will you do me a very great kindness and yourself one as

well? Please go downstairs, rap three times at Mr. Cohen's shutters—hard, so that he can hear you—that's my signal—present my compliments and ask him to be kind enough to come up and have a cigar with us."

Jack leaned forward in his seat, his face showing his astonishment.

"You don't mean it?"

"I do."

"All right."

The boy was out of his chair and clattering downstairs before Peter could add another word to his message. If he had asked him to crawl out on the roof and drop himself into the third-story window of the next house, he would have obeyed him with the same alacrity.

Peter wheeled up another chair; added some small and large glasses to the collection on the tray and awaited Jack's return. The experience was not new. The stupid, illogical prejudice was not confined to inexperienced lads.

He had had the same thing to contend with dozens of times before. Even Holker had once said: "Peter, what the devil do you find in that little shrimp of a Hebrew to interest you? Is he cold that you warm him, or hungry that you feed him,—or lonely that—"

"Stop right there, Holker! You've said it,—lonely—that's it—lonely! That's what made me bring him up the first time he was ever here. It seemed such a wicked thing to me to have him at one end of the house—the bottom end, too—crooning over a fire, and I at the top end crooning over another, when one blaze could warm us both. So up he came, Holker, and now it is I who am lonely when a week passes and Isaac does not tap at my door, or I tap at his."

The distinguished architect understood it all a week later when the new uptown synagogue was being talked of and he was invited to meet the board, and found to his astonishment that the wise little man with the big gold spectacles, occupying the chair was none other than Peter's tailor.

"Our mutual friend Mr. Grayson, of the Exeter Bank," spoke to me about you, Mr. Morris," said the little man without a trace of foreign accent and with all the composure of a great banker making a government loan; rising at the same time, with great dignity introducing Morris to his brother trustees and then placing him in the empty seat next to his own. After that, and on more than one occasion, there were three chairs around Peter's blaze, with Morris in one of them.

All these thoughts coursed through Peter's head as Jack and Cohen were mounting the three flights of stairs.

"Ah, Isaac," he cried at first sight of his friend, "I just wanted you to know my boy, Jack Breen, better, and as his legs are younger than mine, I sent him down instead of going myself—you don't mind, do you?"

"Mind!—of course I do not mind,—but I do know Mr. Breen. I first met him many months ago—when your sister was here—and then I see him going in and out all the time—and—"

"Stop your nonsense, Isaac,—that's not the way to know a man; that's the way not to know him, but what's more to the point is, I want Jack to know you. These young fellows have very peculiar ideas about a good many things,—and this boy is like all the rest—some of which ought to be knocked out of his head,—your race, for one thing. He thinks that because you are a Jew that you—"

Jack uttered a smothered, "Oh, Uncle Peter!" but the old fellow who now had the tailor in one of his big chairs and was filling a thin wineglass with a brown liquid (ten years in the wood—Holker sent it)—kept straight on "Jack's all right inside, or I wouldn't love him, but there are a good many things he has got to learn, and you happen to be one of them."

Cohen lay back in his chair and laughed heartily.

"Do not mind him, Mr. Breen,—do not mind a word he says. He mortifies me that same way. And now—" here he turned his head to Peter—"what does he think of my race?"

"Oh! he thinks you are a lot of money-getters and pawnbrokers, gouging the poor and squeezing the rich."

Penniless Old Men

You know many of them—men who in their prime made plenty of money, but who spent as freely as they earned. Old age finds them in a sorry plight.

You don't expect to be without means of support when you grow old, do you? Neither did they. But you can escape their bitter experience if you will.

A few dollars saved each year and invested in an Imperial Endowment Policy will provide the means to keep you in comfort in your old age. Or it will take care of your family should death call you early.

Fill out and return the coupon below and we'll send you full information free.

Name..... Age.....
Address.....
Occupation..... Married?.....
Single?.....

THE IMPERIAL LIFE Assurance Company of Canada HEAD OFFICE - TORONTO

Branches and Agents in all important centres

Copyright 1914.



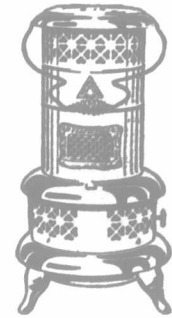
The House Without A Cold Spot

THE house that has a Perfection Smokeless Oil Heater needn't have a cold spot anywhere.

A Perfection is light and can be carried easily from room to room—anywhere

that extra heat is needed. For the "between seasons" of Fall and Spring the Perfection Smokeless Oil Heater gives just the heat you want.

PERFECTION SMOKELESS OIL HEATERS



Perfection heaters are solid, hand-somely designed and smokeless and odorless. Look for the Triangle trademark.

Made in Canada ROYALITE OIL is best for all uses THE IMPERIAL OIL COMPANY, Limited Toronto Quebec Halifax Montreal St. John Winnipeg Vancouver

When Writing Mention The Advocate

'Camp' the-never-waste-a-drop Coffee

"Camp" goes further and lasts longer than any other coffee. "Camp" is delicious and usable to the last drop. It never goes stale.



You make each cup just as you want it—simply adding boiling water. No dregs or grounds.

Pure—and so economical.

Get "Camp" from your grocer, and try it to-day.

R. PATERSON & SONS, LTD., COFFEE SPECIALISTS, GLASGOW.



Grow Mushrooms---\$5 to \$20 a Week

\$56 Worth From a \$2 Bed

Dear Sir:

I am pleased with my success. It is just three months to-morrow since I picked my first mushrooms, and the bed is still yielding. Altogether from this one bed of 50 square feet I have gathered so far 80 pounds. I have good sale for all I can grow at 70 cents per pound. Yours,

(Signed)

U. Natstead

A. V. JACKSON, Falmouth Mushroom Cellars, Inc., 304 Gifford St., Falmouth, Mass.

Others Do, Why Don't You?

Increase your income at home in spare time. A small bed 5x10 feet in your basement, barn, shed, almost anywhere, will grow from 60 to 100 lbs. of mushrooms, selling at 50c. to \$1 a lb. Mr. Jackson, who is at the head of the largest scientific mushroom plant in the world, costing \$150,000 to equip, has shown over 50,000 people how to grow them successfully. Write for free illustrated booklet telling how to raise, how to sell, etc.



A. V. JACKSON
The Mushroom Man

Now is the Time to Start Using Wodehouse's Animal Invigorators

As a blood purifier and conditioner it is unequalled, will put your horses, cattle, hogs and sheep in perfect condition and save its cost several times over by reducing the feed.

OUR FAMOUS PREPARATIONS:

- Wodehouse's Animal Invigorator—Unequalled for all kinds of stock.
- Wodehouse's Poultry Invigorator—The chicken fanciers' best friend.
- Wodehouse's Creameal—The perfect food for calves and pigs.
- Wodehouse's Baby Chick Food—The purest of all Baby Chick Feed.
- Wodehouse's Lice Killer—Sure death to all vermin.

Send us your name and address, and we will mail you free a handsome lithographed card.

Wodehouse Invigorator Ltd., Hamilton, Ont.

JOHN POLLARD, BREEDER OF CHOICE CHESTER WHITE PIGS

Present offerings: One boar of 4 mos., one of 7 mos. Sows to farrow in midwinter; also young pigs.

Norwich, R. 4, Ontario

Jersey Bull Calf for sale, registered, well bred, 14 months old, and of a splendid milker which tests 3.85.

R. R. DODDS, Box 229, Guelph, Ont.

Please mention "The Farmer's Advocate."

Jack broke out into a cold perspiration:

"Really, Uncle Peter! Now, Mr. Cohen, won't you please believe that I never said one word of it," exclaimed Jack in pleading tones, his face expressing his embarrassment.

"I never said you did, Jack," rejoined Peter with mock solemnity in his voice. "I said you thought so. And now here he is,—look at him. Does he look like Scrooge or Shylock or some old skinflint who—" here he faced Cohen, his eyes brimming with merriment—"What are we going to do with this blasphemer, Isaac? Shall we boil him in oil as they did that old sixteenth-century saint you were telling me about the other night, or shall we—?"

The little tailor threw out his hands—each finger an exclamation point—and laughed heartily, cutting short Peter's tirade.

"No—no—we do none of these dreadful things to Mr. Breen; he is too good to be a saint," and he patted Jack's knees—"and then again it is only the truth. Mr. Breen is quite right; we are a race of money-getters, and we are also the world's pawnbrokers and will always be. Sometimes we make a loan on a watch or a wedding ring to keep some poor soul from starving; sometimes it is a railroad to give a millionaire a yacht, or help buy his wife a string of pearls. It is quite the same, only over one shop we hang three gilt balls; on the other we nail a sign which reads: 'Financial Agents.' And it is the same Jew, remember, who stands behind both counters. The first Jew is overhauled almost every day by the police; the second Jew is regarded as our public-spirited citizen. So you see, my young friend, that it is only a question of the amount of money you have got whether you loan on rings or railroads."

"And whether the Christian lifts his hat or his boot," laughed Peter.

Cohen leaned his elbows on his plump knees and went on, the slender glass still in his hand, from which now and then he took a sip. Peter sat buried in his chair, his cigar between his fingers. Jack held his peace; it was not for him to air his opinions in the presence of the two older men, and then again the tailor had suddenly become a savant.

"Of course, there are many things I wish were different," the tailor continued in a more thoughtful tone. "Many of my people forget their birth-right and force themselves on the Christian, trying to break down the fence which has always divided us, and which is really our best protection. As long as we keep to ourselves we are a Power. Persecution—and sometimes it amounts to that—is better than amalgamation; it brings out our better fighting qualities and makes us rely on ourselves. This is the view of our best thinkers, and they are right. Just hear me run on! Why talk about these things? They are for graybeards, not young fellows with the world before them." Cohen straightened up—laid his glass on the small table, waved his hand in denial to Peter who started to refill it, and continued, turning to Jack: "And now let me hear something about your own work, Mr. Breen," he said in his kindest and most interesting tones. Mr. Grayson tells me you are cutting a great tunnel. Under a mountain, is it not? Ah!—that is something worth doing. And here is this old uncle of yours with his fine clothes and his old wine, who does nothing but pore over his musty bank-books, and here am I in the cellar below, who can only sew on buttons, and yet we have the impudence to criticise you! Really, I never heard of such conceit!"

"Oh!—but it isn't my tunnel," Jack eagerly protested, greatly amused at the Jew's talk; "I am just an assistant, Mr. Cohen." Somehow he had grown suddenly smaller since the little man had been talking.

"Yes,—of course, we are all assistants; Mr. Grayson assists at the bank, and I assist my man, Jacob, who makes such funny mistakes in the cut of his trousers. Oh, yes, that is quite the way life is made up. But about this tunnel? It is part of this new branch, is it not? Some of my friends have told me about it. And it is going straight through the mountain."

And then before Jack or Peter could reply the speaker branched out into an account of the financing of the great Mt. Cenis tunnel, and why the founder of the house of Rothschild, who had "assisted" in its construction, got so many decorations from foreign governments; the talk finally switching off to the enamelled and jewelled snuff boxes of Baron James Rothschild, whose collection had been the largest in Europe; and what had become of it; and then by one of those illogical jumps—often indulged in by well-informed men—discussing any subject that absorbs him—brought up at Voltaire and Taine and the earlier days of the Revolution in which one of the little tailor's ancestors had suffered spoliation and death.

Jack sat silent—he had long since found himself out of his depth—drinking in every word of the talk, his wonderment increasing every moment, not only over Cohen, but over Peter as well, whom he had never before heard so eloquent or so learned, or so entertaining. When at last the little man rose to go, the boy, with one of those spontaneous impulses which was part of his nature, sprang from his seat, found the tailor's hat himself, and conducting him to the door, wished him good-night with all the grace and well-meant courtesy he would show a prince of the blood, should he ever be fortunate enough to meet one.

Peter was standing on the mat, his back to the fire, when the boy returned.

"Jack, you delight me!" the old fellow cried. "Your father couldn't have played host better. Really, I am beginning to believe I won't have to lock you up in an asylum. You're getting wonderfully sane, my boy,—real human. Jack, do you know that if you keep on this way I shall really begin to love you!"

"But what an extraordinary man," exclaimed Jack, ignoring Peter's compliment and badinage. "Is there anything he does not know?"

"Yes,—many things. Oh! a great many things. He doesn't know how to be rude, or ill bred, or purse-proud. He doesn't know how to snub people who are poorer than he is, or to push himself in where he isn't wanted; or to talk behind people's backs after he has accepted their hospitality. Just plain gentleman journeyman tailor, Jack. And now, my boy, be honest. Isn't he a relief after some of the people you and I meet every day?"

