

PUBLISHED EVERY WEEK. \$1 50 PER YEAR

Director Central Exp Farm
8 dec 31, 28

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

ENTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

Vol. LI.

LONDON, ONTARIO, AUGUST 3, 1916.

No. 1245

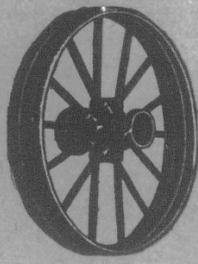
The
Bake-Day
Smile
of
Perfect
Satisfaction



PURITY FLOUR

More Bread and Better Bread

WESTERN CANADA FLOUR MILLS COMPANY, LIMITED
MILLERS TO THE PEOPLE



An Extra Set of Wheels

will make your wagon as good as two wagons

You need a regular high-wheeled wagon. You also need a low-wheeled truck.

PAGE STEEL WHEELS

enable you to convert the one into the other, in a very few minutes.

A splendid, strong wheel is the "Page." Farmers tell us there's nothing on the market to compare with it.

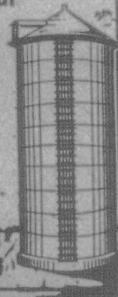
Price list on application, accompanied by chart showing how to take measurements for ordering correct size to fit your wagon.

The Page Wire Fence Company, Ltd.
1143 King Street West, Toronto

HYLO SILO

Sweet Fresh Ensilage down to the last forkful

THE HYLO SILO is perfectly air-tight. No frozen or spoiled ensilage around the walls. Convenient and perfect fitting doors, adjustable without hammer or wrench. Made of Guaranteed Long Leaf Yellow Pine. Built to last a life-time. Stands rigid when empty.



Write for prices and catalogue. AGENTS WANTED.
Gibson Mfg. Co. Ltd. 49 York St. Guelph (A)

To the top of the highest silo

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

GILSON ENSILAGE CUTTER

We guarantee every Gilson Silo Filler to cut and elevate more ensilage with the same power than any other blower cutter.

Write for Catalogue to-day.

Gilson Mfg. Co. Ltd. 49 York St., Guelph, Ont.

GILSON

POWER plus SERVICE After 2 years of Service

Mr. H. TUTTON, of Brantford, Ont., writes:

"Goodman—As my 4 h.p. engine has been such a big saving to me during the 2 years I have had it, I thought I would write you. I have my corn, hay, a lot of stock, and do all my own chopping, feed cutting, wood chopping, etc. It is as good as new now, and compared with other makes around me, I am perfectly satisfied with its superior fuel economy, power and reliability."

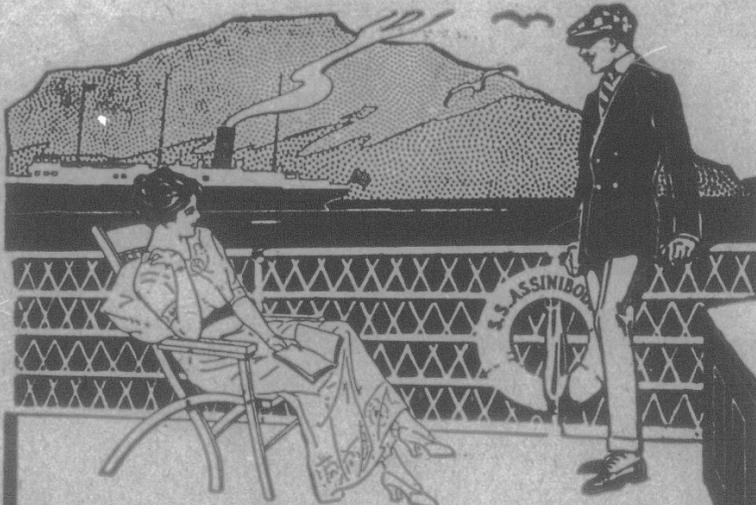
Write for FREE catalogue and prices. —ALL SEASONS—
Gibson Mfg. Co. Ltd. 49 York St. Guelph, Canada

RIDER AGENTS WANTED

In every community to ride and exhibit a sample 1916 Hyslop Bicycle.

10 DAY'S TRIAL. If owner is not entirely satisfied after riding any Hyslop Bicycle 10 days it can be returned and money will be promptly refunded.

TWO CENTS is all it will cost to write us a postal and we will mail free, postpaid, catalogue and colored art folder showing complete line of bicycles, tires and supplies and particulars of most marvelous offer ever made on a bicycle. You will be astonished at our low prices and remarkable terms. **MAKE MONEY** taking orders for Bicycles, Tires and Sundries. **DO NOT DELAY** until you know what we can do for you. Write to-day. **HYSTOP BROTHERS, LIMITED** DEPT. 4 TORONTO, ONT.



A BRACING VACATION on the GREAT LAKES

Five days of rest amid the islands of Georgian Bay, the green banks of the St. Mary's River and the expanse of Old Superior. Breezes to brace you up and the perfect appointments and cuisine of the Clyde-built

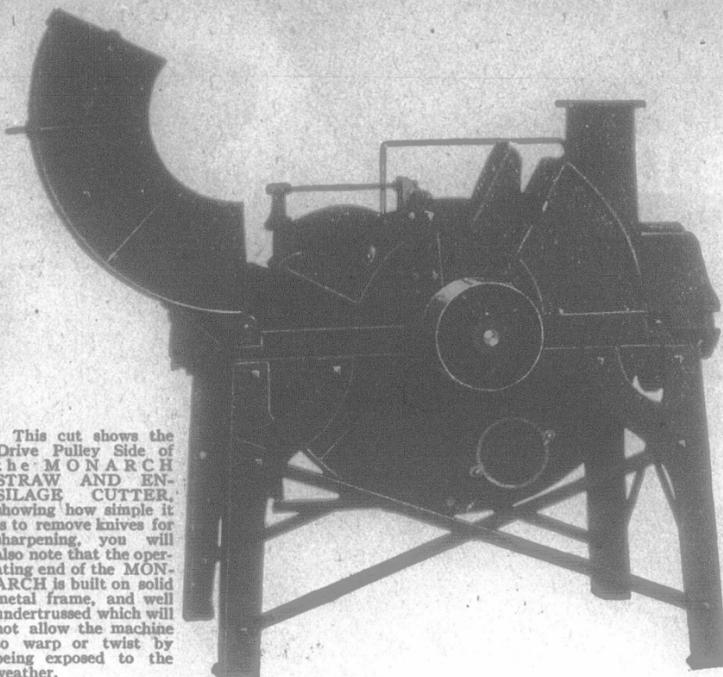
CANADIAN PACIFIC

Greyhounds, Express Steamers "Keewatin" and "Assiniboia" leave Port McNicoll every Tuesday, Thursday and Saturday for Fort William and Port Arthur. Round trip five days.



Tickets, information and reservations from Local Agent, or W. B. Howard, District Passenger Agent, Toronto, Ont.

The Monarch Ensilage and Straw Cutter



This cut shows the Drive Pulley Side of the MONARCH STRAW AND ENSILAGE CUTTER, showing how simple it is to remove knives for sharpening, you will also note that the operating end of the MONARCH is built on solid metal frame, and well undertrussed which will not allow the machine to warp or twist by being exposed to the weather.

THE SATISFACTORY SILO FILLER is one that is Simple, Strong, Fast and Durable; therefore, look into the MONARCH LINE and be convinced that it is the BEST.

Write for our catalogue.

CANADIAN ENGINES Limited, Dunnville, Ontario

Medicine, Surgery, Bacteriology, Public Health, Chemistry and Allied Sciences

offer the greatest opportunities to ambitious men and women. The

Chicago Hospital College of Medicine

located in the greatest medical center of the world; with faculty, facilities and equipment unsurpassed, offers a recognized four or five-year course leading to the degree of DOCTOR OF MEDICINE AND SURGERY. For catalog address

JUNIOR DEAN 3830 RHODES AVE., CHICAGO, ILL.

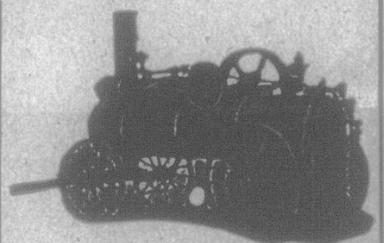
THE DICK

Lever Plow Wheel Attachment



will fit all makes of single walking plows. Any boy that can drive a team is capable, with this Attachment, of doing as good work as the best plowman. Write for full particulars and illustrated catalogue.

DICK AGRICULTURAL WORKS Bolton, Ontario



Rebuilt Portable, Traction Engines and Threshers

A number of good rebuilt Portable and Traction Engines suitable for silo filling and Threshing, also a few good separators for sale cheap.

The Robt. Bell Engine & Thresher Company, Limited SEAFORTH ONTARIO

"London" Cement Drain Tile Machine



Makes all sizes of tile from 3 to 18 inches. Cement Drain Tiles are here to stay. Large profits in the business. If interested, send for catalogue No. 2.

LONDON CONCRETE MACHINERY CO. Dept. B. London, Ont. World's Largest Manufacturers of Concrete Machinery.

When Building—Specify

MILTON BRICK

Smooth, Hard, Clean-Cut. Write for booklet. MILTON PRESSED BRICK COMPANY Milton, Ontario

CLAY TILE

Prices and quality right. For prices on sorted car lots, write WM. DELLER R. R. No. 4, Thorndale, Ontario

LIVINGSTON BRAND

The purest and best

OIL CAKE MEAL

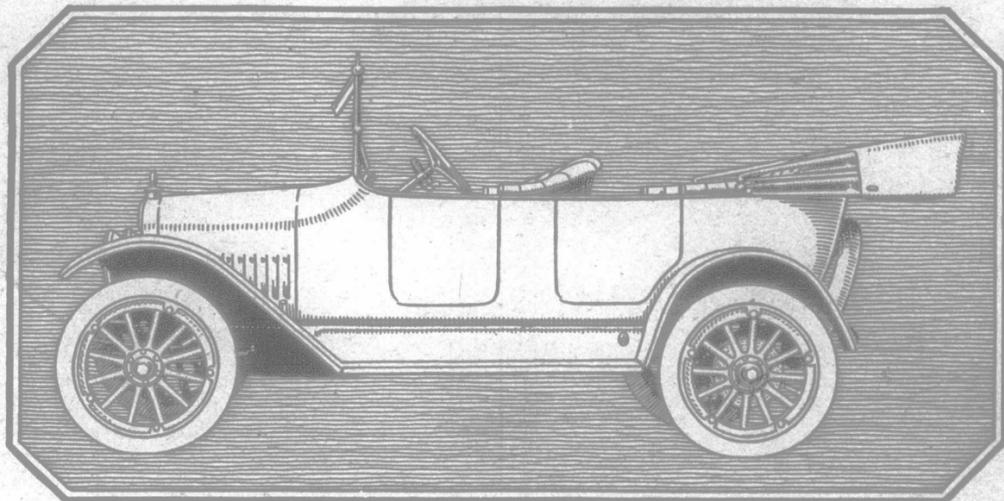
THE DOMINION LINSEED OIL CO., Ltd. Manufacturers, Baden, Ont.