Jack settled again in his chair. His mind was not at all easy.

"Yes, he is, and that makes me afraid I was rude. I didn't mean to be."

"No,—you acted just right. I wanted to draw him out so you could hear, and you must say that he was charming. And the best of it is that he could have talked equally well on a dozen other subjects."

For some time Jack did not answer. Despite Peter's good opinion of him, he still felt that he had either said or done something he should be ashamed of. He knew it was his snap judgment about Cohen that had been the cause of the object lesson he had just received. Peter had not said so in so many words—it was always with a jest or a laugh that he corrected his faults, but he felt their truth all the same.

For some minutes he leaned back in his chair, his eyes on the ceiling; then he said in a tone of conviction:

"I was wrong about Mr. Cohen, Uncle Peter. I am always putting my foot in it. He is an extraordinary man. He certainly is, to listen to, whatever he is in his business."

"No, Jack, my boy—you were only honest," Peter rejoined, passing over the covert allusion to the financial side of the tailor. "You didn't like his race and you said so. Act first. Then you found out you were wrong and said so. Act second. Then you discovered you owed him an ample apology and you bowed him out as if he had been a duke. Act third. And now comes the epilogue—Better be kind and human than be king! Eh, Jack?" and the old gentleman threw back his head and laughed heartily.

Jack made no reply. He was through with Cohen;—something else was on his mind of far more importance than the likes and dislikes of all the Jews in

NOVEMBER
S
CO
a
E
W
wor
whil
a bo
CO
WI
FO
2
MORE
MILK
'1900
Sent
'1900
357
(Factory
STA
can be cured
its cause.
entirely resto
is doing it
and referenc
The Arno
'1900
Sent
'1900
357
(Factory
Send 10c
a few at this
Farmer Berns Sch

H.P. SAUCE

continues to arrive from England

There is no advance in price

Wouldn't it be worth your while to try a bottle now?



CODE WILL FORM 25¢

MAKE YOUR OWN WILL

in a legal and unbreakable manner—in privacy and without expense. You owe this to your family and dependents. Complete instructions with each Code Will form—at your book-seller or stationer, or

The Copp Clark Co., Limited
509 Wellington W. Toronto

MORE MILK

Of a better quality—in greater quantity

"MAPLE LEAF" Oil Cake Meal

Contains over 35% Protein
Write for free sample and prices
The Canada Linseed Oil Mills, Ltd.
Toronto and Montreal

STAMMERERS

can be cured, not merely of the habit, but of its cause. The Arnott Institute has permanently restored natural speech to thousands—in doing it to-day. Write for full information and references to

The Arnott Institute, Berlin, Ont., Can.

'1900' Gravity Washer

Sent free for one month's trial. Write for particulars.

"1900" WASHER COMPANY
357 Yonge St., Toronto, Ont.
(Factory 79-81 Portland Street, Toronto)

Great Athletic Book 10c

Be strong and athletic. Learn wrestling, self defense, jiu-jitsu. Let **Farmer, Burr, Mgr. Frank Gotch, World's Champion**, teach you. Great opportunity for young men. Makes you strong, healthy and skillful.

for 32-page book showing great holds and tricks by **Burns and Gotch**. Only a few at this price. Write today, giving your age

Farmer Burns School of Wrestling, 7618 Range, Bldg., Omaha, Neb.

Christendom. Something he had intended to lay before Peter at the very moment the old fellow had sent him for Isaac—something he had come all the way to New York to discuss with him; something that had worried him for days. There was but half an hour left; then he must get his bag and say good-night and good-by for another week or more.

Peter noticed the boy's mood and laid his hand on his wrist. Somehow this was not the same Jack.

"I haven't hurt you, my son, have I?" he asked with a note of tenderness in his voice.

"Hurt me! You couldn't hurt me, Uncle Peter!" There was no question of his sincerity as he spoke. It sprang straight from his heart.

"Well, then, what's the matter?—out with it. No secrets from blundering old Peter," he rejoined in a satisfied tone.

Jack laughed gently: "Well, sir, it's about the work." It wasn't; but it might lead to it later on.

"Work!—what's the matter with the work! Anything wrong?" There was a note of alarm now that made Jack reply hastily:

"No, it will be finished next month; we are lining up the arches this week, and the railroad people have already begun to dump their cross ties along the road bed. It's about another job. Mr. MacFarlane, I am afraid, hasn't made much money on the fill and tunnel, but he has some other work offered him up in Western Maryland, which he may take, and which, if he does, may pay handsomely. He wants me to go with him. It means a shanty and a negro cook, as near as I can figure it, but I shall get used to that, I suppose. What do you think about it?"

"Well," chuckled Peter—it was not news; MacFarlane had told him all about it the week before at the Century—"if you can keep the shanty tight and the cook sober you may weather it. It must be great fun living in a shanty. I never tried it, but I would like to."

"Yes, perhaps it is,—but it has its drawbacks. I can't come to see you for one thing, and then the home will be broken up. Miss Ruth will go back to her grandmother's for a while, she says, and later on she will visit the Fosters at Newport and perhaps spend a month with Aunt Felicia." He called her so now.

Jack paused for some further expression of opinion from his always ready adviser, but Peter's eyes were still fixed on the slow, dying fire.

"It will be rather a rough job from what I saw of it," Jack went on. "We are to run a horizontal shaft into some ore deposits. Mr. MacFarlane and I have been studying the plans for some time; we went over the ground together last month. That's why I didn't come to you last week."

Peter twisted his head: "What's the name of the nearest town?" MacFarlane had told him but he had forgotten.

"Morfordsburg. I was there once with my father when I was a boy. He had some ore lands near where these are,—those he left me. The Cumberland property we always called it. I told you about it once. It will never amount to anything,—except by expensive boring. That is also what hurts the value of this new property the Maryland Mining Company owns. That's what they want Mr. MacFarlane for. Now, what would you do if you were me?"

"What sort of a town is Morfordsburg?" inquired Peter, ignoring Jack's question, his head still buried between his shoulders.

"Oh, like all other country villages, away from railroad connection."

"Any good houses,—any to rent?"

"Yes,—I saw two."

"And you want my advice, do you, Jack?" he burst out, rising erect in his seat.

"Yes."

"Well, I'd stick to MacFarlane and take Ruth with me."

Jack broke out into a forced laugh. Peter had arrived by a short cut! Now he knew, he was a mind reader.

"She won't go," he answered in a voice that showed he was open to conviction. Peter, perhaps, had something up his sleeve.

"Have you asked her?" The old fellow's eyes were upon him now.

As You Listen to the Band

in your own home, you realize that the NEW EDISON PHONOGRAPH is giving you music more perfect than can be heard in opera house, theatre or concert hall.

Remember that all EDISON RECORDS are made under ideal conditions—in a specially constructed concert room—far from the noises of the street, where there are no late comers and the inevitable chatter of the concert audience.

EDISON PHONOGRAPH

(THE INSTRUMENT WITH THE DIAMOND POINT)



And such Bands as you may enjoy too!

- Highlanders Bagpipe Band
- United States Marine Band
- Artillery Band of Mexico
- Garde Republicaine Band
- Souza's Band
- National Military Band
- Police Band of Mexico
- New York Military Band
- and
- Johann Strauss' Orchestra.

The new Edison Phonograph has the diamond reproducing point, unbreakable and long playing records, superior motors and construction, concealed horns, and the Cabinets are made in true Period styles, in perfect harmony with the finest furniture.

As usual, Edison owners have everything worth while in the new melodies, the old favorites, selections from the classics, and the popular dance and song hits of the day. There are Edison dealers everywhere. Go to the one nearest you and ask for free demonstration, or write us for complete information today.



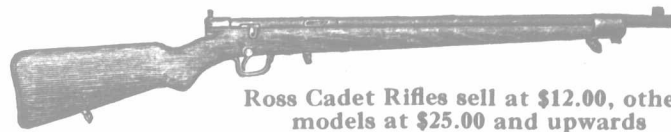
Thomas A. Edison Inc., Orange, N. J.

Learn How to Shoot

Lord Kitchener emphasizes Lord Robert's remarks on the vital importance of a knowledge of rifle shooting.

THE ROSS CADET RIFLE

offers a splendid arm for training boys or men, and has been adopted by the Canadian Government for use of Cadet Corps. The action is very similar to that of the Ross Military Arm, and the sights are excellent, while the accuracy of the barrel is as great as that of other celebrated Ross Models. It is a splendid arm for camp or farm, perfectly safe, and the .22 short or long rifle cartridges which are used can be bought anywhere and cost but little.

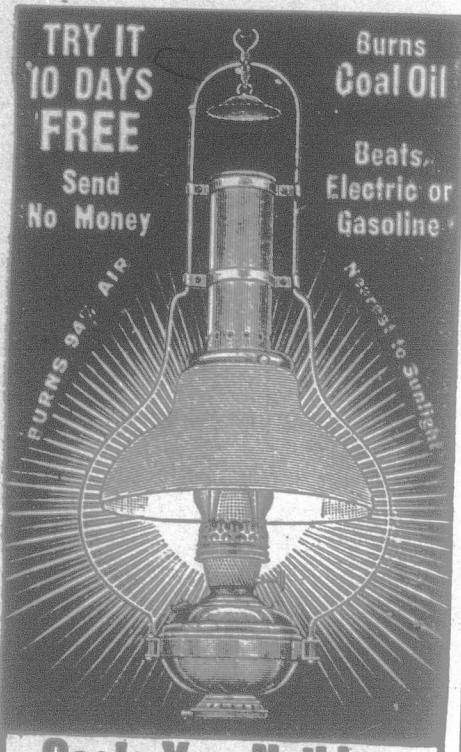


Ross Cadet Rifles sell at \$12.00, other models at \$25.00 and upwards

Best dealers everywhere sell them. Complete catalogue sent free on request.

ROSS RIFLE COMPANY, Quebec, Que.

Mention "The Advocate"



TRY IT 10 DAYS FREE
Send No Money

Burns Coal Oil
Beats Electric or Gasoline

Costs You Nothing
to try this wonderful new Aladdin coal oil mantle lamp 10 days right in your own home. You don't need to send us a cent in advance, and if you are not perfectly satisfied, you may return it at our expense.

Twice the Light on Half the Oil
Recent tests by noted scientists at 14 leading Universities, prove the Aladdin gives more than twice the light and burns less than half as much oil as the best round wick open flame lamps on the market. Thus the Aladdin will pay for itself many times over in oil saved, to say nothing of the increased quantity and quality of pure white light it produces. A style for every need.

Over Three Million
people now enjoy the light of the Aladdin and every mail brings hundreds of enthusiastic letters from satisfied users endorsing it as the most wonderful light they have ever seen. Such comments as "You have solved the problem of rural home lighting," "I could not think of parting with my Aladdin," "The grandest thing on earth," "You could not buy it back at any price," "Beats any light I have ever seen," "A blessing to any household," "It is the acme of perfection," "Better than I ever dreamed possible," "Makes my light look like a tallow dip," etc., etc., pour into our office every day. Good Housekeeping Institute, New York, tested and approved the Aladdin.

We Will Give \$1000
to the person who shows us an oil lamp equal to the Aladdin (details of this Reward Offer given in our circular which will be sent you). Would we dare invite such comparison with all other lights if there were any doubt about the superiority of the Aladdin?

Get One FREE
We want one user in each locality to advertise and recommend the Aladdin. To that person we have a special introductory offer under which one lamp is given free. Just drop us a postal and we will send you full particulars about our great 10 Day Free Trial Offer, and tell you how you can get one free.

THE MANTLE LAMP COMPANY
429 Aladdin Bldg., Montreal and Winnipeg, Canada
Largest Manufacturers and Distributors of Coal Oil Mantle Lamps in the World.

Men With Rigs Make Big Money
delivering Aladdin lamps. No previous experience necessary. One farmer who had never sold anything in his life made over \$500.00 in six weeks. Another says: "I disposed of 34 lamps out of 31 calls."

No Money Required We furnish capital get started. Ask for our distributor's Easy-System-of-Delivery plan quick, before territory is taken.

LEARN TO BE A CHAUFFEUR

The British Government want 1,000 chauffeurs. Let us qualify you either to go to the front or to take the place here of others who have gone—good chauffeurs are scarce. All makes of gasoline motor engines, repairing, etc., thoroughly studied. Our diploma qualifies you for Government chauffeurs' license examination. Write to-day for particulars and free booklet. Classes now starting.