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 Company Guelph, Ontario Dept. 1

Tile made from stone and cement, from 4 inches up to 18 inches; assorted car lots. Prices on application. Building Blocks for houses or barns. These make an ideal garage. Window sills, lintels for prompt shipment. For prices, write or phone 31A.

A. DEVINEY, St. Mary's, Ont.



The Maxwell Shield

THE Maxwell Motor Car is a product that we are proud to brand with the Maxwell emblem. The car gives value to the shield, and the shield, in turn, goes forth as a guarantee of the car.

The Maxwell trade-mark carries a definite message. It presents our declaration that Maxwell Motor Cars are well and honorably made, that they are cars of real worth, that they represent an exceeding value and that our resources and reputation are staked on their ability to give the fullest measure of efficient service.

The Maxwell Shield, whether it appears on Maxwell Motor Cars or on Maxwell advertising, symbolizes the honesty of purpose, the integrity, the ideals of The Maxwell Motor Company.

To many thousands of Maxwell Owners it has come to mean more than any spoken or written words.

*The prices, including Full Equipment, are: Touring Car, \$850; Roadster, \$830.
One Chassis, Three other Body Styles.*

Maxwell
Motor Company of Canada, Ltd.
Windsor, Ont.

ENDED 1866

CK

Wheel
achment



g plows. Any
able, with this
rk as the best
rticulars and

WORKS



Traction
eshers

Portable and
also filling
v good
cap.

Thresher

ONTARIO

Cement
Machine

of tile from 3 to
nent Drain Tiles
y. Large profits
If interested,
gue No. 2.

CONCRETE
ERY CO.

London, Ont.
Manufacturers
Machinery.

ecify

CK

te for booklet.

COMPANY

LE

quality right.

on sorted

, write

SELLER

No. 4.

Ontario

RAND

at

MEAL

IL CO., Ltd.

Ont.

pments

ave Expense

es every

lking and

rite to:

ompany

ph, Ontario

ement, from 4

s; assorted car

ation. Build-

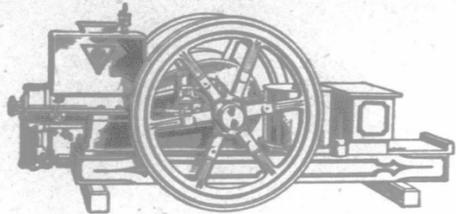
These make an

els for prompt

one 31A.

ry's, Ont.

Alpha Gas Engines



The Men Who Use Them Save Money

You can save money by using an Alpha Gas Engine just as do many other men. It will do work you cannot get done at all without power. It will do other work that is now costing you far too much in time and labor.

An Alpha Gas Engine is a saving investment any way you look at it. It will save money you now must pay out to get work done that requires power, because you can own and operate the engine at less cost than that of hiring some one with an engine.

It will do quickly work that you are now doing by hand and wasting a lot of valuable time over. It will pump water and do other similar jobs without attention and leave you free to get other work done. Your wife or your boy can start and operate it at many jobs to which you now must give your time. Having an engine will relieve you of the odd jobs that are time-wasters and give you more time to attend to the important work on your farm.

You need an engine and the sooner you buy one the quicker you will save the cost of the engine. Get an Alpha Gas Engine now, put it to work and it will pay for itself in a few months.

Ask for catalogue, prices and complete information. Made in eleven sizes, 2 to 25 H. P. Each furnished in stationary, semi-portable or portable style, and with hopper or tank cooled cylinder.

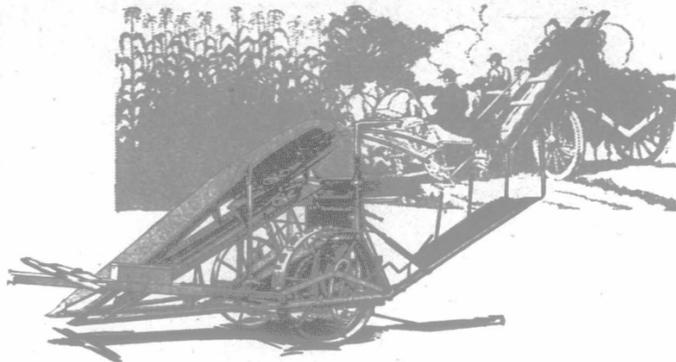
DE LAVAL DAIRY SUPPLY CO., Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA
Sold distributors in Canada of the famous De Laval Cream Separators,
and Alpha Gas Engines. Manufacturers of Ideal Green Feed Silos.

Catalogue of any of our lines mailed upon request.

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

How Do You Harvest Your Corn?



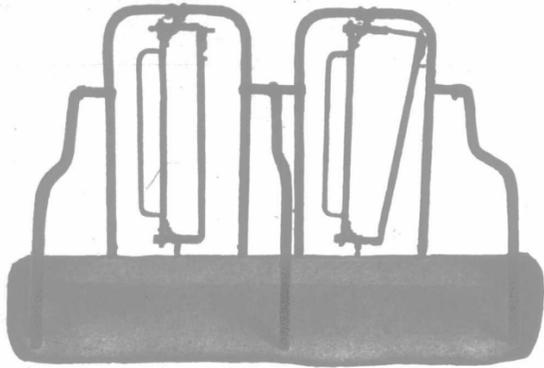
Unless you use a corn binder, you are not harvesting your corn—that is, not all of it. Fully a third of the value of the corn crop is in the leaves, husks and stalks. To make full use of this value it is necessary to cut the stalks at just the right time. This cannot be done practically without a corn binder. The loss to American farmers in 1915, through this item alone, is estimated at about three hundred millions of dollars.

Trying to harvest corn without a Deering or McCormick corn binder is just as reasonable as trying to harvest grain with a cradle. It can be done, but up-to-date farmers prefer the binder. When you consider that one man with an I H C corn binder can go into a field of corn in almost any condition and cut and bind from five to eight acres every day, you will see why we are selling more and more corn binders every year. Drop in and see the I H C local agents, or write the nearest branch house for complete information.

International Harvester Company of Canada, Ltd.

Branch Houses at Brandon, Calgary, Edmonton, Estevan, Hamilton,
Lethbridge, London, Montreal, N. Battleford, Ottawa, Quebec,
Regina, Saskatoon, St. John, Winnipeg, Yorkton

Mr. Farmer and Dairyman:



Do not fail to send for our catalogue if you are thinking of remodeling your stables.

BUCHANAN'S Steel Cow Stalls, and Adjustable Positive Lock Stanchions have features found in no other make in Canada.

The arch stall makes a farmer's stable look like a show stable.

The noise and clang so common to the head rail stall is entirely done away with.

There are no spaces for the cattle to run through. All spaces are filled in.

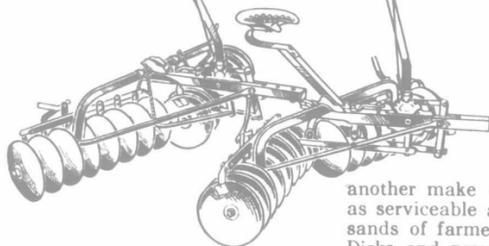
Buchanan's Stall. We use a positive steel lock to lock our stanchion. You know yourself the difference between a steel lock and wire springs. The stanchion can be adjusted for the smallest calf or the largest cow. We have been serving the Canadian Farmer for nearly forty years and thousands of farmers will testify that BUCHANAN Stalls and Stanchions are in a class by themselves. Write us for prices and catalogue. They will interest you.

M. T. BUCHANAN & COMPANY, INGERSOLL, ONT.

Mfrs. Haying Tools, Cow Stalls, Stanchions, Water Bowls, etc.

Agents wanted in sections where we are not represented.

Sizes for Horses or Tractors



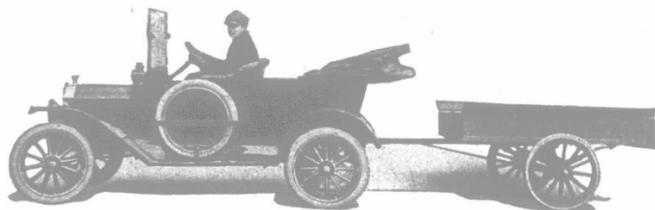
Use the Bissell Double Disk Harrows. They have great capacity for cultivating, and have made a record for working the soil better than other Disks—in fact, you won't be able to find

another make of Disk Harrow nearly as serviceable as the Bissell. Thousands of farmers have tested Bissell Disks and proved them to have the

"knack" for doing the best work. They are simple in design, durable and Built for Business. Write Dept. W for Booklet. Man'd exclusively by—

T. E. BISSELL COMPANY, Ltd., Elora, Ontario

Do not fail to see our exhibits at Toronto, London and Ottawa



Go to Market in 1/4 the Time

Think of the pitiful waste of time spent in going to market and back—if it is a ten-mile drive it takes you probably two hours each way. And you could do it in half an hour or less if you had a FOX Trailer for your car.

The Auto Trailer has proved so successful in the United States that thousands of them have been sold in the last few months. This splendid utility—the FOX Trailer—can be attached to any make of car. It causes no injury to the car—no inconvenience to drive. Built like an automobile, with steel chassis, steel axle ball-bearing wheels, interchangeable with Ford wheels, solid Dunlop tires, guaranteed for 10,000 miles. Size of body, 6 ft. x 4 ft. Write for descriptive catalogue.



Ask Your Local Automobile or Implement Dealer, or write:

Fox Brothers & Co., Limited

WINDSOR, ONTARIO

orn?



ng your
e of the
full use
ne right
binder.
n alone,
s.

Cormick
ain with
refer the
I H C
ndition
ou will
ry year.
nearest

a, Ltd.

amilton.
uebec,

spent
t is a
y two
it in
FOX

in the
e been
utility
y make
incon-
e, with
inter-
o tires,
ft. x 4

ited

The Farmers Advocate and Home Magazine

PERSEVERE
AND
SUCCEED

ESTABLISHED
1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

LI.

LONDON, ONTARIO, AUGUST 3, 1916.

1245

EDITORIAL.

Keep the water trough filled.

Swat the stable fly as well as the house fly.

Never put off for to-morrow what can conveniently be done to-day.

Weeds do not thrive during hot, dry weather when the cultivator is kept going.

In the absence of an irrigation plant, remarkable results can be secured by the use of the hoe and cultivator.

Commence preparation for 1917 crop by after-harvest cultivation to destroy weeds and conserve moisture.

A few hours spent this summer in preventing weeds producing seed may save days of cultivation next year.

Now is the time when judicious, supplementary feeding will maintain the milk flow and general vigor of the dairy herd.

With the assistance of the hot July weather the corn crop in endeavoring to make up for the delay in seeding operations.

Cut the burdocks growing around the fences and save the trouble of picking burrs from the horses' tails and manes this fall.

Selecting the best heads of grain and saving them for a seed plot, pays well. Have you tried improving your crops this way?

Nothing is gained in this world that is really worth while without a lot of hard work. The laggard seldom gets anywhere.

Do not attempt deep cultivation of the corn crop after cultivating shallow once or twice. Root pruning will give the crop a set-back.

If the pasture field affords no shade for the herd it may pay to keep the cows in a well-ventilated stable during the heat of the day.

The July sun has done its share in aiding to destroy the weeds in the summer-fallow. Has the cultivator been kept going as regularly as it should have been?

Keep the harvesting machinery and wagons well oiled and greased. Besides prolonging their period of usefulness they will draw much easier than if oiling is neglected.

A few bolts and nuts of different sizes together with a good wrench should always be carried in the tool box of every implement. They may save loss of time on a rush day.

Crops in competition are severely scored if the judge finds noxious weeds growing and producing seeds. Many good fields of grain have lost the prize because of neglect on the part of the owner to cut the weeds. While it is difficult to keep certain weeds under control there should be, at least, an effort made to do so. Weeds have no rightful place in any crop.

The Open Mind in Politics.

Politics is important because it deals with the public business of the country. It should not be prostituted to prejudice, partizanship or grafting—another name for pilfering at the public expense. Dr. L. H. Bailey, who ranks easily among the most eminent American men of the day in fruitful agricultural research, particularly in the great field of horticulture, takes the hopeful view that the growing independence of the voter is the most significant movement in politics. He finds him breaking away from parties, weary of machine control and "boss rule" with their natural adjunct of corruption. These are the reasons specified, but Dr. Bailey thinks that the causes lie deeper and are to be found in the spread of the science-spirit and the growth of intelligence. Agricultural colleges and experiment stations in all directions are permeated with the spirit to which Dr. Bailey refers. The periodicals and text books of the day are charged with this open spirit of enquiry, and by degrees, slowly enough it is true, people come to see that it ought to apply to the business affairs and policies of the country. Blindly following a party does not settle anything aright. The making of government is a serious business and should be taken seriously by the voters at large. Dr. Bailey therefore pleads, and he is surely right, for the application of the open mind, even though we may not propose to eliminate sentiment, and the following of great leaders. Parties are inevitable, but leaders and parties and policies will all be better if we approach them with the fair and open mind. No one is in a better position to do this than the voter of the farm, from the ranks of which more men should be drawn because of capacity, integrity and independence—qualifications never so urgently needed in public life as at this very time and during the great reconstruction period to follow the war. Day-light and independent spirit should displace hole-in-corner partizanship if we are to have a wholesome rule of the people. We apply the open mind to questions of farm practice. Let it be done in the affairs of the country and we shall have fewer sordid scandals to be ashamed of in the future.

Selling Wool for Its Real Value.

Some day the sheep raisers of Ontario will awaken to the fact that they are selling their wool each season at a price below its actual value. Perhaps, as it is offered for sale, the Ontario clip is sold very well, for, generally speaking, no effort is made to grade it or add to it those finishing touches which enhance the price. Furthermore, the transaction with the farmer in each case is a small one, but almost as much time is required to close the deal as though a carload were being purchased. One bushel of apples or potatoes on the farm is worth very little, because the marketing of it alone would so eat into the price that the net gain to the grower might be very small. However, the food nutrients contained in the bushel of apples or potatoes are more valuable before they leave the farm than after passing through the various channels of trade. The products of the farm are appraised according to what the ultimate consumer will pay, minus the cost of getting it to his door. Similarly with wool, Ontario shepherds were selling from 31 to 35 cents per pound, while the shepherds of Quebec were receiving 43 cents per pound for their best grades, or an average of 41.8 cents for good, bad and indifferent. This represents a difference of from 20 to 40 per cent. in price, made possible by a well-organized, co-operative effort and a system of grading and marketing.

The farmer with a carload of potatoes receives a higher net price per every 60 pounds than for his one lone bushel, and a group of shepherds who combine their wool, have it graded and prepared in a modern way to suit the trade, realize a greater revenue than the isolated raiser of sheep with a few bags of wool. There would be no great difference in the value of a fleece whether shorn from the back of a sheep in Ontario or Quebec, but the way it is subsequently handled may result in the difference of from 20 to 40 per cent. This is the point we endeavored to make clear in an article entitled, "Ways and Means of Marketing Wool That Might be Applied in Ontario," and which appeared in the issue of April 6, 1916. Alberta, Manitoba, Quebec and Manitoulin Islands, Ont., have put this modern co-operative method into practice with pleasing results, but the majority of the Ontario shepherds still continue to market their clip in the antiquated, money-losing way. A report of the operations in Quebec in this regard during 1916 appears in this issue. Ontario sheep raisers and wool producers can well afford to study these methods and consider the scheme. We have in this province the proper machinery for organizing and conducting an educational propaganda. If thousands of dollars can be saved to the farmers by putting it into operation it is indeed time that the wheels began to move. Perhaps a little discussion at the Sheep Breeders' annual meeting would give the engine a "once-over" and start things going.

Breeding for a Purpose.

The most successful stockmen to-day have been laboring for years with a definite aim in view. They have bred along a line that they believed would eventually produce the animal of the desired type and conformation. The weakling or the off-type animal has been weeded from the herd, and only the best retained to perpetuate their kind. The result is a whole herd of valuable animals with true breed type and excellent conformation. Dairymen have also selected and bred to intensify milk and butter-fat production in their herds. Breeders who were fortunate enough to secure good foundation stock have had an easier road to travel than the average breeder. However, any stockman who knows the type and quality of herd he eventually wishes to own and sets out with those qualifications firmly fixed in his mind can and will succeed. There has been too much haphazard breeding, even among pure-bred stockmen. Using a sire of one strain this season and of another the next makes it difficult to establish a definite type. If every owner of grade and pure-bred stock would select and breed to intensify the good qualities of his herd or flock, the value of live stock in this country would be greatly increased during the next few years. Young men in particular when starting into live-stock breeding should set a standard and then strive to breed their herds up to it. Possibly breeding for a purpose is most clearly exemplified in the case of dairymen. The production of grades as well as pure-bred herds has been more than doubled, in some instances, by using a selected sire and then weeding out the unprofitable individuals.

This is not an expensive system to follow. It merely means securing the best possible sire to head the herd, and then select the females to keep by use of the scales and tester. It may take generations to set a particular type and conformation of form, but, producing qualities of the average dairy herd could be doubled in a decade if the proper system of selection and breeding were followed. Knowing exactly what the cows are producing in a year or two years is a straight business proposition. Short tests have proven what individuals of the various breeds

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, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States \$2.50 per year; all other countries, 12s., in advance.
3. **ADVERTISING RATES.**—Single insertion, 25 cents per line, agate. 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 arrears must be made as required by law.
5. **THE LAW IS,** that all subscribers to newspapers are held responsible until all arrears 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 each 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.

are capable of producing under ideal conditions, but it is the long or yearly test that indicates the staying qualities under normal care and attention.

An article on another page of this issue gives an idea of what breeders have accomplished with their herds when they set out with a definite purpose. It is equally as important that the grade herds be brought up to a higher standard of perfection as it is to further improve the pure-bred herds. There has never been a surplus of high quality stock in the country, and it is doubtful if there ever will. It can hardly be said that perfection has been reached with individuals of any breed. There is still a big field of work for the breeder of live stock.

When Will the Tide Turn?

Information compiled by the Census and Statistics Office show that in 1881, 15.4 per cent. of the total population of Canada was engaged in agriculture. In 1891 the percentage was practically the same. In 1901 the proportion dropped to 13.5 per cent., and in 1911 to 13 per cent. It is impossible at present to see that the "back-to-the-land" propaganda has been instrumental to any extent in keeping young people on the farm, or in taking people from the city to the country. It is also difficult to see or predict how long this diminution of the agricultural ranks shall continue, but there is one factor which will eventually turn the tide, and that is when the agriculturists become so few and the urban dwellers so plenty that living in the towns and cities will become difficult and too expensive. Then, if history repeats itself some will find their way back to the country, and thus restore the equilibrium between the farm and urban population.

So long as transportation companies are liberally subsidized and manufacturers are bonused in an extravagant manner they can afford to pay such wages as will attract laborers in their direction. This will leave the country population small, and no amount of government money spent in educating farmers will convince them that farming is a glorious occupation

and satisfactorily remunerative. The decrease in the percentage of those engaged in the occupation of agriculture in Canada during the last 30 years explains fairly well the effects of our governments' inattention to agriculture during that time.

The New - World Trade in Shorthorns.