Ed. W. Cameron, Principal
TORONTO AUTOMOBILE SCHOOL
86 Wellington Street West, Toronto, Ont.

PRESIDENT SUSPENDER
NONE SO EASY

Made In Canada

"No,—not in so many words."
"Well, try it. She has always gone with her father; she loves the outdoor life and it loves her. I never saw her look as pretty as she is now, and she has her horse too. Try asking her your has her horse too. Try asking her yourself, beg her to come along and keep house and make a home for the three of you."

Jack leaned back in his seat, his face a tangle of hopes and fears. What was Uncle Peter driving at, anyhow?

"I have tried other things, and she would not listen," he said in a more positive tone. Again the two interviews he had had with Ruth came into his mind; the last one as if it had been yesterday.

"Try until she does listen," continued Peter. "Tell her you will be very lonely if she doesn't go, and that she is the one and only thing in Corklesville that interests you outside of your work—and be sure you mention the dear girl first and the work last—and that you won't have another happy hour if she leaves you in the—"

"Oh!—Uncle Peter!"
"And why not? It's a fact, isn't it? You were honest about Isaac; why not be honest with Ruth?"

"I am."

"No, you're not,—you only tell her half what's in your heart. Tell her all of it! The poor child has been very much depressed of late, so Felicia tells me, over something that troubles her, and I wouldn't be at all surprised if you were at the bottom of it. Give yourself an overhauling and find out what you have said or done to hurt her. She will never forget you for pulling her father out of that hole, nor will he."

Jack bristled up: "I don't want her to think of me in that way!"

"Oh, you don't! don't you? Oh, of course not! You want her to think of you as a great and glorious young knight who goes prancing about the world doing good from habit, and yet you are so high and mighty that—Jack, you rascal, do you know you are the stupidest thing that breathes? You're like a turkey, my boy, trying to get over the top rail of a pen with its head in the air, when all it has to do is to stoop a little and march out on its toes."

Jack rose from his seat and walked toward the fire, where he stood with one hand on the mantel. He knew Peter had a purpose in all his rallery, and yet he dared not voice the words that trembled on his lips; he could tell the old fellow everything in his life except his love for Ruth and her refusal to listen to him. This was the bitterest of all his failures, and this he would not and could not pour into Peter's ears. Neither did he want Ruth to have Peter's help, nor Miss Felicia's; nor MacFarlane's; nor anybody's help where her heart was concerned. If Ruth loved him that was enough, but he wouldn't have anybody persuade her to love him, or advise with her about loving him. How much Peter knew he could not say. Perhaps—perhaps Ruth told him something!—something he was keeping to himself!

As this last thought forced itself into his brain a great surge of joy swept over him. For a brief moment he stood irresolute. One of Peter's phrases rang clear: "Stoop a little!" Stoop?—hadn't he done everything a man could do to win a woman, and had he not found the bars always facing him?

With this his heart sank again. No, there was no use of thinking anything more about it, nor would he tell him. There were some things that even Peter couldn't understand,—and no wonder, when you think how many years had gone by since he loved any woman.

The chime of the little clock rang out. Jack turned quickly: "Eleven o'clock, Uncle Peter, and I must go; time's up. I hate to leave you."

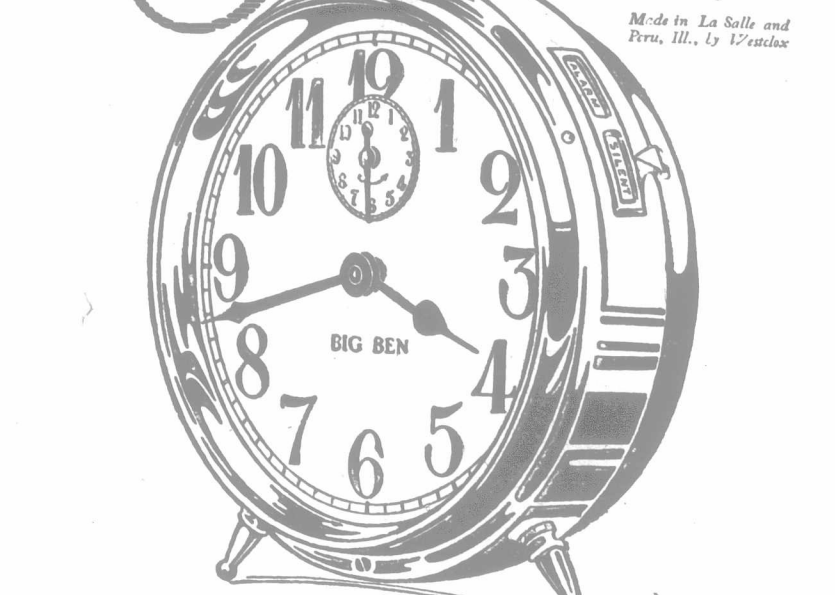
"And what about the shanty and the cook?" said Peter, his eyes searching Jack's.

"I'll go,—I intended to go all the time if you approved."

"And what about Ruth?"
"Don't ask me, Uncle Peter, not now." And he hurried off to pack his bag.

(To be continued.)

Big Ben



It Beats All, How He Gets the Farm Hands up

Chores ain't slow when he's around—his deep toned, cheery voice makes men feel like getting up and being about their work.

That's how he takes all that worry of getting things started off YOUR mind. He's working 24 hours a day on hundreds of thousands of farms—asking only \$3.00 to start and a drop of oil a year as his board.

Put him in the parlor to tell the time by day, or in the dining room, or kitchen—best clock in the world to time cooking with.

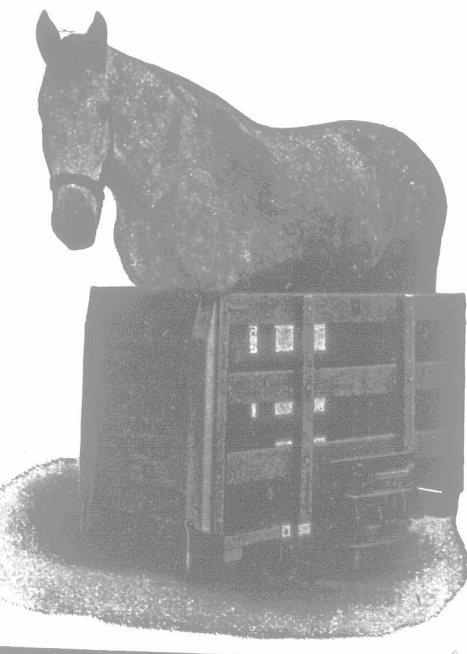
Big Ben stands 7 inches tall, triple-nickel plated, handsome, smart-looking; and is just as smart as he

looks. He wears an inner case of good implement steel to keep him healthy and strong.

He'll ring you up two ways—one way is for five minutes straight without a let-up and the other is ten short rings, every other half minute for ten minutes. Shut him off at any point during either call if you choose.

Ask your dealer to put him through his paces.

If your dealer hasn't him, send a money order for \$3.00 to Westdex, La Salle, Illinois, and he'll come prepaid to your front door if it's anywhere in the Dominion.



"Grey Dan," weight 1,612 lbs., being weighed on an

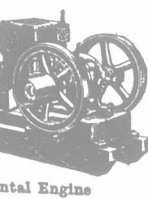
Aylmer Three-Wheel Wagon and Stock Scale

CAPACITY 2,000 lbs.

Delivered at any Railway Station in Ontario, complete with rack, \$35.00

Government Certificate accompanies each scale. Scale shipped same day as money received.

THE AYLMER PUMP & SCALE CO., LIMITED
Aylmer, Ont.

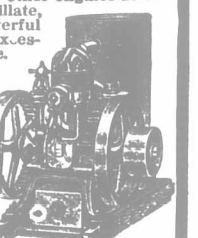


Horizontal Engine

Run on Coal Oil—6c for 10 Hours

Ellis Engines develop more power on cheap lamp oil than other engines do on high-priced gasoline. Will also operate successfully on distillate, petrol, alcohol or gasoline. Strongest, simplest, most powerful engines made; only three working parts. No cranking, no excessive weight, no carbonizing, less vibration, easy to operate.

ELLIS ENGINES



Vertical Engine

Have patent throttle, giving three engines in one; force feed oiler; automobile type muffler; ball-bearing governor adjustable while running and other exclusive features. Every engine sent on 30 days' approval with freight and duty paid. 10-year guarantee. Write for 1915 catalog, "Engine Facts," showing New Models with special prices. Shipments made from Windsor, Ont. ELLIS ENGINE CO., 2855 E. GRAND BLVD., DETROIT, MICH.

SAVE
thoroughly. Save-The-Ho-
19 Y

No blistering
treat Bond t
Ringbone—
Shoulder, Kn
You risk n
for advice an
Save-The-Ho
ADVICE—Al
gm.) Write
TE

148 Van Hor
Druggists c
WITH CONT
or Express pai

DR. P
SP

For the c
Splints, W
Bruises, Th
worm on
cattle, and
to remove
all unnatur
enlargeme
ments. This
preparation,
unlike o
thers, acts
by absorbi
ng rather
than bliste
r. This is the
only prepara
tion in the
world guaran
Spavin or m
the hair. M
Page & Son,
E.C. Maille
price \$1.00.—
J. A. JO
171 King St

SURE

It stops ble
Blood Poison
Fr
DOUGL

You C
A BOG SPAV

A
will
and y
Does
hair.
Will
Book
the an
reduc
Muscle
Wena, Cysta. All
bottle at drug
W.F. YOUNG, F.I.

Prime C
Best Q

Guaranteed 51%
sample on req
radio-grow

The Chisho

DR. BEL
FREE to horse
fair trial. Guar
Coughs, Colds,
wanted. DR. B

ABERDEE
OX

For Sale—Good
also a few Oxfo
Fergus, Ontari

ABERDEE
For Sale—Sever
sire and prize-w
A. Dinamore, M
Clark

SAVE-THE-HORSE

After Doctors Give Up

C. H. Varner, Valley Hotel, Buckhannon, W. Va., writes: "Couple of years ago at Clarksburg, W. Va., I had a horse with thoroughpin. You gave us instructions and your Save-The-Horse cured the thoroughpin."

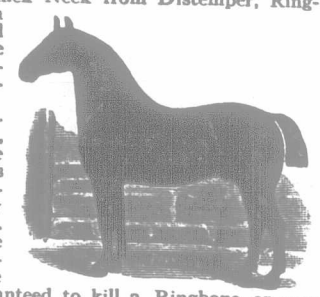
19 Years a Success

No blistering or loss of hair. A Signed Contract Bond to return money if remedy fails on Ringbone—Thorpin—SPAVIN—and ALL—Shoulder, Knee, Ankle, Hoof and Tendon Disease. You risk nothing by writing; it costs nothing for advice and there will be no string to it. **Save-The-Horse BOOK, Sample Contract and ADVICE—All Free** (to Horse Owners and Managers.) Write today. Address,

TROY CHEMICAL CO.,
148 Van Horn St., Toronto, Ont.
Druggists everywhere sell Save-The-Horse WITH CONTRACT, or we send by Parcel Post or Express paid.

DR. PAGE'S ENGLISH SPAVIN CURE

For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hocks, Strains or Bruises, Thick Neck from Distemper, Ringworm on cattle, and to remove all unnatural enlargements. This preparation, unlike others, acts by absorbing rather than blistering. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin or money refunded, and will not kill the hair. Manufactured by Dr. Frederick A. Page & Son, 7 and 9 Yorkshire Road, London, E.C. Mailed to any address upon receipt of price \$1.00.—Canadian agents—



J. A. JOHNSON & CO., Druggists,
171 King St., E., Toronto, Ont.

SURE CURE FOR THRUSH

will be found in



Douglas' Egyptian Liniment

It stops bleeding instantly and will prevent Blood Poisoning. For Sale by all Dealers. Free Sample on request.

DOUGLAS & CO., NAPANEE, ONT.

You Can't Cut Out A BOG SPAVIN, PUFF or THOROUGHPIN, but

ABSORBINE

TRADE MARK REG. U.S. PAT. OFF.

will clean them off permanently, and you work the horse same time. Does not blister or remove the hair. \$2.00 per bottle, delivered. Will tell you more if you write. **Book 4 K free.** ABSORBINE, JR., the antiseptic liniment for mankind, reduces Varicose Veins, Ruptured Muscles or Ligaments, Enlarged Glands, Gout, Wens, Cysts, Always pain quickly. Price \$1.00 and \$2.00 a bottle at druggists or delivered. Manufactured only by W.F. YOUNG, P.D.F. 258 Lyman Bldg., Montreal, Can.