For over a hundred and twenty-five years Shorthorns have been purchased from the herds of Britain, and used to build up and improve the breed in Canada and the United States. This has constituted a lucrative trade for the Old Country breeder, and the number of cattle exported encouraged him in his operations and rewarded him, to a large extent, for his toil. Furthermore, when the Colonial went overseas with a well-filled purse or adequate credit, he could bring back individuals that were worthy to bear the name "imported" and do service on this Continent. Our neighbors to the south were also liberal in their bids for quality when they saw it in the homeland of the Shorthorn. During recent decades a trade was also developed between Britain and South America which took many thousands of dollars annually from the stockmen of the Argentine to the estates of England and Scotland. The result in America has been what one would expect where a system of constructive breeding is followed. We can now choose from the old established herds, males and females that are a credit to the name of the owners, and qualified to be used as foundation stock or to improve the commercial herd. The Argentine breeders were not slow to realize this fact, and, inconvenienced through the war in their trade with Britain, they turned to America for breeding stock. The American, in his characteristic manner, extended the glad hand to the newcomer, and through an exchange of judges at the show in Argentina and at the International at Chicago they hope to cement the newly-founded friendship into a new-world brotherly feeling that may result profitably to both parties. This export trade assumed considerable proportions during the past sales season, and this combined with a universal shortage of meat products, when the need is great, has made and will make itself felt still further throughout all stages of the live-stock industry.

The stockmen in Britain are now awakening to the fact that something has happened in the Argentine, and their reputation is no longer sufficient to draw in their direction all the overseas business in breeding Shorthorns. Members there are asking the Shorthorn Society to make a move before the hand writing appears on the wall.

This is not meant in any way as a reflection upon the conduct or character of the American or Old Country breeder. The object is only to set forth the trend of events and show what is liable to transpire in the hustle and bustle of live-stock breeding activities. Any development of the business with South America will strengthen the demand in Canada, for our neighbors in the Republic south of us think highly of the Canadian-bred Shorthorn, and when trade is brisk there the effect is soon felt in this Dominion. New fields are constantly being explored which will be able to use good cattle, and the breeders of this country must emphasize quality instead of quantity if they desire to obtain the most out of the conditions as they arise. With a well-defined, constructive breeding policy, making use of the best matings they can afford, Canadian cattle breeders can look forward to a good business even down to the commercial herd which produces pure-bred stock for use on the farms.

Nature's Diary.

A. B. KLUGH, M.A.

The way in which some animals make use of the work of other animals is one of the very interesting things we sometimes come across in our study of nature. The other day I discovered some Hickory trees on which a great many of the leaflets had been rolled into cylinders by the larva of the Hickory Leaf-roller. This insect, when in the larval condition, rolls up a leaflet, tying it with silk, and pupates within the cylinder thus formed. On opening some of these cylinders, I found within not only the larva or the pupa of the Hickory Leaf-roller, but in most cases either the larva or pupa of the Forest Tent Caterpillar. Now, this latter insect is in the habit of seeking some snug hole or crevice in which to pupate, the cocoons usually being found in crevices in the bark, under stones, or in dead leaves on the ground. In this case the larva, when they had

finished feeding on the leaves of the Hickory, found that the Leaf-roller had made very suitable retreats for their use, and promptly adopted them.

One of the most curious larvæ which we have is that of the Puss-Moth, which is found feeding on the leaves of our willow bushes, around ponds and swales. This caterpillar is about an inch in length, pale green on the lower part of the sides and on the abdomen, and has a large brown patch on the back. It is very blunt at the head end and tapers to a point at the opposite end of the body. At the posterior end of the body are two tail-like appendages, which, when the insect is feeding or resting quietly, extend straight out behind. When the larva is alarmed or attacked, it curls these appendages up over its back, protruding from each an orange-colored lash-like thread. This peculiar arrangement is considered to be of use in keeping off parasitic insects which attack it. While this may be its means of escaping these enemies, it undoubtedly escapes other enemies, such as birds, on account of its protective coloration, for its light-green lower parts blend in wonderfully well with the green of the willow leaves, while the darker upper parts resemble the withered brown edge of a leaf.

The latest breeder among our birds—the American Goldfinch—is now busy nest-building. Its nest is a firm compact structure, the exterior being composed of shreds of bark, fine grass and vegetable fibres felted firmly together. The inside is lined with a soft, deep bed of thistle down. The position of the nest varies a good deal, being anywhere from five to thirty feet from the ground. The eggs are from four to six in number and are plain, pale bluish-white.

The American Goldfinch is often termed the Thistle-bird, not by any means a bad name, as the seed of the Thistle forms one of its main articles of diet. In fact, from the time the Thistle seeds ripen until late fall, one of the places we most frequently see the Goldfinch is perched on a Thistle head busily picking out the seeds. In this way the Goldfinch does a great deal of good, and is a very real friend to the farmer. It is also called the Wild Canary, and if this name should be applied to any Canadian bird, this is the species which should bear it, as it is more closely allied to the Canary than any other bird in our fauna. The name Wild Canary is, however, also quite commonly, but erroneously, applied to the Yellow Warbler, evidently because of its bright golden color. It is mainly size and color which strikes the casual observer of birds. The form of the bill is usually ignored, yet the shape of the bill is the index to a bird's Family, and is one of the most essential points to notice if desirous of identifying a bird.

In summer the male American Goldfinch is a bright pale yellow, with a black cap, black wings and tail, and white wing-bars. The female has the head and back olive-brown, and the under parts yellowish, her wings and tail resembling those of the male, except that the black is not so pure. About the middle of September the male moults into a plumage which resembles very closely that of the female. In April he again assumes his summer garb, not all at once, but gradually little patches of bright yellow showing here and there in his dull winter coat, and spreading until full plumage is attained.

The song of the American Goldfinch is a very bright little melody, and the male has also a pretty note, "Perchick-o-ree," which he utters on the downward curve of his looping flight.

The range of the American Goldfinch is from Labrador to Manitoba. In the latter province it finds neither Thistles nor orchards, so it eats the seeds of other plants belonging to the Family Compositæ, such as the Black-eyed Susan and the Gaillardia, and nests in the low poplars and oaks. Over most of Canada it is absent in the winter, but in southern Ontario flocks of this species are to be seen all through the winter. The so-called "Winter Canary" is, however, usually the Pine Siskin, a Finch about the size of the Goldfinch, but more flaxen-colored and streaked all over.

The European war correspondent of the Brooklyn Eagle, who has seen every army in Europe, last of all that of Great Britain, pronounces it eminently fit in men, leaders, guns, and supplies for the giant task of driving back the German foe. Britain has accomplished in two years, he declares, what Germany has been busy working up for forty years.

There is usually one or two places in the field where the sample of grain is superior to that in other parts. In harvesting, it is advisable to keep this good grain separate from the rest in order that it may be saved for seed. This is one way of selecting to improve the yield and quality of the crop.

All fences surrounding growing crops should be kept in repair. A broken rail may permit the stock to break into and practically destroy a crop that is nearing maturity. If cattle or horses once break into a field it afterwards requires an extra strong fence to keep them out.

August is the month that potato blight frequently makes its appearance. Protect the crop this year with Bordeaux mixture, 4-4-40.

THE HORSE.

Don't forget to water the team frequently during hot weather.

The feet are a very important part of the horse or foal, and they should be kept in good form.

Teach the colt that man is a friend. Handle its feet and legs and get it accustomed to the halter, straps and other common pieces of harness.

Harness sores are nasty things on a beast, and they can usually be prevented by bathing with cold water when the harness is removed and by keeping all leather that bears on the flesh, clean.

The Clydesdale Horse Society of the United Kingdom of Great Britain and Ireland, report that the export trade during 1915 was almost non-existent. The total exports for the year were 47, as compared with 1,617 in 1911.

In the Home of the Percheron.

Information gathered from those who have been in France in quest of Percherons, shows that actual conditions relative to the horse situation are not so bad as has been reported. However, it is difficult to gather together a satisfactory shipment and get them out of the country. There is a notable decrease in Percheron stock, but none of the good mares were requisitioned and none of the stallions and colts which the owners wished to keep. In spite of this, however, the help problem has been serious and the young animals have been very poorly cared for. In many cases, it is said, the animals have been at pasture since they were foals, and they are not in suitable condition to select from for export. Members of the Percheron Society were permitted to submit a number of pedigrees of individuals they had for sale. The total amounted to about 200, and from these foreign buyers were obliged to choose. Even after their purchases were made much delay and inconvenience was experienced in procuring the papers and getting the shipment to England, and from there to the boats for the overseas trip. Some of the larger dealers are now doubtful if any more Percherons from France will be obtainable till after the war is over.

After the Day's Work.

During the rush of the harvest season, when long hours are spent in the field, and the teamsters come in unusually tired at night, there is a strong temptation to hurry through the chores. Water and feed is considered by many to be all the attention the team requires. The horse that is not thoroughly cleaned to remove dirt and perspiration from the skin soon begins to show the effects of it. Lack of proper attention to the horse's comfort is responsible for more thin horses than is feeding too small an oat ration.

If a horse comes to the stable wet with sweat very little cleaning can be done with the comb and brush, although the use of the curry comb aids in opening the pores of the skin. All harness marks should be sponged off and some horsemen go over the whole animal with a damp sponge to remove as much dirt as possible. It is not advisable to wash a horse at night although some drivers do so. Many stables are so hot during the summer months that a horse sweats if left in them at night, and under these circumstances cannot well stand the next day's heat. After being fed and cleaned the horse is fresher the next morning if turned on pasture at night throughout the summer. However, it is not always possible to do so, and when the stable is hot the next best thing to do is to tie the horse outside with some bedding under him. The hay can be fed in the open as well as in the stable. To keep up with the farm work the teams must be kept as efficient as possible and in condition to do a full day's work.

For two or three months during the year flies torment the horses and make it more difficult for them to do their work. Some horses are protected against the pests, but others are left to fight these tormentors themselves. Fly-nets made of heavy cord or leather laces were commonly used at one time and afforded a degree of protection. A light cotton or burlap sheet also serves the purpose of protecting the back and sides against flies, but is more heating than the netting. Some drivers rub a little fish oil around their horses' ears, neck, legs and other parts where flies persist in lodging, and claim that it proves effective in keeping off the flies. Not only are the horses benefited by some protection being afforded, but the driver has less trouble in handling them.

Stock that are continually tormented with flies seldom do well during fly season. There are many prepared mixtures that if sprayed on the animal every day or two will ward off these pests. If these remedies are not available a ten-per-cent. solution of carbolic acid in fish oil serves the purpose.

LIVE STOCK.

Thumps in Pigs.

Thumps or spasm of the diaphragm is really a disorder of the nervous system, but it is so commonly associated with irritation of the stomach and bowels, that it is usually considered a disease of the digestive organs. The condition is commonly noticed in young pigs, and consists of a spasmodic or jerking contraction of the diaphragm. The diaphragm is the flat, somewhat fan-shaped muscle which separates the thoracic from the abdominal cavity. This muscle receives its nerve supply from a nerve called "the pneumogastric," which nerve also sends many branches to the stomach and many other organs. Any irritation of this nerve may cause the irregular spasm-like contractions of the diaphragm, which are known as "thumps." In man these same spasmodic jerkings of the diaphragm are known as hiccup.

Causes.—Thumps was, for a long time, believed to be due to palpitation of the heart. In fact, there are still many who consider that the jerkings noticed and the sounds heard are caused in this way. This is a mistake, which can be readily determined. If the hand be placed over the heart and the heart beats counted, and the contractions of the diaphragm noted at the same time, it will be seen that there is no relation between them.

The direct cause of thumps is an irritation of the nerve already mentioned. This irritation may be caused in various ways. Probably the most common causes are diseases of the digestive organs. Inflammation of the stomach or bowels are often complicated by the development of thumps. This is a symptom of severe inflammation, which often causes death. As stated, thumps is common in young pigs. Lack of exercise and overloading the stomach

if the patients will not voluntarily take exercise, they should be forced to. It is good practice, in cases where pigs have suffered from this disease, to give sufficient of equal parts of Epsom salts, sulphur and powdered charcoal, daily in their food, to cause a rather laxative condition of the bowels. In cases where the thumping is violent and it is considered wise to endeavor to control it, this can be done by the administration of laudanum. This can be given in 3 to 15-drop doses every 4 or 5 hours until the violent symptoms have passed. On account of the constipating action of laudanum, it is wise to administer it mixed with a little raw linseed oil. In cases where the oil and laudanum are administered at first, the dose of oil should be somewhat larger than otherwise, as the opium will counteract its laxative effect to some extent. If the bowels act too freely the addition of a little lime water to the water or milk drank (say 1 part lime water to 4 parts milk or water) will usually correct the fault.

WHIP.

Successful Co-operation by Sheep Breeders in Quebec.

EDITOR "THE FARMER'S ADVOCATE":

The Wool Growers' and Sheep Breeders' Associations in the Province of Quebec have again successfully graded and marketed their wool clip. Since their organization these associations have extended the scope of their work, so that now practically every phase of the sheep industry receives attention at their hands. Assistance in the organization and direction of these associations through A. A. MacMillan and the College Demonstrators has been made an important feature in the extension work of Macdonald College Animal Husbandry Department.

In the fall of 1915 four local sheep sales were held, at which 98 head of selected breeding stock, including individuals both male and female, of a number of breeders were sold. These sales afforded a larger opportunity for local selection in purchasing besides providing a new market for pure-bred breeders. The local sales policy will be extended, so that the requirements of all members will be met this fall.

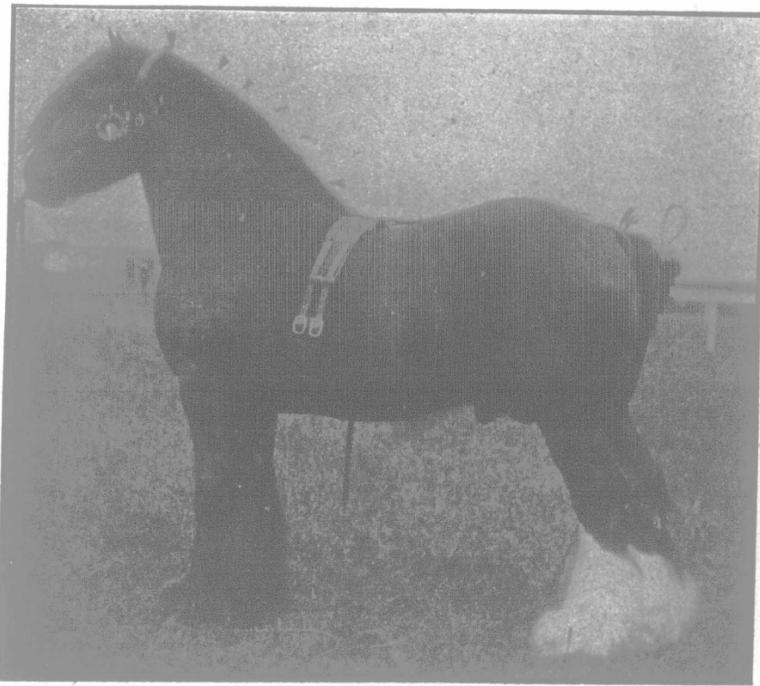
The necessity for further legislation for the protection of sheep against dogs was brought prominently before the Minister of Agriculture, by signed petitions from each association asking for a revision of the Dog Act. The new Act, which was passed at the last session of parliament, received prompt attention, and many petitions bearing the necessary 25 names were presented to the municipal councils, so that sheep owners in a great many municipalities now have the protection of the new Act.

The benefits of co-operative purchasing have also been extended to association members. Shearing machines, fleece boxes, wool sacks, paper twine and dip are some of the requirements that have been handled in this way. The associations feel that there is unlimited scope for work along this line.

Co-operative dipping has also been practiced. The association dipping tank, which is made so that it can be moved from place to place and set up in a few minutes, has been found economical. From 100 to 150 sheep can be dipped at each dipping centre, at a cost of from 1/2 to 1 1/2 cents per sheep.

The co-operative marketing of lambs is a new feature of the work, which is being undertaken this fall. At the local shipping centres, the lambs will be graded according to weight, quality and finish; the standard grades being medium weights, light weights and heavy weights. Ram lambs will also be put in a separate class. Two sales are being arranged in each association. The early sales will take place during September, and the late sales during October and November. Bids will be received from buyers either personally, by phone, telegram or letter; and sales will be made to the highest bidders. In order to encourage and facilitate the establishment of new flocks of sheep among farmers, a number of choice ewe lambs will be selected at each shipping point and offered for sale.

A large number of lectures and demonstrations were given during the year. Talks on the preparation of wool for market, demonstrations in the proper methods of shearing, rolling and tying of fleeces, and the docking and castrating of lambs were given in



Eaton Fenland King.

First and champion Shire stallion at the Royal Show, Manchester, England.

are common causes. Diseases of the lungs or heart or the spinal cord may cause the symptoms, but the most common cause is high feeding and want of exercise.

Symptoms.—The most prominent symptoms are the jerking movement of the body, accompanied by a more or less well-marked sound during each contraction, and by a bulging out of the flanks and a drawing in of the ribs. The symptoms are usually more marked when the stomach is full. These thumping movements are often sufficiently forcible to cause a swaying back and forth of the body. In some cases the thumping occurs at the same time as the heart-beat, but in most cases it is irregular in time, and bears no relation to the heart-beats.

Course.—The course of this condition is variable. It may last a few days, or for several weeks. In tedious cases the patient loses flesh and becomes weak and stunted.

Treatment.—The prevention of this disease in young pigs largely consists in giving them plenty of room to exercise, moderate quantities of strong food, well-ventilated quarters and plenty of sunshine. Curative treatment consists, first of all, in getting the animals into a place where they will have plenty of room to take exercise, and plenty of sunshine. Where the cause is digestive trouble (as is usually the case) a laxative should be administered. For this purpose either raw linseed oil, castor oil or Epsom salts, gives good results. The dose, of course, will depend upon the age and size of the patient, say from 1/2 to 2 oz. of any of the drugs mentioned. This should be followed by light feeding on laxative food, and,

sections that were not touched last year. The local demonstrators, besides arranging for meetings and demonstrations, gave much personal assistance to members in the various associations. French speakers were provided in a number of cases by the Dominion Live Stock Branch. The grading was also performed by expert wool graders supplied by the Live Stock Branch.

The following tables give a complete statement of the grading for each association:

Table Showing Number of Pounds in Each Grade and Total Weight for Each Association.

Association	Medium clothing	Fine medium combing	Medium combing	Low medium combing	Coarse combing	Black and grey	Rejections	Tags	Total
Pontiac.....	150		22382	20195	5454	556	2742½	86	51564½
Compton.....	244½	684	13536	8172	665½	52	1111	6½	24471½
Richmond.....	32	258	11003½	5353½	81	271½	554¼	12	17567
Sherbrooke.....	189	206	13010	2668	8	158	531	115	16885
D. of Bedford.....	319	58	5630	7031	2893½	164	514½	31	16621½
Stanstead.....	436	142½	8097¼	4438	682	69	375	11	14252
D. of Beauharnois.....	365½		2232	5227	3402		2124		13350½
Argentuil.....			5276	4614	397	404	500		11191
Megantic.....			3025	791		70	51		3937
Total.....	1736	1328¾	84191¼	58489½	13583	1744½	8503¼	261½	169839
Per cent. of total.....	1.1	.9	49.4	34.5	8.1	1.1	5.		

Table Showing Number of Members and Fleeces, average weight and Price Per Fleece and Average Selling Price Per Pound.

Association	No. of members.	No. of fleeces.	Average		Average price per pound.
			weight per fleece.	price per fleece.	
			Lbs.		Cents.
Pontiac.....	483	7216	7.02	\$3.04	42.3
Compton.....	282	3489	7.06	3.00	42.4
Richmond.....	167	2364	7.43	3.10	41.7
Sherbrooke.....	133	2238	7.53	3.19	42.3
D. of Bedford.....	153	2226	7.42	3.05	41.5
Stanstead.....	125	1965	7.22	3.06	42.3
D. of Beauharnois.....	113	1545	8.79	3.62	41.1
Argentuil.....	107	1481	7.75	3.10	40.0
Megantic.....	49	486	8.1	3.45	42.5
	1617	23010	7.59	3.18	41.8

One new association was organized in Megantic County. All the other associations show a marked increase in membership and total output of wool. Six hundred and forty-seven members have been added since last year, and the total output of wool increased by 65,647 lbs., making a total this year of 169,839 lbs., with a total value of \$71,092.70. Medium clothing, fine medium combing and medium combing grades sold at 43 cents a pound; low medium combing at 42 cents; coarse combing at 41 cents; black and grey and rejections at 38 cents. Fifty-one per cent. of the wool sold for 43 cents a pound, while the average price for all grades,

including rejections, was 41.8 cents a pound.