Prime Cotton Seed Meal

Best Quality Texas Meal

Guaranteed 51% combined fat and protein. Mail sample on request. Also Alfalfa Meal, Colorado-grown. Prices on application.

The Chisholm Milling Co. Limited
TORONTO

DR. BELL'S

Veterinary Medical Wonder. 10,000 \$1.00 bottles FREE to horsemen who will give The Wonder a fair trial. Guaranteed to cure Inflammation, Colic, Coughs, Colds, Distemper, Fevers, etc. Agents wanted. DR. BELL, V.S., Kingston, Ontario.

ABERDEEN-ANGUS CATTLE OXFORD SHEEP

For Sale—Good young show bulls and females; also a few Oxford rams. Thos. B. Broadfoot, Fergus, Ontario. G.T.R. and C.P.R.

ABERDEEN-ANGUS CATTLE

For Sale—Several young bulls from the imported sire and prize-winner, "Pradamere." Address: A. Dismore, Manager, "Grape Grange" Farm Clarksburg, Ontario

Questions and Answers.

1st—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.

2nd—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Veterinary.

Lump on Jaw.

Cow has a hard lump about the size of a saucer on her upper jaw, between her eye and nostril. It has been growing for about six months. It has never discharged. I think it is caused by a tooth. Would a blister remove it?

G. F.

Ans.—A blister will not remove it. It is possible it is due to a decaying tooth, and if so, the only successful treatment will be to have the tooth extracted. A veterinarian could tell by examining the mouth whether a tooth is causing the trouble. It is more probable a case of lump jaw, for which treatment consists in giving iodide of potassium three times daily. Commence with 1-dram doses, and increase the dose by ½ dram daily until she refuses food and water, fluid runs from mouth and eyes, and the skin becomes scruddy. When any of these symptoms become well marked, cease giving the drug. If necessary, repeat treatment in three months.

Pigs with Cough.

Pigs now about two months old have had a cough since about two weeks old. The cough is quick and continued, and worse after feeding. Some older pigs are also affected. I treated for worms without results. The pigs eat well, but do not grow, and are getting poor.

L. W.

Ans.—The symptoms indicate lung worms, for which treatment is seldom effective. Infectious bronchitis produces about the same symptoms. Treatment is the same. Shut the pigs in a close pen and burn sulphur so long as you can stand the fumes. Then open the door or window to admit air. This forces the pigs to inhale the fumes, which are supposed to kill the lung worms or the bacilli of bronchitis. Treatment may be repeated every 8 to 10 days, but it is often of no avail. It will be wise to get your veterinarian to investigate. If necessary, allow him to kill a pig to hold a post-mortem in order to ascertain for certain the nature of the trouble. In some cases it is wise to dispose of the whole herd and thoroughly disinfect the premises before introducing fresh stock.

Miscellaneous.

Trustees and Wood.

Our School Section, after the New Year, as usual, called for tenders for wood and kindling, but got no tender, so some time after one of the farmers of the Section tendered, and, I find, was ignored by trustees, and one trustee put in kindling and another trustee put in the hard wood. Is that legal, and if not, what can be done? READER.

Ans.—If any dispute has arisen over the payment for the wood, some rate-payer in the Section should enter action against the trustees in order that the matter be righted. It is not legal for trustees themselves to supply wood to the school of which they are trustees.

Geese and Ganders.

Let me know how you can tell the difference between geese and ganders. I have quite a flock, and cannot tell one from the other. J. F. O.

Ans.—We do not know that we can very well direct you as to how to tell the difference between the geese and ganders in your flock. The safest plan is by their call, which in the gander is usually shriller than in the goose. The gander is as a general thing longer in the body and longer in the neck, and more upstanding than the shorter, squat-tier female of the species. When the birds have reached full development, it is generally not so difficult to tell the one from the other.

Raising Stock That Pays

Increase your profits from stock-raising and dairying by using CALDWELL'S STOCK MEALS. These guaranteed feeds result in a quick improvement in your herds. We print and publish a careful analysis of each meal, besides guaranteeing all ingredients to the Government.

CALDWELL'S MOLASSES MEAL

contains 84% Pure Cane Molasses and 16% Edible Moss. It is a fully-balanced ration for the upbuilding of cattle, horses, sheep and hogs, furnishing valuable feed elements that are lacking in ordinary diet. Makes everyday feed more palatable and beneficial, and reduces feed bills. Write for free booklet.


CALDWELL'S Cream CALF MEAL

is a scientifically-prepared food for young calves, fully as good for them in every way as whole milk. It contains Linseed, Wheat, Oat, Corn, Lucist Bean, Pea and Molasses Meal in right proportions to ensure best results. Enables you to raise calves without having to sacrifice good whole milk. Booklet free.

CALDWELL'S DAIRY MEAL

will increase milk yields and maintain your herd in prime condition. It is a carefully-proportioned cow ration for the production of milk. Contains Gluten Feed, Cottonseed Meal, Dried Grains, Barley, Malt Combing, Molasses Meal, forming a beneficial, high protein feed that will cause your herd to thrive. Booklet free on request.

The Caldwell Feed & Cereal Co., Limited
LARGEST FEED MILLS IN CANADA
DUNDAS, ONTARIO



Excelsior Life Insurance Company

Assets Over Four Million Dollars.
Assurances Over Twenty Million Dollars.

To liquidate that mortgage—to provide for old age—apply to-day for an Endowment Policy.

Head Office: TORONTO
Excelsior Contracts Are Up-to-date
Desirable Vacancies For Agents

1914 Stallions--CLYDESDALES--Fillies 1914

We made the grade on a darkened ship without meeting a Kaiser cruiser, Our 1914 importation are home. Stallions and fillies especially selected for character, quality and breeding. If you want a topper, come and see them.

SMITH & RICHARDSON, Columbus P.O.
Myrtle C.P.R., Brooklyn G.T.R.

Royal Oak Clydesdales

Present offering: 5 Imported Mares (4 with foal by side), 3 yearling Fillies (1 Imp. and 2 Canadian Bred), 1 Canadian Bred Yearling Stallion, 1 Canadian Bred 2-year-old Stallion, 1 Canadian Bred 8-year-old Stallion. Parties wishing to secure a good brood mare or stallion should inspect this offering or communicate with me at earliest convenience. G. A. Attridge, Muirkirk, Ont. P.M. and M.C. Ry. L-D. Phone, Ridgeway

A few choicely-bred young stallions always on hand and for sale. Prices and terms right. Visitors welcome.

BARBER BROS., :: :: GATINEAU PT, QUE.

1909. CANADA'S CHAMPION HEREFORD HERD. 1914

From 1909 to 1914 our herd has maintained their supremacy as Canada's Champion Herd. We have several 20-months' old bulls bred in the leading herds of the United States, and others got by our noted champion, Refiner, all of high-class quality. Female all 2009. Get the best when selecting a herd leader. I. O. Clifford Oshawa Ont.

ABERDEEN-ANGUS CATTLE ELMPARK SUFFOLK SHEEP

Choice young bulls that have won their colors. Choice cows and heifers that have done the same. Suffolk flock headers of highest quality, also shearing and ewe lambs. Come where the best is bred for your breeding stock. JAMES BOWMAN, GUELPH, ONTARIO

100 ESCANA FARM SHORTHORNS 100

For sale, 25 Scotch bull calves from 6 to 12 months; 25 Scotch heifers and young cows bred to Right Sort, imp., and Raphael imp., both prizewinners at Toronto.

MITCHELL BROS., Props., Burlington P.O., Ont. Jos. McCrudden, Mgr.
Farm ¼ mile from Burlington Junc.

Springhurst Shorthorns

Shorthorn cattle have come to their own; the demand and prices are rapidly increasing, now is the time to strengthen your herd. I have over a dozen heifers, from 10 months to two years of age, for sale; every one of them a show heifer, and some of them very choice. Bred in my great prize-winning Harry Smith, HAY P.O., ONT. strains. Only one bull left—a Red 18 months old.

BELMONT FARM SHORTHORNS

We are offering 20 heifers from 1 to 3 years, daughters of the 1913 Toronto Grand Champion, Missie Marquis 77713, Scotch and Scotch Topped, several of them show heifers.

FRANK W. SMITH & SON, R.R. No. 2, Scotland, Ont.
Scotland Station, T. H. & B. L.-D. Phone.

SALEM SHORTHORNS

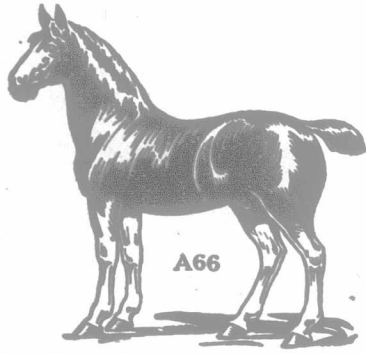
Herd headed by the undefeated champions, Gainford Perfection and Lavendar Scot. Will sell fifteen heifers and fifteen young bulls, at prices you can afford to pay.

J. A. WATT, ELORA, ONT.

Make Your Lamé Horse Sound, Like This

You Can Do It While He Works.

We want to show you that there isn't any affection that causes lameness in horses that can't be cured, no matter of how long standing. We want to send you our instructive book, "Horse Sense" No. 3.



It describes all. And with the book we want to send you an expert's diagnosis of your horse's lameness. All this is absolutely free. Simply mark the spot where swelling or lameness occurs on picture of horse, clip out and send to us telling how it affects the gait, how long animal has been lame and its age.

We absolutely guarantee Mack's \$1,000 Spavin Remedy to cure Spavin, Bone or Bog Spavin, Curb, Splint, Ringbone, Thoroughpin, Sprung Knee, Shoe Boil, Wind Puff, Weak, Sprained and Ruptured Tendons, Sweeny, Shoulder or Hip Lameness and every form of lameness affecting the horse. We have deposited One Thousand Dollars in the bank to back up our guarantee. Cures while he works. No scars, no blemish, no loss of hair.

Your druggist will furnish you with Mack's \$1,000 Spavin Remedy. If he hasn't it in stock, write us. Price \$2.50 per bottle, and worth it. Address McKallor Drug Co., Binghamton, N. Y.

LYMAN BROS. CO., LIMITED
Toronto, Ont.
Distributors to Drug Trade.

SHORTHORNS

8 bulls from 7 to 15 months, some are herd headers both in quality, size and breeding, some are thick, fleshy, sappy bulls that will get good steers, also 10 heifers and a few young cows bred on milking lines, prices easy. Write me your wants.

Stewart M. Graham, Lindsay, Ont.

Lochabar Stock Farm

Offers some choice Shorthorn bulls and females of different ages; also Leicester sheep and Berkshire pigs at reasonable prices.

D. A. GRAHAM
WYOMING : : : : ONTARIO

Spruce Lodge Shorthorns and Leicesters. Have always on hand to offer a good selection of young bulls and heifers from the best milking families; also a choice selection of Leicesters of both sexes including a choice imp. three-year-old ram suitable for show purposes. W. A. Douglas, Caledonia, Ont., R.R. No. 2

1854 MAPLE LODGE STOCK FARM 1914
Shorthorns and Leicesters
We have on hand for sale three extra quality shearing rams; also some very choice lambs of both sexes at very reasonable prices. Situated one mile east Lucan Crossing.

Miss C. Smith, R.R. 1, Clondeboye, Ontario

Fletcher's Shorthorns. Imp. stock bull, Roy Bruce-55038-(89909) 273853, for sale or exchange. Royal Bruce is a choicely-bred Bruce Mayflower; was imported by Mr. Arthur Johnsthor for his own use. Young stock of either sex for sale. Geo. D. Fletcher, Erin, R.R. No. 2. Long-distance Telephone. Erin Station, C.P.R.

Spring Valley Shorthorns
Herd headed by the two great breeding bulls, Newton Ringleader (Imp.) 73783, and Nonpareil Ramsden 83422. Can supply a few of either sex. KYLE BROS., DRUMBO, ONTARIO
Phone and Telegraph via Ayr.

OAKLAND SHORTHORNS
Choice bulls and heifers of dual purpose quality. A sweepstakes roan bull has been in our herd for 8 years. He and two other good red stock bulls are for sale. 58 to select from. No fancy prices. FNO. ELDER & SONS, : : HENSALL, ONT.