The associations had no difficulty in selling their wool to Canadian mills, immediately after grading, at the above prices, which were f. o. b., at shipping points. The wool throughout was put up in excellent shape for market, and was considered one of the choicest lots of Canadian wool offered for sale this year. Local prices for ungraded wool throughout the province ranged between 31 cents and 35 cents a pound, so that grading and co-operative sale netted

room growth in it there is also a solid foundation of constructive breeders.

Hereford Prosperity.

There are in the United States 7,078 members of the Hereford Cattle Breeders' Association, most of them active breeders. There were in 1915, 45,583 pure-bred Herefords recorded, an increase of 7,000 over the previous year. There the pure-bred industry has become so extensive that through the process of evolution there have become three classes of breeders: First the great majority catering to the commercial clamoring for sires; second, those middle class constructive breeders supplying a few smaller breeders with breeding stock and selling to the commercial range industry; and third, breeders that are the aristocrats of the industry, essentially constructive breeders and disposing of their breeding stock solely for other pure-bred herds. It has been the great demand for beef that has been a tonic to the range industry. It has been the call of the range for sires that has speeded up the pure-bred business, the ripple of which seems almost accentuated as it reaches the few great aristocrats or constructive breeders. Thus the 37 public auction sales of pure-bred Herefords from January 1 to May 19 this year, in which 2,299 head were sold, broke all previous records, averaging \$322.25, giving a total revenue of \$750,809. The previous record average was \$300.12 for 1,345 head in 1898, more pure-bred Herefords were sold at \$1,000 and over than ever during the same period in the history of the breed.

These are the conditions surrounding the pure-bred industry and they pave the way for the discussion of one of the greatest Hereford breeding establishments on the American continent. This institution is none other than the Orchard Lake Farm, owned by Warren T. McCray of Indiana.

Record Annual Sales.

It is an aristocratic establishment of constructive breeding representing the pinnacle of Hereford herds on the the American continent, and commanding that position by recognition of all the American Hereford breeders. It was so in May, 1915, when to his annual sale of 75 head there came breeders from every state of the Union and from Canada, anxious to replenish their herds with the choicest breeding stock from the establishment where the choicest constructive breeding had been performed, and where an average of \$766 per individual was recorded. Again on May 17 of this year 1,500 breeders returned for McCray's eighth annual sale and owing to the boom in the beef industry, and recognizing this premier Hereford herd 75 head were sold for \$96,525, or an average of \$1,287.50 per head. Twenty-five bulls averaged \$1,906 and 50 females averaged \$977.50, breaking all the world's Hereford records and furnishing a fitting climax to date of the story of the Hereford on this continent. It was at this sale, which the writer attended, and met many of the most reputable breeders in the United States, that we saw bulls in his new sale pavilion, and by auction go up in thousand dollar bids. It was so when Superior Fairfax entered the ring, and registered \$10,000, purchased for Mr. Dana, of Wyoming, who has a herd of 7,000 pure-breds, and is catering to the demands of the range. This sale not only is a record one in itself, but the \$10,000 Superior Fairfax in the sale heads the records as the highest priced Hereford bull ever sold at auction.

After viewing in the sale pavilion the great demand for pure-breds in this establishment to furnish sires and females for other breeders, some of them who are constructive, and others who are supplying the range, we must necessarily ask, why the prestige of the McCray establishment? Why do they travel that beaten road yearly to the Orchard Lake Farm, and continue to make each year a new record in sale prices. When we know the facts behind the history of the establishment, and fully comprehend the quality of sires used in the herd, then only will we appreciate the fact that these breeders are not paying out their good money without getting value for it, although we admit many people will not be able to understand how \$10,000 can be paid and yield dividends on the investment.

King of the Herefords.

Mr. McCray has been farming for the past 20 years, and 10 years ago entered the pure-bred Hereford breeding business. He made his foundation in the choicest of breeding females that he could secure, and in 1908, desiring the very choicest of a Hereford sire procurable, he went out and purchased Perfection Fairfax from A. C. Huxley, of Bunker Hill, Ind., and paid \$5,000 to get him, when beef cattle were selling at a much lower price than they are to-day. The main factor that influenced the proprietor to pay such a long figure was, in his own words: "I picked him out of all bulls because I liked his calves better than those from any others." Thus he was not a poor speculation, but a bull which had demonstrated his ability to sire the very choicest of breeding stock. With careful mating in the herd since 1908 he has now built up the total herd to from 350 to 500 head on his 1,600 acre farm, on which he has 150 of the most select breeding females to be found anywhere on the continent. Perfection Fairfax has built up his reputation, the reputation of to-day with the title of King of the Hereford sires. To the question, "What has been the value in dollars and cents of Perfection Fairfax in the herd, and how many sons and daughters from him have you sold, and for what price?" he stated, "He has been worth to me \$50,000, and I have sold approximately 150 head sired by him for \$150,000." Thus while the \$5,000 was paid \$50,000 could have been paid and the proprietor not lose a cent.

We saw this 13-year old bull in the field grazing. As

On America's Greatest Hereford Establishment.

When the Hereford was taken out of the yoke in the southwestern part of England few foresaw the magnificent fields to conquer or anticipated the great renown that the breed has won in supplying the world with meat. Yet the original conditions which surrounded the breed in which they were fed scantily, their environment for the production of farm power, made them hardy rustlers which seems even to-day to saturate their whole carcass that has made the breed a forerunner of the small fenced farm. Wherever pioneer work is to be done there you find the Hereford. He goes out to all range countries of the world demonstrating his ability to make the best of conditions as he finds them, standing more abuse than any other breed when under adverse conditions. Although generations of scientific breeding since he left the yoke have developed in him a type remarkable for beef form, early maturity and easy fleshing qualities, he still maintains that natural vigor and vitality, that unequalled grazing tendency that makes him the favorite wherever the rancher exists. Cross him on the pioneer mongrel and he will put out a new product. He will have his way for the white face, and the Hereford type will appear in the offspring. The rancher once just demanded cattle that would rustle, now they must have two assets, certain type and certain vigor, they must meet the conditions of the range in being rustlers and meet the demands of the market in being low set, thick and well balanced. The Hereford just naturally fits into this "nick" of our agriculture, and we find the Hereford sire on ranges of both North and South America, besides on many other foreign fields, stamping his approved type and approved vigor wherever he goes.

Since the first importations to America in 1817, 1824 and 1840, the Hereford has continuously made progress. As the intensive farming became practiced in the older settled districts of the United States the

members a gain of seven to twelve cents a pound or twenty to forty per cent. advance.

The associations are operated on a purely co-operative basis. The membership fees are based on the amount of business that each member does with the association. Four cents a fleece has been found sufficient to cover all expenses such as postage, printing, wool sacks, paper twine, labor, etc. The working principle throughout has been the production of a high-class, marketable product, the application of proper methods in the preparation of this product for market, and its sale at top prices.

Macdonald College, Que.

H. BARTON.

breed moved westward ever on the frontier, and was brought back to the intensive feed lot of the middle west for finishing. This practice has gone on and on and will continue so until the range becomes a thing of the past, and then the breed, unless transformed to a dual purpose, may continue like other straight beef breeds on the outer fringes of moderately priced lands.

At the present time a great rejuvenation of the beef cattle industry is going on throughout the American continent. The herds of not only this continent but of the world were a couple of years ago at a low ebb, liquidation of the beefers occurred, and now the great reconstruction is taking place. In addition to this situation the great war has demanded additional supplies just at a time when the world is least in a condition to satisfy them. Under these circumstances it is not hard for one to understand the good prices of commercial beef cattle and the increased momentum of commercial breeding. On the range and semi ranges of the United States this great progressive breeding tendency is foremost.

At one time just grade sires that would stand the adverse conditions were suitable, but now they are endeavoring to more nearly meet the demands of the market and have sought out sires of pure breeding that will do this, that will transmit their qualities in the offspring from miscellaneous dams. In this trek of the pure-bred to the range country the white faces have led the way, and after displaying the quality of their wares, so satisfactory in rustling ability, so efficient in offspring to meet market demands, the thin trail becomes a well beaten road, outstanding, intermingled with the breed from Herefordshire. Who is to supply this Hereford trade? None other than breeders of pure-bred Herefords. It is little wonder then that the pure-bred Hereford industry of the United States is in the midst of the most prosperous era of all time. While there is much mush-

could be expected, he was not showing to great advantage on account of age, but is still of great service in the herd, royally transmitting those qualities that have made his progeny so remarkable in beef conformation.

In the sale he had last May almost everything that came under auction was sired by this great Hereford king, or by a son of this great bull, and was strenuously competed for. The prices not only backed up this Hereford establishment as being one of the most select, but was the greatest of tributes to Perfection Fairfax, which is making Hereford history and is recognized king of the Hereford sires on the American continent.

We do not wish to intimate that in a commercial herd of cattle that a bull could be made worth \$50,000, but that in a herd of pure-breds, which has reached the pinnacle of Hereford fame by constructive breeding, and which is catering to breeders, not to the commercial field particularly, and which breeders in turn are catering to the commercial demand, a sire can be that valuable and not a fictitious price either. Perfection Fairfax, like any other bull that makes breeding history, must necessarily have the ability to make improvements in the breed, to sire offspring which are of superior order, that they may be recognized publicly as improvements on the Hereford breed, and to demonstrate this comparison they must necessarily meet all competitors in the show-ring, and prove their merit. Perfection Fairfax himself and his sons and daughters have many times over been grand champions and prize-winners in the leading shows on the continent, and by proving their merit in this way are keenly sought after by other establishments. While the breeders may pay from \$1,000 to \$10,000 for his progeny they reap a benefit in the better quality of stock produced, which commands more money because more readily patronized by commercial breeders. Thus the constructive work done on such a farm finds its way down to the grades on the range, and ever widening out over a larger field as it finds its way thence. It might be stated that this one sire has contributed largely to the success of the establishment, and naturally in eight years of breeding a good share of the breeding stock are daughters and granddaughters of him. In consequence it became necessary to introduce a bull not so closely related, and two or three years ago he imported one of the choicest bulls in Great Britain called Farmer, by which he intends to introduce an out cross preventing inbreeding too closely. Thus his main sires to-day are the 13-year-old Perfection Fairfax, his two sons, Brummel Fairfax and Martin Fairfax, besides the imported Farmer. To the question how are you using Farmer in the herd, he replied, "I am retaining all the heifers of the imported Farmer and will use on these Brummel Fairfax and Martin Fairfax." Thus it will be seen he is introducing an out-cross, and will re-introduce the Perfection Fairfax blood, or in other words line breeding to fix the type and make advancement.

The proprietor was questioned concerning the weak points in the Hereford breed and he stated, "They have few weak places, they are prolific, easily kept, kind, gentle, early maturers, uniform in markings, good size, good mothers and excel where the highest priced meats are obtained. In my breeding I am doing all I can to improve them, but I find it difficult to make much headway on the best type of to-day. On the range he has proved himself hardy, and has plenty of bone and good legs. He stands more punishment than almost any other breed."

Breeding Pointers.

It is usually true that the great show cows at our large exhibitions do not produce the best show calves, largely for the reason that they do not get a chance to be the best breeders, and to throw the best progeny. Mr. McCray confirms this idea. He stated, "We have not as a rule got the best results from show cows. The most valuable matrons are as a rule the well-bred cows of fair size and quality that have never been over fed." As we looked over a number of his breeding females there on the farm, they were mostly in ordinary condition, yet with plenty of meat on them, and the mothers of the most select calves invariably showed a strong matronly type, more distant from the compact steer standard as exemplified in many of our show cows in the show-ring.

It is his aim in breeding cattle to give the heifers every opportunity to develop to the maximum. He does not breed them until 22 to 26 months of age. These heifers, therefore, calve from two-and-one-half to three years of age. For a young bull he recommends that one 15 months old may be allowed 30 cows if hand bred, and for a mature bull 40 to 60 females. The practice of breeding too young must eventually have an influence upon the progeny, if not in the first generation, then in the second or third, and in any constructive breeding policy, mismanagement may offset to a large extent the effects of a sire. In a herd with the very choicest of breeding behind pure-bred stock the very choicest management must be given that the characters may be able to assert themselves to the greatest extent, and by doing so such management is conducive to the best development which is absolutely essential if the maximum in a constructive policy is to be attained. In the experience of this establishment where the management is in harmony with breeding, the laws of breeding that like begets like, that character can be intensified and transmitted, are proving out in practice.

Imported Hereford Blood.

At the present time there is considerable rivalry between the American and the English Hereford breeders. The Americans feel that they have a firm foundation and have advanced the type in comparison with their English rivals. They have from time to time imported some of the choicest sires in Great Britain, and have

worked for a smooth, even animal with quality. The main strains that have contributed towards this perfection have been the Anxiety, Perfection, Beau Donald and Lord Wilton. The English breeders, on the other hand, have given considerable emphasis to scale or size, and it is claimed have larger cattle than the American. A few of the leading American breeders believe that the infusion of English blood occasionally is advantageous. To the following questions, "Are the imported Herefords better than the home bred? Is the United States on a solid footing in Hereford breeding or do they need assistance from the home of the Herefords?" Mr. McCray, who represents the top in the breeding fraternity, replied, "I do not think the imported Herefords are better than our own. We might be benefited by an occasional influx of new blood, but I think it should come through the dams, rather than through the sires."

The writer attended Mr. McCray's sale to observe the basis of his great success with the breed, to understand why the popular demand for his stock, and to view personally what was expected to be a record Hereford sale. The secret, as previously intimated, was clearly discernible. It was a matter of constructive breeding, where a single bull had woven himself into Hereford history so intensely that he is almost inseparable. Sons and daughters of his won in the show-ring, they produced winners, and the scramble for them in the auction ring under that ebullient auctioneer, Fred Reppert, only seemed to diminish as they soared past the pocket book of the modest financier. They were in demand because the commercial range cattle industry was healthy and because they represented aristocratic breeding and conformation.



Brandsby's Count 6th.
First and champion Shorthorn bull at the Royal Show, Manchester, Eng. Sold for 2,500 gs.

There silently on that 1,600-acre farm, modernly equipped in buildings and fences and located about 85 miles south of Chicago, goes on a constructive policy leading the Herefords into new spheres. There in May, 1915, was held a record sale, and yet another in May, 1916, in the new magnificent sale pavilion but what will be the prices at the ninth annual, May 1917, who knows?

THE FARM.

Development Through Adversity.

EDITOR "THE FARMER'S ADVOCATE":

When I cam' in frae ma wark the ither nicht I found the auld wumman readin' the paper that she had just taken frae the mail-box at the road gate. "Weel Jean," says I, "what's the war-news to-day?" "Aboot as usual," she says, "the British are advancing an' the Germans are hauling their ain. It's muckle like it wis a week ago, or a month ago, or a year ago for that maither, sae far as I can see," she went on, "when it's gaein' tae end or what it's gaein' tae accomplish I canna' mak' oot at a'. Seems tae me the world is gaein' tae the bad a'thegither wi' a' this fightin' an' na sign o' an end tae it."

"Hoot Jean," I interrupted her, for I saw she wis gettin' ready tae monopolize this conversation for the rest o' the evenin', "what for dae ye talk like that? Have I no' tauld ye that something is gaein' tae come oot o' a' this turmoil that will compensate the world for what she is gaein' through the noo? It's mighty short-sighted views ye're takin' o' these warld problems, I'm thinkin' Jean," says I.

"Noo look here Sandy," she answered, "will ye tell me what is gaein' tae compensate this country for the loss o' sae many o' her best young men that we were lookin' to as oor future leaders in religion an' politics an' commerce an' a' the rest o' it. They can no' be replaced in a hurry, I can tell ye." "Jean," says I, "it will tak' time. I'll grant ye that. But it can be done, an' it will be done. We have only tae go tae

history for proof o' that. Nature is unco' slow an' canny in a' her operations, but she gets there just the same. The inhabitants o' this auld earth hae been at war wi' ane anither, off an' on pretty much since first they came here an' ye canna' say that there are not as guid specimens o' mankind in the world to-day as there ever was. For that matter we a' ken that the standards are higher noo in a' lines o' mental development, than they ever were. An' what I'm thinkin' is that this has come aboot not only in spite o' war, but tae a large extent because o' it. I ken that in times o' peace we seem tae mak' great progress along scientific, an' ither lines, but what use dae we mak' o' oor increased knowledge? Don't we maistly use it tae mak' things easier for oorselves an' tae tak' the struggle oot o' life?" "Weel," says Jean, "what's the matter wi' that, isn't it richt for us tae be as happy as we can be while we're here?" "I'm no' denyin' it," I replied, "but the trouble is that as soon as we get tae the point where we can live wi'oot scratchin' we cease tae scratch. In ither words when we become prosperous the tendency is tae tak' things easy, an' frae then on we're on the down-hill road. Gin man could retain his moral balance as he increases in knowledge an' prosperity, he wouldna' be laag reaching a muckle higher state o' existence on this airth than he has yet attained to. But until he does this, until he has learned tae obey the law o' God an' nature (which is pretty much the same thing), he must expect tae tak' his medicine once in a while. An' the maist effective medicine in oor present state o' development seems tae be war. Oor hale trouble wis that science got ahead o' morality, as I said, an' for the guid o' the race we ought tae be thankful that nature has provided a remedy. We must a' admit the temporary set-back war gives tae many things that are guid in themselves but we dinna' want tae lose sight o' the main purpose behind everything, which is the development o' life in the universe. The trouble wi' us is, that we can't abide retracing oor steps until we get on tae the richt track. It looks tae us like lost time an' wasted energy. But when we think o' the fact that it has taken millions o' years tae bring everything tae its present state, an' also o' the fact that there's ony amount o' time ahead for nature tae finish the job, we willna' feel sae impatient. An' when this war has ended, as it will end when it has brocht man tae the point where he can discriminate between what is of real an' lasting value in life, an' what is not, then we'll ken that, wi' a' its horrors an' misery, it wis the one thing that could bring the world tae its senses an' prevent us frae slippin' back intae the condition o' animalism frae which nature is raising us wi' sae muckle effort an' pain. We're too close tae the present scene o' action tae get the best view o' it. One wee part o' the play tak's up a' oor attention. What we want tae dae is tae get on tae higher ground where we can get a broader outlook; an' when we understand something o' the plot o' the story an' the different actions that have led up tae the present stage, we can mak' a forecast o' the outcome that will gie us a reasonable hope for the future an' encouragement for the trials that we hae yet tae endure in the course o' oor natural life. I'm no' blind tae the temporary set-back that has come tae the world along material lines, as I tauld ye, but there's something better being developed these days, an' that is the manhood o' oor nation. That's the one thing ye can use as a foundation for the future achievements o' the race an' wi'oot it we'll never get onywhere. The chief interest in a nation's life as well as an individual's indicates the character o' that nation or individual. Two years ago oor main object was the making o' money, which is a richt in itself, but oor purpose was a selfish one in nine cases oot o' ten, an' maistly oor interest did na' gae beyond oor ain family an' particular friends. To-day the hale Empire is united in one purpose an' that is in the defence o' a principle. Liberty o' thought an' speech has become o' mair importance tae us than even the almichty dollar. Dae ye no' think that a national change o' sentiment such as that is worth all it is costing us?"

"Weel," says Jean, "I'll say naething till I've thoct the matter over for a spell. Gin I come tae agree wi' ye it will be by the exercise o' ma ain reason an' judgment, ye may depend upon that, for ye ken I never believed in hauldin' tae second-hand creeds an' doctrines."

SANDY FRASER.

Upon his return to the United States from Russia where he spent some months I. McRoberts of the National City Bank, New York, reports a great awakening in the land of the Czar where he negotiated a \$40,000,000 loan. The prohibition of vodka and the ending of the war will, he predicts, usher in a surprising era of progress. For three days he travelled through lands as fertile as those of Iowa and Illinois, and the country has undoubtedly a great future.

Some Advantages of Advancing the Clock One Hour.