Morrison Shorthorns and Tamworths
Bred from the prize-winning herds of England. A choice lot of young boars fit for service and also young sows bred, and also a choice lot of young bulls and heifers sired by Proud Loyalist (Imp) from choice cows. Chas. Currie, Morrison, Ont.

GLENLEA SHORTHORNS
For sale—Our herd bull, Buckingham Bridgroom 81270. He is a dark roan, low set, mellow-fleshed bull, four years old. Quiet, active and sure. If in need of a good bull, write us. John McLean & Son : : Rodney, Ontario

SHORTHORNS
Young bulls and females of the best type and quality, heavy milking strains and flesh combined; also the imp. Duthie bull, Scottish Minstrel, 68710. Thos. Graham, R.R. No. 3, Port Perry, Ont.

Questions and Answers. Miscellaneous.

Feeding Cows—Carbolic Acid.

1. I have silage, roots and straw, and I intend to buy bran for my milk cows this winter. What grain should I feed to make a well-balanced ration?

2. What is the dose of carbolic acid to be fed to cows before freshening?

T. G.

Ans.—1. If your silage contains a large percentage of corn, your concentrate ration would be very well balanced if plenty of bran is given. However, you could use to good advantage some mixed chop, oats and barley. We believe in mixing grain.

2. Some have claimed good results from feeding from 40 to 60 drops daily, and well diluted with water.

Wild Oats—Clipping Horses.

1. What is the best possible way to rid a field of wild oats, and at the same time raise a crop?

2. When is the proper time to clip horses in the fall and spring? Is it too late now?

F. M. G.

Ans.—1. The most effective means we know is seeding down and leaving down for four or five years. It is claimed three years is long enough, but we would prefer to be doubly sure. Then sow nothing but clean seed.

2. We have seen horses clipped at almost any season of the year. For farm horses, it is not generally advisable to clip in the fall. Clipping before seeding commences in the spring is good practice. Clipping, if done in the fall, should be finished before the cold weather sets in, and horses should be blanketed and kept in a warm stable.

Diseased Cow.

I purchased a farrow cow at B's auction sale last spring for \$45, and gave my note, which is due Nov. 14th. B purchased cow about three weeks before his sale from a neighbor as a farrow cow. When B was driving her home he noticed she had a cough, but did not think anything wrong. After I got her, she began to gradually get thin till she died about August 1st. I had a veterinarian examine her, and he pronounced her as bad a case of tuberculosis as he ever saw. B is willing to share one-third loss if C and I will, but C is not willing. Should I refuse to pay note when due, or is B or C at all liable?

Ontario.
Ans.—We think that you ought to settle the matter with B, without litigation. C is not liable to you.

Farming on Shares.

1. A gives his farm on shares for one year, beginning March 1st, 1914. B is to get half of everything. A has two two-year-old colts and four two-year-old heifers, for which he hired pasture for the summer months. Can A make B pay half the cost of pasturing?

2. If A wants B to winter same, could B charge him for them?

3. If so, how much would it be worth?

4. B is pasturing six three-year-old heifers which A promised him would be milking this year, but none of them will milk until next summer. B is leaving place when his year is up. Can he make A pay for wintering them on the place?

5. A two-year-old heifer strayed onto said farm, B allowing it to pasture there all summer, as we could not find the owner. Can B claim half of heifer?

M.

Ans.—1. We think not.

2. Yes.

3 and 4. These are both matters calling for an agreement between A and B.

5. As between themselves, A and B would seem to be equally interested in the animal, and the matter should be dealt with accordingly when they come to settle.

Marie—"At the place where I was spending my vacation this summer, a fresh young farmer tried to kiss me. He told me he'd never kissed a girl in his life."

Ethel—"What did you say to him?"

Marie—"I told him that I was no agricultural experiment station."

Sydney Basic Slag

The Ideal Fertilizer for Heavy Clay Soils

IN 1913, when the use of Sydney Basic Slag was unknown in Ontario, we gave away a number of ton lots for trial purposes, free of charge. This was not philanthropy, but hard, common sense. What was the result? In practically every case the recipients bought carlots from us last season and have become enthusiastic agents for these goods. If you want their names we will send them. In 1913 we sold 200 tons in Ontario. During last spring our sales ran over 1,000 tons. This season, basing on business already done, we estimate our trade will amount to 3,000 tons. All this means satisfied farmers, but we will not rest content until every agricultural district in Ontario knows the value of Sydney Basic Slag.

Special Offer to Farmers in the Counties of Peterborough, Lennox-Addington, Frontenac, Renfrew, Lanark, Carleton, Russell, Prescott, Victoria, North Hastings, Prince Edward and Glengarry:

So far we have not arranged agencies in the above counties, and to a limited number of farmers holding not less than 50 acres of land, we will supply one ton of Sydney Basic Slag "free of charge." We want these goods used on clay soil, 500 lbs. to be broadcasted on one acre of permanent pasture, and another 500 lbs. on an acre of poor meadow and applied before the end of December. The remaining 1,000 lbs. can be kept for spring crops. Perhaps you have been using other fertilizers with good results, in which case we ask you to apply Sydney Basic Slag, pound for pound, in the same field against such fertilizers and watch the results. Sydney Basic Slag will cost you \$10 per ton less money, and when we give you an opportunity of testing it free of charge, it is up to you to take advantage of our offer.

Drop us a line and let our general sales agent call and tell you all about SYDNEY BASIC SLAG. Agents wanted in unrepresented districts.

Interesting literature giving full particulars will be sent on application to

The Cross Fertilizer Company, Limited
SYDNEY, NOVA SCOTIA

SHORTHORNS

I have ten young Shorthorn bulls, some fit for service now. Part of them are bred and made so that they are fit to head the best herds in any country; some of them are bred from the best-milking Shorthorns, and the prices of all are moderate. I have SHROPSHIRE and COTSWOLD rams and ewes of all valuable ages. Write for what you want. I can suit you in quality and price.

Robert Miller, Stouffville, Ontario

10 Shorthorn Bulls, 9 Imported Clydesdale Mares

Our bulls are all good colors and well-bred. We also have Shorthorn females of all ages. In addition to our imported mares, we have 7 foals and yearlings. Write for prices on what you require. Bell 'Phone. Burlington Jct., G.T.R. 1/2 mile.

W. G. PETTIT & SONS, Freeman, Ontario

SHORTHORNS and CLYDESDALES We have a nice bunch of bull calves that were a year old in Sept., and are offering females of all ages; have a choice lot of heifers bred to Clansman-87809. One stallion three years old, a big, good quality horse, and some choice fillies, all from imported stock.

A. B. & T. W. Douglas Long-distance 'Phone Strathroy, Ontario

Poplar Hall Shorthorns If you want a herd header of the highest possible individuality and richest possible flays and Lovelys, Marr Roan Ladys and Cinderillas, from 7 to 18 mos. of age. Miller Bros., Brougham, Ont. Clarendon C.P.R., Pickering G.T.R., G.Freenburn C.N.O. Sts.

BLAIRGOWRIE SHORTHORNS, SHROPSHIRE AND COTSWOLD SHEEP

This stock is all for sale at reasonable prices. Herd consists of 54 head. Bulls ready for service. Cows with calves by side. Cows and heifers ready to calve. In sheep there are shearing and ram lambs ready to head good flocks, also a number of good ewes. John Miller, Jr., Ashburn, Ont.

PLEASANT VALLEY FARMS SHORTHORNS

Herd headed by Imp. Loyal Scot. Have for sale, 10 high-class young bulls of herd-heading quality and several of the milking type. Also females of the leading families. Consult us before buying. GEO. AMOS & SONS : : : : MOFFAT, ONTARIO
Farm 11 miles east of Guelph; C.P.R. 1/2 mile from station

HIGH-CLASS SCOTCH SHORTHORNS
We have a choice selection of richly-bred young herd headers, the thick, mellow, good doing kind. Visit our herd and make your own selection. RICHARDSON BROS., COLUMBUS, ONTARIO
Myrtle, C.P.R.; Oshawa, C.N.O. and G.T.R.; Brooklin, G.T.R. Sts.

IRVINE DALE SHORTHORNS

Herd is headed by Gainford Select (a son of the great Gainford Marquis). A number young bulls of choice breeding and out of good milking strains. Also a few heifers. J. WATT & SON : : : : Elora Station : : : : SALEM, ONTARIO

Woodholme Shorthorns and Berkshires

Young bulls, cows and heifers of choicest Scotch breeding and high-class quality. Also young sows bred and ready to breed. G. M. FORSYTH, Clarendon, P.O. and Str., C.P.R.

Scotch—SHORTHORNS—English—If you want a thick, even fleshed heifer for either show or breeding purposes, or a thick, mellow beautifully-fleshed young bull, or a right good milker bred to produce milk, remember I can surely supply your wants. Come and see. A. J. HOWDEN, Myrtle, C.P.R.; Brooklyn, G.T.R. COLUMBUS, P. O., ONT.

Rosedale Stock Farm

20 SHORTHORN BULLS for sale, ranging from 4 to 13 months of age; good colors, good breeding and good individuals, 6 of which are from imported dams; also 1 Leicester Shearling Ram and a few ram lambs. J. M. GARDHOUSE, WESTON P. O., ONT. G.T.R., C.P.R. Street Ry. and L.D. 'Phone



For Your WINTER DRIVING
Get a
Clark Heater

Use it in auto, sleigh or wagon. In coldest weather it will keep you warm and cozy. No flame, smoke or smell. Twenty styles of these heaters, from \$1.25 up. Most of them have attractive carpet covers with asbestos lining. They fit in at the feet in any vehicle, occupy little space and are just the thing for real comfort. They are attractive and last forever. We guarantee you will be satisfied and pleased or money refunded. Ask your dealer for a CLARK HEATER—they always satisfy.

Write for complete free catalogue—a postal will bring it. Write now, please.
Chicago Flexible Shaft Company
110 N. La Salle St. Chicago, Illinois

Cotton Seed Meal
\$31.50 per ton. F.O.B. Forest, Ont.
Good Luck Brand Guaranteed 41% Protein. Cash Must Accompany Order.
H. FRALEIGH, Box 1, FOREST, ONT.
Also dealer in Flax Seed and Linseed Meal.

Woodbine Holsteins
Young bulls and bull calves, sired by Duke Beauty Pieterje; sire's dam's record 32.52 lbs. butter, and his two granddams are each 30-lb. cows, with 30-lb. daughter with 30-lb. granddaughter. Three generations of 30-lb. cows. If you want a bull that will prove his value as a sire, write—
A. KENNEDY & SON, R.R. No. 2, Paris, Ont.
Stations: Ayr, C.P.R.; Paris, G.T.R.

Holstein-Friesian Association of Canada
Application for registry, transfer and membership: as well as requests for blank forms and all information regarding the farmer's most profitable cow, should be sent to the Secretary of the Association.
W. A. CLEMONS, St. George, Ontario

2 Yearling Holstein Bulls 2
and several younger females, all ages; cows in R. O. P. and R. O. M. Will sell half interest or all of our own herd. Sire and show bull, "King Fayne Segis Clothilde," five years old.
R. M. HOLTBY,
Phone, R.R. No. 4, PORT PERRY, ONT.
Manchester and Myrtle Stations.

Maple Grove Holsteins
Do you know that Tidy Abbekirk is the only cow in the world that produced three sons who have each sired 30-lb. butter cows, and two daughters with records greater than her own. She was bred, reared and developed at Maple Grove. Do you want that blood to strengthen the transmitting power of your herd, at live and let live prices. Write for prices to
H. BOLLERT,
FAVISTOCK ONT., L.R. No. 1.

The Maples Holstein Herd offers sons of Prince Aggie Mechthilde from R. O. M. and R. O. M. sisters and dam of Duchess Wayne Calamity 2nd, Canadian champion 2-year-old for butter in R. O. P. test, 16,714 lbs. milk, 846 lbs. butter. These fellows are ready for service. Write for prices to **WALBURN RIVERS,** R.R. No. 5, Ingersoll, Ont.

Holsteins, Yorkshires and Cotswolds. For R.O.P. and untested females, bred to and calves of both sex sired by Ourville Sir Abbecker, whose 4-year-old dam gave 19,375 lbs. milk in 310 days. Also Yorkshires of both sex. Write: **Richard Honey & Sons, Minster Farm, Brickley, Ont.**

Alancroft Dairy & Stock Farm
BEACONSFIELD, P.Q., CANADA
A FEW
Pure-bred Ayrshires and Pure-bred French-Canadian Bulls for Sale
Correspondence or visit solicited.
E. A. SHANAHAN, Secretary,
Merchants Bank Building, Montreal, Canada

Lakeside Ayrshires
The herd is headed by the well-known Auchenbrain Seafoam (Imp.) = 35755 = A few young bulls for sale from Record of Performance Dams, imported and home-bred.
Geo. H. Montgomery, Proprietor
Dominion Express Building, Montreal.
D. McArthur, Manager, Phillipsburg, Que.

High-class Ayrshires If you are wanting a richly bred young bull out of a 50-lb. a-day and over cow, imported or Canadian-bred dam or sire, write me. Females all ages. Prices are easy.
A. MACFARLANE : KELSO, QUEBEC

Mention this Paper

Questions and Answers.
Miscellaneous.

- Miscellaneous Queries.**
1. When I rented a farm I moved some hay on to it. Can I take a corresponding amount of manure away?
 2. Can I send my hired man, whom I have engaged for a year, away to work with an apple gang against his will, on extra pay?
 3. What time does the law allow him to vote at a general election?
 4. Is it legal for the chairman of a committee meeting to be Returning Officer?
 5. Is it legal to shoot my neighbor's dog if I find him killing sheep on my farm?
 6. How long will a mortgage hold good before it expires?
 7. Is a note, outlawed when the time mentioned expires?

Ans.—1. It is law that the leasee shall not remove any manure from a rented farm. If you took hay on to the place it will be necessary to make some special arrangements with the lessor or take a corresponding amount of hay away.

2. From our knowledge of the circumstances, we do not believe that you can send your hired man to work off your own farm.

3. There is no law stipulating the time a man should be allowed to have to cast his ballot. Polling booths are not always the same distance from all the voters, and it is simply a matter of distance from the farm.

4. We know of no law that will prevent the chairman of a committee meeting acting as Returning Officer.

5. If you catch your neighbor's dog killing sheep on your farm, you may shoot the dog and recover damages from its owner for the sheep destroyed.

6. A mortgage does not expire when the time mentioned is arrived at. If interest is not paid, foreclosure is generally resorted to unless there is some agreement between the parties.

7. No.

Blackhead in Turkeys.
Will you kindly give me a remedy for sick turkeys? The disease is probably blackhead. The symptoms are, diarrhea, wings drooping, and refusal to eat. Then extreme weakness until they die. If you can also give a preventative medicine for those not already diseased, I shall be very thankful. **READER.**

Ans.—One usual symptom of blackhead you have omitted, and that is a darkening and swelling of the head, in extreme cases even closing the eyes. However, it is quite possible that this is the disease affecting the birds. A post-mortem of a victim of this disease would probably show the caeca (or blind pouches) at the lower end of the small intestines) to be found thickened. The liver is enlarged and darkened, while scattered over its surface are distinct round spots, sometimes whitish, or again with a yellowish tinge. It would not be unwise to send a bird to the Bacteriological Department of the Ontario Agricultural College where they could tell you exactly the cause of the trouble. The treatment of infected birds has not been effective. Several remedies have been advocated, but we are unable to learn from any that the treatment has been entirely satisfactory. Some have recommended starving the birds for 48 hours, and then letting them drink from a mixture composed of a teaspoonful of muriatic acid to a quart of water, others recommend sulphur, five to ten grains, and sulphate of iron, one grain; or sulphur ten grains, sulphate of iron one grain, and sulphate of quinine one grain. These remedies are to be given two or three times a day, and continued for a considerable time. These doses are for turkeys weighing four or five pounds each. Any birds apparently healthy should be separated at once from the diseased flock, and the runs (if by any chance the turkeys be confined) cleaned up. The germs of this disease, it is claimed, will remain in the soil for about three years, and turkey raisers claim that it is often wisdom to get rid of the whole flock and allow conditions to right themselves naturally. This is drastic in the extreme, but it may be wisdom in the end.

PAGE FENCE

Page Fence costs a little more than others, but it is worth much more than the difference. Made of special rust-resisting galvanized wire. Every rod perfect. All full gauge wire. Beware of quotations on under-gauge fence. Make the seller guarantee the size.

No. of b.u.s.	Height.	Stays inches apart.	Spacings of horizontals.	Price in Old Ontario.
6	40	22	6 1/2-7-8 1/2-9-9	22c
7	40	22	5-5 1/2-7-7 1/2-8	24
7	48	22	5-6 1/2-7 1/2-9-10-10	25
8	42	22	6-6-6-6-6-6-6	27
8	42	16 1/2	6-6-6-6-6-6-6	29
8	47	22	4-5-5 1/2-7-8 1/2-9-9	28
9	47	16 1/2	4-5-5 1/2-7-8 1/2-9-9	30
9	48	22	6-6-6-6-6-6-6	31
9	48	16 1/2	6-6-6-6-6-6-6	33
9	52	22	4-4-5-5 1/2-7-8 1/2-9-9	31
9	52	16 1/2	4-4-5-5 1/2-7-8 1/2-9-9	33
10	48	16 1/2	3-3-3-4-5 1/2-7-7 1/2-8	35
10	52	16 1/2	3-3-3-4-5 1/2-7-8 1/2-9-9	35
11	55	16 1/2	3-3-3-3-4-5 1/2-7-8 1/2-9-9	38

ALL FULL NO. 9 GAUGE

Cash to accompany order. Freight paid in Old Ontario on 20 rods or more. Rolls 20, 30 or 40 rods.

We are official supplier of fencing, gates, etc., to Granges and other members of the United Farmer's Co-operative Company. Members should apply to the head office of the United Farmer's Co-operative Company, 100 Church Street, Toronto, for particulars.

Send for our big catalogue, giving mail-order prices on hundreds of lines of goods. Buy the Page way and save one-quarter of your money.
THE PAGE WIRE FENCE CO., LIMITED
King St., W., and Atlantic Ave., Toronto
Walkerville, Ont.

LAKEVIEW HOLSTEINS

Senior herd bull—Count Hengerveld Payne De Kol, a son of Pieterje Hengerveld's Count De Kol and Grace Payne 2nd. Junior herd bull—Dutchland Colantha Sir Mona, a son of Colantha Johanna Lad and Mona Pauline De Kol. Third bull—King Canary Segis, whose sire is a son of King Segis Pontiac, and whose dam is 27-lb. three-year-old daughter of a 30-lb. cow. Write for further information to—

E. F. OSLER, BRONTE, ONT.

FAIRVIEW FARMS

Can furnish you a splendid young bull ready for immediate service, and sired by such bulls as PONTIAC KORNDYKE, the greatest producing sire of the breed, and also the sire of the greatest producing young sires of the breed; one of his sons already has six daughters with records above 30 pounds, RAG APPLE KORNDYKE 8TH, now heading our herd, and a few by a good son of PONTIAC KORNDYKE, and out of officially tested cows. Come and look them and the greatest herd of Holsteins you ever saw over, or write just what you want.

E. H. DOLLAR, Heuvelton, New York (Near Prescott, Ont.)

SUMMER HILL FARM
Holstein Cattle and Yorkshire Hogs

We offer for sale a dozen bulls, some ready for service, from high official record dams. If you are wanting a bull; better write us and let us tell you how good they are. Can also spare a few good heifers. Yorkshire hogs all ages.

D. C. FLATT & SON
HAMILTON : Phone 7165 : R.R. No. 2 : ONTARIO

WILLOWBANK'S HERD OF REGISTERED HOLSTEIN-FRIESIAN CATTLE offers special prices on the following young bulls: Willowbank's Correct Currency (20882), sire Correct Change 11319, dam Mina Sylvia Posh (13424) official record butter 7 days 13.03, won 6 first prizes this fall, ready for service, \$100.00. Willowbank's Hengerveldt Prince, sire Count of Lakeview 9076, dam Princess Mercedes of Willowbank's (official record butter 7 days 18.03), ready for service, \$75. Sir Canary Korndyke, one month old; dam Spring Brook Queen Canary 2nd (butter 7 days official record 24.33), sire King Korndyke Inka DeKol 18545; price \$125. These bulls are in pink of condition, about half white. Six June bulls, all from R. O. M. dams and from above sire, \$75 each. Cows of all ages for sale at special prices this month. **COLLYER V. ROBBINS, R. R. No. 3, Wellandport, formerly Riverbend, Ont.** Bell phone, Fenwick Sta.

Holstein Cattle (Prince Hengerveld of the Pontiacs, herd sire)
Stock for sale. Large herd to select from.

HAMILTON FARMS - ST. CATHARINES, ONT.

Evergreen Stock Farm—High-class Registered Holsteins
For sale: Two exceptionally fine young bulls, one ready for service, and dams have good official records. Also three heifer calves, six, seven and ten months old; good individuals and bred right. Write for particulars, or come and see them.
A. E. HULET, R.R. 2, Norwich, Ont. Bell phone.

Holsteins and Percherons at Beaver Creek Stock Farm
In Holsteins—Present offering—A number of cows, also a few bull calves. In Percherons—2 Stallions, rising three years and five years respectively, also one yearling filly and one 1914 filly. Will exchange the two stallions for one and a cash difference.
Albert Mittlefehldt, Smithfield Station, T. H. & B. R. R. Wellandport, Ontario

Cloverlea Dairy Farm Holsteins
For Sale—10 head of choice grade Holstein heifers, yearlings and calves; a snap for any person taking the bunch. No pure-breds for sale at present. Booking orders for fall bull calves.
GRIESBACH BROS. : L-D Phone : COLLINGWOOD, ONT

Brampton Jerseys
We are busy. Sales were never more abundant. Our cows on yearly test never did better. We have some bulls for sale from Record of Performance cows. These bulls are fit for any show ring. **B. H. BULL & SON, BRAMPTON, ONTARIO**

Don Jerseys Young bulls of breeding age, young cows and heifers, got by our richly-bred stock bulls Fontaines Boyle and Eminent Royal Fern, and out of prize-winning and officially record dams. **David Duncan & Son, R.R. No. 1, Todmorden, Ontario**

City View Farm
For Record of Performance Ayrshires, Present offering: two choicely-bred young bulls. Will sell cows or heifers by personal inspection only.
Jas. Begg & Son, R. R. No. 1, St. Thomas, Ontario

Bone Spavin

No matter how old the blemish, how long the horse, or how many doctors have tried and failed, use Fleming's

Fleming's Spavin and Ringbone Paste

Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a simple 45-minute application—occasional lyes required. Cures Bone Spavin, Ringbone and Stribone, new and old cases alike. Write for detailed information and a free copy of

Fleming's Vest-Pocket Veterinary Adviser

Ninety-six pages, curably bound, indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.

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

ALLOWAY LODGE, STOCK FARM
Southdown Sheep
Look up this year's record at the shows. Breeding stock of all ages for sale.

ROBT. McEWEN,
BYRON, ONTARIO - Near London

1900 - SPRINGBANK OXFORDS - 1914
Ram and ewe lambs for sale, sired by Adams 77, imported by Wm. Cooper & Nephews, Chicago: of good type and quality. Write to John Cousins & Sons, Wm. Barnett & Sons, R.R. No. 3, Fergus, Ont. Long-Distance Bell 'phone.

Sheep, Swine and Seed Corn—Young
stock of both sexes in Dorset Horn and Shropshire sheep, and in Swine Poland Chinas, Duroc Jerseys, Berkshires and Chester Whites. Also Seed Corn, all varieties. Consult me before buying.
Cecil Stobbs : LEAMINGTON, ONT.
Phone 284 M.C.R., P.M. and Electric Ry.

PURE SHROPSHIRE FOR SALE
50 April Ram Lambs, from ten to twelve dollars each, including pedigrees. A few yearling rams, ewe lambs and young sheep at moderate prices; these are sired by one of J. & D. J. Campbell's best rams; also St. Lambert Jerseys. H. E. Williams, Sunnylea Farm, Knowlton, P.O.

Oxford Down Sheep
Shorthorn Cattle, Yorkshire Hogs—Present offering: Lambs of either sex. For prices, etc., write to John Cousins & Sons, "Buena Vista Farm," Harriston, Ont.

TOWER FARM OXFORDS
A choice lot of ram and ewe lambs, sired by Hamptonian, No. 279, imported prize-winner at the Royal; also a few yearling rams and ewes.
EMPHRAIM BARBOUR, ERIN, ONTARIO

For Sale—Registered Oxford Downs. Will sell for next 30 days choice ram and ewe lambs, at close prices. Write for prices.
W. A. BRYANT, Strathroy, Ont. R.R. No. 3.

Shropshire Sheep For Sale
Shropshire rams and ram lambs for sale, all pedigree stock. Prices right, apply:—
W. F. SOMERSET, PORT SYDNEY, ONT.

OXFORD DOWNS
FOR SALE—A number of good quality ram lambs from show stock. Reasonable prices. Write for particulars. N. A. McFARLANE. Write for particulars. N. A. McFARLANE. R.R. No. 2. DUTTON ONT.

Maple Grove Yorkshires
200 Head
Are as good as the best, because they combine the bloods of the following noted sires:—M. G. Champion 20102, Champion boar at Toronto, 1906; S. H. Jack, Imp. 28515, Champion boar at Toronto, 1908, 1909, 1910; and S. H. Romeo 27th, 24653. Our brood sows, in view of the above, could not but be of a very high class, combining great size, true type, and easy feeding qualities. For Sale—30 sows in farrow, 10 boars fit for use. A grand lot of young stock. Write us to-day.
E. S. McDIARMID : FINGAL, P.O., ONT. Shedden Station. L.-D. 'Phone via St. Thomas

Hilton Stock Farm
We are sold out of Tamworths; also females in Holsteins, but still have some choice bulls for sale, from two to six months, officially backed and right good ones. R. O. Morrow & Son, Hilton, Ont. Brighton Station. Telephone.

POLAND CHINAS—Canada's champion herd can supply stock of either sex at the most valuable ages, pairs not akin. Also good Chester Whites and select young Shorthorns. Prices easy.
GEO. G. GOULD (Formerly Edgar's Mills)
R.R. No. 4, Essex

PINE GROVE YORKSHIRES
Bred from prize-winning stock of England and Canada. Have a choice lot of young pigs of both sexes, pairs akin to offer at reasonable prices. Guaranteed Satisfaction.
Joseph Featherston & Son, Streetsville, Ont.

Cloverdale Large English Berkshires
Sows bred, others ready to breed; boars ready for service: 200 from six to twelve weeks old, both sexes, pairs not akin. All breeding stock Imp. or from Imp. stock. Prices reasonable.
C. J. LANG, Hampton, Ont. R.R. No. 1

TAMWORTHS—Choice young sows; bred for September and October farrow. Also a nice lot of boars. Write for particulars and prices.
John W. Todd : R.R. No. 1 : Corinth, Ont.

Questions and Answers.
Miscellaneous.

Planting Nuts.

How and when should I plant walnuts and horsechestnuts? M. J.

Ans.—We have never had experience in this, but would think it best to plant in a nursery row, to be removed when the trees are large enough. We believe it necessary to plant the nuts the same fall that the frost cracks the outer husks and gives them opportunity to germinate.

Worms in Turkeys.

What can I give turkeys that pass white worms about 1/4 or 1 inch long? They seem to be very dry, and drink anything they can. S. A.

Ans.—Badly infected flocks should be killed off, and no poultry of the kind kept on the same land for several years. These birds would infect new land. If the birds show no clinical symptoms from the trouble and are doing well, try giving to one of the birds ten to fifteen drops of oil of turpentine in a teaspoonful of sweet oil night and morning for three days. If it is successful, give the dose to each of the others.

Paint for Brick.

I am a faithful reader of "The Farmer's Advocate," and find many useful recipes. I wish to paint my house on the outside. It is an old, brick house. Would you please give me the best and cheapest method; some mixture in which to use dark red? Is there some mixture of milk instead of oil? Some say the paint oil is all absorbed by the brick, and then the paint washes off. A. M.

Ans.—Some old bricks are porous, and take in paint almost like a sponge. Preparatory to painting such a wall, it should be washed with "sizing" made by using about a pound of glue to a 12-quart pail of water. Approximately, a gallon of good paint would cover 600 square feet of wall. Paints are made by mixing coloring powders with linseed oil and a little turpentine or liquid drier added. Red lead and "Torgored red" are good. Milk paint is made as follows, and no more should be mixed than is to be used that day: Stir into one gallon of milk about three pounds of Portland cement, and add sufficient Venetian-red paint powder to impart a good color. Any other colored paint powder may be as well used. The milk will hold the paint in suspension, but the cement being very heavy, will sink to the bottom, so that it becomes necessary to keep the mixture well stirred with a paddle. Apply with an ordinary whitewash brush.

Fertilizers.

1. Will fertilizer applied to a reasonably poor piece of land sufficiently enrich it to grow a good crop of corn or potatoes?
 2. Will fertilizer be of any benefit to a crop sown the following year?
 3. Is fertilizer in any way detrimental to the land? I have heard it said that after using it for a few years it would be impossible to grow a crop on the land, either with or without it. Is this so?
 4. About how many dollars' worth per acre should it take for a crop of corn or potatoes?
 5. Do you advise its use?
 6. Give me the names and addresses of all poultry papers published in Canada.
 7. The fertilizer I have in mind is the best? Do you consider it one of the best?
- Ans.—1. This is a broad question. Given good cultivation, and the land not too poor, reasonable success could be expected. The fertilizer would certainly help on such land.
2. Yes.
3. We never heard such a contention. Of course, fertilizer must be judiciously applied else it will not prove profitable.
4. From five to ten dollars per acre, according to the requirements of the land, and the crop.
5. Yes, under certain conditions.
6. We cannot give you all. Canadian Poultry Review, Toronto, Ont., and the Poultry Advocate, Grimsby, Ont. "The Farmer's Advocate" also devotes considerable space to poultry.
7. This fertilizer, like all others, has a guaranteed analysis, and you should buy on this basis.

Blast the Boulders

Blow up the stumps



PUT your unproductive land on a paying basis. Reap the added profits that CXL stumping powder will clear the way for you to make.

The whole process is so simple, so little labor is needed, so short a time required, and the cost is so small compared with the additional amount your land will earn, that there should be no further delay in clearing your land of stumps and boulders. Let us explain how.

Send for "Farming with Dynamite." This book is free. It is full of useful information for any farmer.

CXL stumping powder is no more dangerous than gun powder. There's a CXL explosive for every blasting purpose.

CANADIAN EXPLOSIVES LIMITED

Montreal—Victoria



Farnham Farm Oxford Downs

"The Oldest Established Flock in America."
We are making a Special Offer for 30 days of 50 fine registered yearling ewes, bred to our imported ram to lamb in April. Also 50 ram lambs amongst them, a lot of big, strong fellows for flock-heads. Also a few nice ewe lambs, and a few good Hampshire ram lambs C.P.R., Guelph and Arkell. Phone:—Guelph, 240 ring 2. G.T.R., Guelph St. and Telegraph.
Henry Arkell & Son : : Route 2 : : Guelph, Ontario

Maple Villa Oxford Down Sheep
Yorkshire Hogs

Sired by Adonis Imp. 57495, and out of ewes that have won many prizes at big and local shows. I have high-class flock headers and high-class ewe lambs, also shearlings, of both sexes. Yorkshires both sexes, any age.

J. A. Cerswell : : R.R. 1 : : Beeton, Ont.

Shropshires and Cotswolds
I have now for sale 30 extra large well covered shearing ewes, 100 shearing ewes and a very fine lot of lambs from my imported ewes. Will be pleased to book orders for delivery later of any kind wanted.
JOHN MILLER, R.R. No. 2, CLAREMONT, ONT. Claremont Station, C.P.R. 3 miles Pickering Station, G.T.R. 7 miles. Greenburn Station, C.N.R. 4 miles

Large White Yorkshires
Have a choice lot of sows in pig. Boars ready for service and young pigs of imported stock from the best British herds. Write or call.
H. J. DAVIS, Woodstock, Ont. Long-distance 'Phone. C. P. R. and G. T. R.

DUROC JERSEY SWINE, JERSEY CATTLE
In Duroc Jerseys we have either sex of any desired age, bred from winners and champions for generations back. In Jerseys we have young cows in calf, and young bulls, high in quality and high in producing blood.
MAC. CAMPBELL & SON : : : : NORTHWOOD, ONTARIO

THE SPRUCEDALE STOCK FARM
Yorkshires and Berkshires of all ages, bred from show stock. Prices right for immediate sale.
A. WATSON & SONS : : R.R. No. 1 : : ST. THOMAS, ONT. 'Phone Fingal Via St. Thomas.

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 on Brantford and Hamilton Radial.

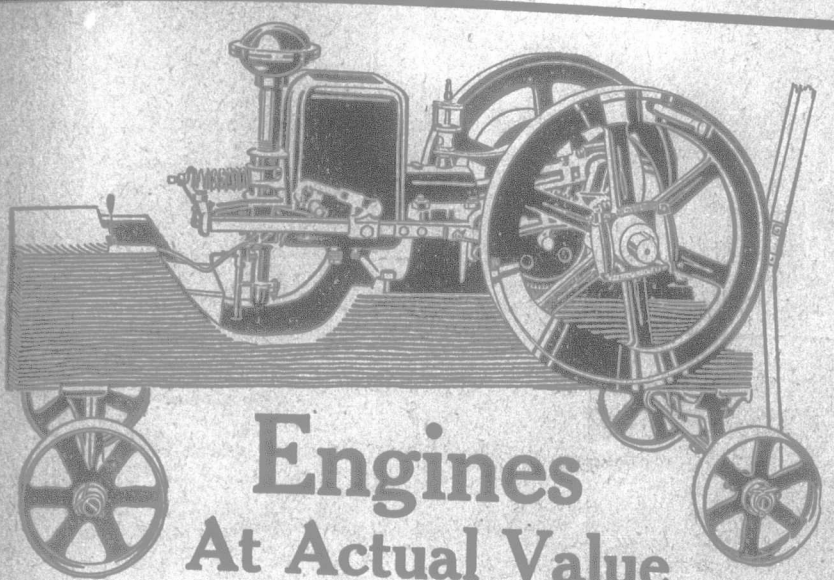
Newcastle Tamworths, Shorthorns and Clydesdales—For sale at once: Two choice sows in pig, 2 years old; one extra choice year-old sow bred; boar ready for service, sows bred and ready to breed; choice lot of pigs nearly ready to wean; all from the choicest stock on both sides; 3 choice young bulls 10 to 12 months old; several heifers bred to my present stock bull, Broad lands; all from splendid milking dams. One registered 3-year-old filly; one 5-year-old and a 12-year-old brood mare; all of splendid quality; prices right. A. A. Colwill, Newcastle, Ont. L.-D. 'Phone.

Canadias Champion Herd of Registered Hampshire Swine
This herd has won over 90% of all prizes offered for the breed at leading Ontario Fairs. Write for particulars and prices.
HASTINGS BROS. : : : : Phone : : CROSSHILL, ONT

Woodburn Stock Farms
We are offering for immediate sale: 25 choice boars ready for service, 25 young sows bred. These are of first quality from our prize-winning herd.
E. BRIEN & SONS, Proprietors : : : : RIDGETOWN, ONTARIO

We have little to spare from our own herd but can fill orders from other herds of different ages up to car load lots. A few choice March 31st Boars on hand. Prices right.
ALEX. HUME & CO., - R.R. No. 3. - CAMPBELLFORD, ONT.

BERKSHIRES
My Berkshires for many years have won the leading prizes at Toronto, London and Guelph. Highcleres and Sallys the best strain of the breed, both sexes, any age.
ADAM THOMPSON, R.R. NO. 1, STRATFORD, ONT. SHAKESPEARE STATION, G.T.R.



Engines At Actual Value

In buying the "Page Way" direct for cash, you eliminate all dealers' and agents' commissions and profits.

High-grade engines at half usual price. See:

1½ Horse Power	\$ 39.00
1¾ " "	48.50
3 " "	66.00
5 " "	123.50

For larger sizes, ask for quotations. We supply up to 50 h.-p. Freight paid in Ontario. Detailed description sent on request.

Wood Saw Tables, \$19.00. Feed Grinders, 8-inch plates, \$27.00.

Send for our 80-page general catalogue, showing "Direct-to-You" prices on fencing and other farm and household supplies.

The Page Wire Fence Co., Limited

King Street West and Atlantic Ave.
TORONTO, ONT.

Factory and Head Office:
WALKERVILLE, 'ONT.



These Honest,
Time-Tried
Ingredients—

are the bulwark
of RAMSAY
QUALITY



In RAMSAY PAINT you get the most accurate and thorough combination of approved raw materials. Master painters will tell you no better materials exist. Your own good judgment will tell you that scientific machine mixing is superior to guess-work and "hand paddling."

Specify Ramsay for your next big-job—and for the odd jobs you do yourself get the right Ramsay finish. Splendid service from the local Ramsay dealer or write the manufacturers. (2)

A. RAMSAY & SON CO. (Established 1842) MONTREAL, Que.

HIGH-CLASS, PURE-BRED YORKSHIRES

Boars and sows, from 5½ to 7 months of age.
Two sows recently bred. Prices low for quick sale.

WELDWOOD FARM

Farmer's Advocate

London, Ontario

Scotch Shorthorns

FOR SALE—A number of young bulls of serviceable age, good individuals and of splendid breeding. Some show bulls amongst them. Visitors met by appointment.

W. R. ELLIOTT & SONS, R.R. No. 4, GUELPH, ONTARIO

Call Phone

When writing advertisers, kindly mention "The Farmer's Advocate."



Wide Margin of Strength

IN purchasing a cream separator it is important to get one with a wide margin of strength. In that way you avoid possibilities of break-downs and secure a machine that will give long service. The 1915 Model

Standard

MADE IN CANADA

Cream Separator is now built with one frame and gearing for all capacities. This frame and gearing is strong and rugged enough to provide a wide margin of safety for the largest capacity. The main gear and intermediates have bearings 2½ inches long. The gearing would be sufficiently heavy to drive a bowl of even 2,000 pounds capacity. Think what a tremendous margin of strength this means in our 350- to 1,000-pound machines.

The bowls of the Standard (any size from 350 to 1,000 pounds) are also sufficiently over capacity to skim 20% faster than their rating and still do the work as well as other separator bowls.

To get a separator of super strength and over capacity is good business. You know that. But do you know all the other superior features of the Standard cream separator? Write for our latest separator catalogue and get full particulars.

The Renfrew Machinery Company, Limited

Head Office and Works: RENFREW, ONT.

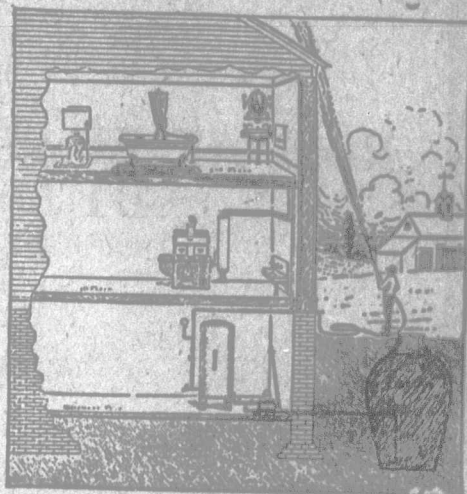
Agencies Almost Everywhere in Canada

Why Not Enjoy City Comforts?

The one thing sadly lacking on the average farm is running water in house and barn.

For a moderate outlay you can enjoy full water facilities, with all the comfort and safety that adequate water pressure affords.

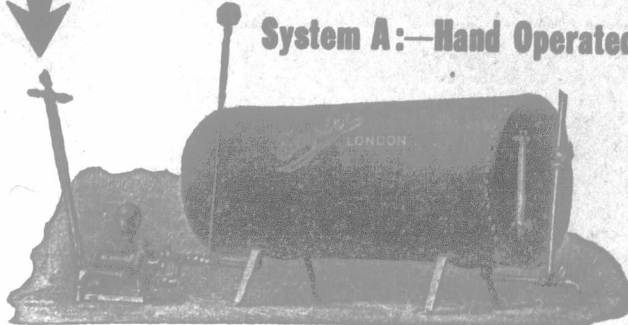
We make the EMPIRE Water Supply System in many styles and sizes to cover every need—hand-operated, or to run by windmill, gasoline or electric power. Outfit shown below is our powerful Style A.



EMPIRE Water Supply System

It is operated by hand, requires little attention, is simple, durable, and does not get out of order. This apparatus is low in price, but very efficient. It gives ample pressure to all parts of the house. By making a simple connection to kitchen range you secure abundant running hot water on every floor.

Our pumps will furnish water and air at the same time, water alone or air alone. Let us help you to greater home comfort and better security. Profit by all the labor-saving that good water pressure makes possible.



System A:—Hand Operated

Write to-day for free illustrated bulletin.

Empire
Mfg. Co.
Limited
East London
Ontario

Sweet Cream Wanted

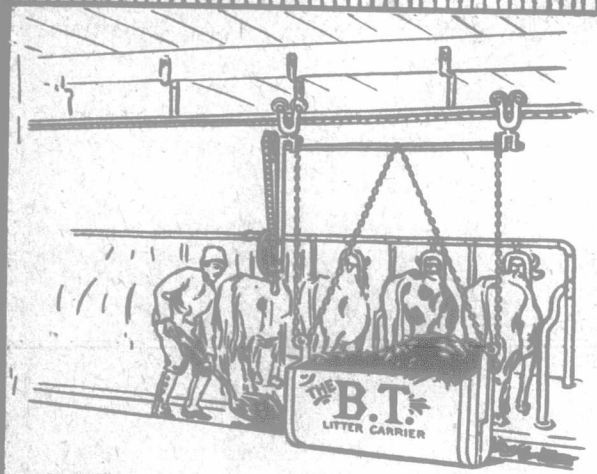
Highest prices paid throughout the year. Write for particulars to

S. PRICE & SONS, LIMITED
Toronto, Ontario

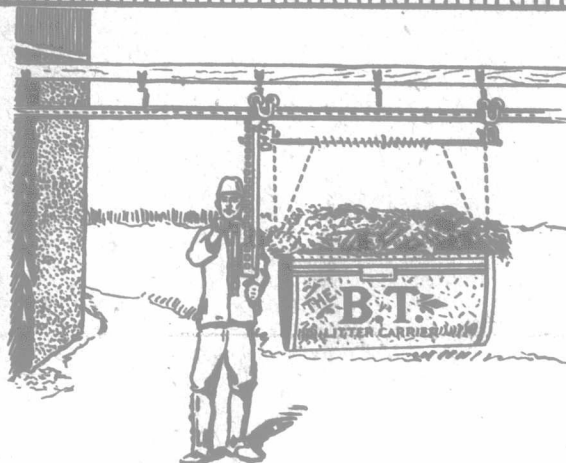


Buy St. Lawrence Granulated Pure Cane Sugar in original packages, and get pure, clean, perfect sugar.

From Gutter to Pile in a Jiffy



Release a brake; carrier drops by its own weight close to floor and can be quickly loaded.



Double purchase on windlass enables you to raise bucket easily. Then run out to sleigh or pile.



Glides along overhead track, right over mud or snowdrifts. Job's done in a jiffy.

In the fall when the yards are muddy and in winter time when drifts are deep, it's hard work getting the manure out from the barn with a wheelbarrow or stoneboat. Stable-cleaning is then a drudgery. And the manure is bound to accumulate in and around the stable, rotting the woodwork, and impairing the health of the stock.

But with a BT Manure Carrier the job becomes play for a boy, and is done in quarter of the time at that! For its capacity is half-a-ton, and it will take out four wheelbarrow loads at a time instead of one.

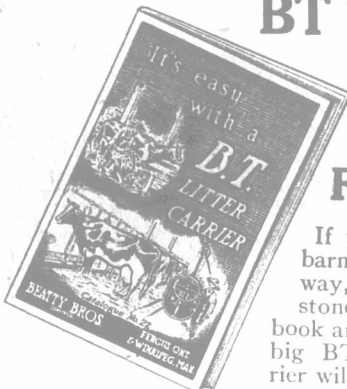
The system of level overhead track, suspended from the mudsills of the stable, runs in behind the stalls and then out along a Swing Pole over the yard. You have no heavy lifting. All the weight rests on the track. You can run the Carrier out no matter what is the condition of the yard, and always keep

the manure a good distance from the barn. The bucket is watertight, so every ounce of liquid manure is kept until you reach the sleigh or pile. No dripping along the passageways.

No implement on your farm will save so much hard, disagreeable work as a BT Manure Carrier. You use it night and morning, every day of the year. Use it for cleaning the horse stable, the calf and bull pens, the pig pens, as well as the cow stable.

It will pay for itself in a single winter.

Read All About The BT Manure Carrier In This Free Book

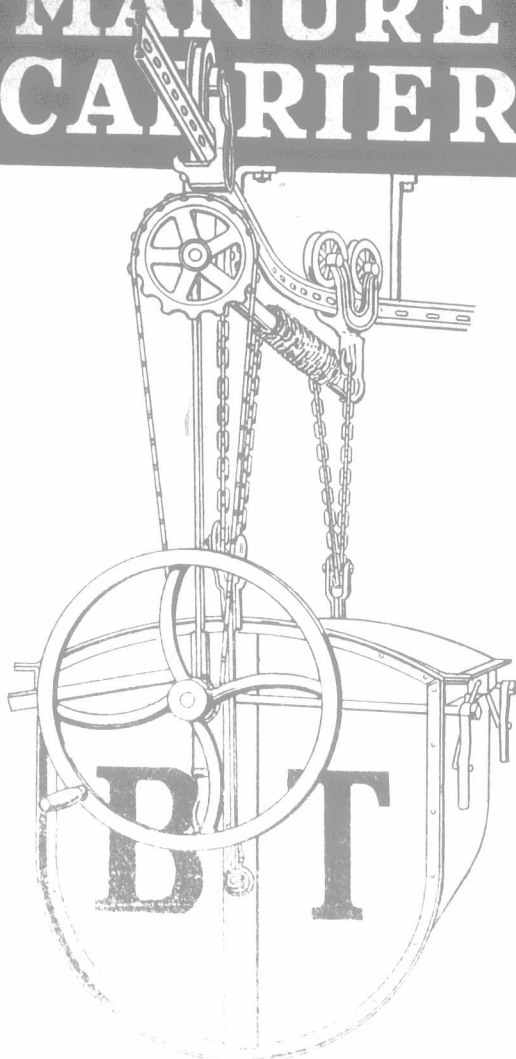


If you clean your barn the old tedious way, wheelbarrow or stoneboat, get this book and read how the big BT Manure Carrier will help you. So many farmers are using

the BT to lighten stable work that you owe it to yourself to investigate it. Study this book, learn what the BT will do for you, investigate every detail of the proposition and then decide.

But do this right away—cold weather will soon be here and the cows will have to be kept in the barn all the time. You will soon have all the old drudgery again, unless you find out about the big BT now. Don't let Jack Frost catch you—send for the book right away.

BT MANURE CARRIER



Your hands do not touch the manure

Fig. 53 shows the hand-wheel windlass for raising and lowering the BT Carrier.

To lower the Carrier you simply lift the friction brake, and the bucket descends by its own weight—you do not have to windlass it down.

The windlass is so highly geared that a boy can handle the biggest loads.

Then this windlass also serves as a handle by which you can run the loaded carrier out of the barn. Your hands do not touch the dirty bucket.

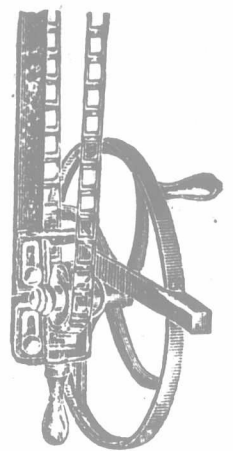


Fig. 53

Track Strong, Durable



The BT Track is built in the shape of an I-Beam with all the material at the edges where all the strain comes. No sagging, wobbling or spreading. It affords no surface for the ice and snow to catch and clog, for the edge of the track is only 3/8 of an inch across and is rounded. Because of its great depth the track will stand long years of wear.

The BT Track can be bent around curves without any heat, which saves a great deal of time in erecting the outfit. The hangers button into the track—no bolts or nuts are needed to secure them. This greatly simplifies the erecting.

The BT Carrier has many important, exclusive features which make it so successful. It is very simple in construction, yet each part is heavily built, so that the machine will stand up to the work better, for there is no complicated mechanism to get out of order. A BT Manure Carrier Outfit will last you fifty years.

These are only a few of the advantages. Send coupon for the FREE BOOK that tells them all.

FREE COUPON

BEATTY BROS., LIMITED

1021 Hill St., Fergus, Ont.

Please send your illustrated book No. 22 about Manure Carriers and Feed Carriers.

Are you thinking of putting in a Manure Carrier?

If so, when?

Name.....

P. O.

Prov.....