EDITOR "THE FARMER'S ADVOCATE":

According to articles in the FARMER'S ADVOCATE, the Daylight Saving scheme does not seem to be meeting with the greatest approval in some districts. I hardly see the weight of some of the arguments advanced against it, but then that does not matter, as I am not fond of controversy. I would rather state my side of the question, and let it go at that.

We have been using the plan for some time here, and it is giving us a great many advantages that we missed just by the loss of the hour in the morning. Here our men come on the place at seven and leave at six. They all have homes of their own, or nearly all, with an acre or so upon which they raise many of the vegetables and fruits they need, and have considerable to sell as well.

These men, if they are at home in the morning, go out and work their places, and their employers do not always get the best of their energies. Now, as the time has been changed, these same men come to us less tired out, and when they get home at night, they have an hour more of daylight, and then they are satisfied to go to bed and can give us better service, as they come on to our places rested. Very few of them do very much work in the mornings.

We have no trouble with the dew, because in the dry belt we do not have it. Hay and grains are not

crops that give us much concern, as it is largely a fruit growing district.

The hour ahead, while it is not observed by the railways, gives us considerable advantage, as we have one hour longer in which to get to the depot. Railway officials are not very considerate here, where there is no opposition, and except in the very rush of the season will not accept fruit for shipment after six p.m. The boat goes out at six in the morning and they do not accept fruit unless it has been on the wharf all night. We are now one hour to the good in shipping our fruit.

This year, too, we are especially ahead. Some time ago I mentioned the fact that 10 per cent. of our population had enlisted; that leaves us very short handed. Fruit here is packed in small packages, especially the early stuff, so that boys can, without injury, handle the packages. One of the chief arguments brought to the council in asking them to pass the bylaw was that the boys could drive the loads to the packing houses after school, and have them there in time to get them out that night.

Fruit is always better picked when it is cool. Tomatoes, cucumbers, and such, are always better picked while they are cool. They will stand up 24 hours longer if they are picked before the sun has had them warmed, and a tremendous quantity of cucumbers can be picked up in one hour. This fact alone is worth any inconvenience to the community that it may be suffering as a direct result of the daylight saving.

So far, I cannot see where it will hit the farming interest if the towns are on the daylight saving and they stay as they are working all the daylight there is. What does it matter? Where is the clash? If it is merely in the farm help, then a bargain between the individual farmer and his help that the hours are to be such that they help him out during hay and harvest is all that is necessary.

In the town it is a great advantage. It gives the people an hour of recreation. That idea of recreation may not appeal to some, but most of our criticism, if looked at deeply, is more a matter of jealousy than anything else. Their side of the question differs from ours in that their work is to a very great extent a matter of mental effort entirely. It is a demonstrated fact that a man who is tired mentally requires more recreation than one tired physically. He also needs more rest as well.

But the matter looks as if it might make serious trouble if it is legislated on and the clock moved one hour. It would be far better if the manufacturers would simply agree to start their work at six and close at five, and we on the farm hire our help to come on at the hour that suits us best. For our work here this change is such a great benefit that even if the council changes it for next season, which I don't think they will, we will make an agreement with our help, having them come at six, by standard time, and leave at five during the harvesting of the tender fruits.

British Columbia.

WALTER M. WRIGHT.

Canada's Young Farmers and Future Leaders.

One-half Acre of Oats and a Colt.

EDITOR "THE FARMER'S ADVOCATE":

In the spring of 1915 my father had to plough the ditch bank on account of the big government ditch being cleaned out. He had to plough about half an acre to make the ground level. After the ground was ploughed my father said that if I would work it up he would give me enough seed oats to sow it. I got the team and double disked it three times, then I harrowed it with the straight toothed harrows. When it was evenly worked up my father sowed it with the disk-drill on April 22nd, 1915, with "Silver Mine" oats.

By the middle of May the oats were up so that we could not see the ground. They kept on growing fine, till they headed out, then we had a great deal of rain and the oats lodged badly in some places being flat to the ground, but they seemed to head out pretty well. When we cut them we could only run the binder one way and after they were stooked it rained almost every day so that we did not get them harvested and threshed until the first week in September.

My oats turned out very good. I paid for threshing 29 bushels at 2 cents a bushel, which came to 58 cents.

Father had a mare which went lame in one leg, so he could not work her, consequently she was given to me. Last summer she had a colt so I saved 10 bushels of oats for my colt and sold the other 19 bushels to my father and took a pig in payment. I am expecting her to have little pigs about the middle of August and I will tell you more about them next year.

Kent Co.

RALPH SCULL.

A Birthday Present Well Invested.

EDITOR "THE FARMER'S ADVOCATE":

Last summer I had five dollars sent to me for a birthday present when I was twelve years old. As I had another dollar of my own I decided to buy two pigs for I expected they would be a good price about January or February. So, about the fifteenth of July I spoke for two pigs, which were only two days old and would be weaned in about four weeks. In that time I got a pen ready and purchased eighty pounds of shorts for them. The time seemed long until I could get my pigs for I was anxious to have them to attend to.

When I finally got the pigs I fed them milk for three weeks, three times a day. When I thought they would eat shorts I started to put a handful in their milk. I fed them a little more all the time until the shorts was about gone, then I got about seven bags of oats and barley chop which I thought would feed them until they would be ready to sell. I mixed some chop with the shorts and milk, but I soon stopped feeding them shorts, and when they started to eat chop readily I weakened the milk with slop until they were fed all slop and chop. I kept them cleaned out and bedded well for I wanted to have them dry.

When they got a little bigger I made their pen larger and let them outside for a run every second day because I thought they should have exercise. My sister called them Nip and Tuck because they got in the manger together and slept, but soon they got too big for the manger and had to lie on the straw. They got to know their names. They would want me to pet and scratch them every time I went into the pen. They were sleeping nearly all the time that they were not eating. When the turnips were ready I pulped some and gave them a handful at each feed. They appeared to like the roots. I pulped enough for the days feed, put them in a box with some wet chop and mixed it all up. They liked this very much. When the horses came into the stable I had to put my pigs into a dark box stall. I fastened the trough to the wall so I would not have

to look for the trough when it was dark. As I heard of people giving their pigs ashes and salt I put some in an old trough once a week. As we had some potatoes with rotten spots on them I boiled them in a sugar kettle and mixed then with some chop. I fed this for a week and a half and then started to feed the turnips again. Whenever we churned I would give them the swill and some butter-milk which I found was very good for them. I had to buy more chop for I found out that the seven bags was not enough. I then started to fatten them with all chop. I put one pailful of wheat chop to each bag of oat chop. I did not let them out for exercise when I was finishing them. When hogs were a good price I sold them and they weighed two-hundred-and-seventy-four pounds each at six and half months old. I gave my father twenty-three dollars for the feed.

Bruce Co.

BURTON KEYES.

Feeding the Dairy Herd.

EDITOR "THE FARMER'S ADVOCATE":

There were four calves, five yearlings, and twelve grade Holstein cows, between the ages of three and ten years, in our herd last year.

We began feeding silage the second week in December.



An English Crop.

Oats in the foreground, hops at the back, on the farm of J. Dengate, in Sussex, England.

We fed it very sparingly at first as the cows did not like its sour taste. We gradually increased the amount as they grew to like it until the cows got 20 lbs., and the yearlings 15 lbs. per day. Our first meal mixture was 18 bags of two parts oats to one of barley chop and 800 lbs. of shorts. We mixed these in a large bin in the barn which had a chute running down in front of the cows. The cows got 3 lbs. of this concentrate feed twice a day on their silage. When they had eaten this we fed them straw and hay. They got 15 lbs. oat straw with 5 lbs. clover hay on top, morning and night. At noon they got 20 lbs. straw and 5 lbs. clover hay. What was left of this was thrown out for bedding. The cows that had not freshened got the rakings instead of good clover hay.

The yearlings got 10 lbs. of silage twice a day and 25 lbs. straw three times a day. The bull was fed 15 lbs. silage and 2 lbs. chop together with straw and hay.

In January we had two cows freshen. These cows got the same amount of chop and silage until their milk was fit to use. Then we gradually increased their feed until they got 35 lbs. silage and 12 lbs. chop daily. This same process was used throughout the winter until the cows had all freshened.

The calves were now to be fed, and it was quite a care to keep them in good health. We started them on their mother's milk increasing the amount by degrees. When the calves had a good start, we commenced feeding three-quarters of a pound calf meal and 5 lbs. milk twice a day, and between five and ten lbs. whey at noon. We generally gave each a handful of chop to keep them from sucking each other. Two lbs. clover hay were fed three times per day. About the middle of June we turned them into a clover field near the barn, and fed chop every day and kept water in a kettle.

The cows were kept in the stable until June 5, as the weather was not favorable and the ground was not firm. We had two eight-acre fields of mixed timothy and clover, and five acres of bushland for pasture. When on grass the cattle were also fed silage. The meal was now changed to 18 bags chop of 2 parts-oats and one part barley, 500 lbs. of shorts and 300 lbs. of bran. We fed 4 lbs. of the mixture twice a day during the summer. Salt was fed every morning.

In July when the grain was well advanced we fed a medium sized forkful of peas and oats twice a day. In the latter part of August we turned them into new fields for the fresh after-grass.

The frosts and snows became severe in November so the cows had to be stabled. We had enough corn left over after filling the silo to feed them two months. We gave a large sized sheaf to two cows three times a day and some clover hay night and morning. When milking we gave them 5 lbs. chop daily.

The milk was sent to a cheese factory that pays by the test. We also tested our individual cows. We sampled and weighed on the 1st, 11th and 21st of each month. The sample bottle and record sheet were taken to the factory to be tested.

Our average test for the herd in 1915 was 3.2 per cent. fat. Our cows varied from 2.9 per cent. to 4.0 per cent. In May our cows gave 34,500 lbs. milk with an average test of 3.0 per cent. In June we had 33,293 lbs. milk with an average test of 3.3 per cent. The average price for cheese at our factory last year was 14.46 cents per pound.

We are gradually thinning out the low-testing cows and in time hope to have a high-testing herd. We are also trying to have our cows freshen in December. This enables us to have them dry in the fall when the fall work is on and the time when cows are so hard to keep up in their milk flow. The price of milk is also higher during the winter.

Perth County.

J. LORNE BALLANTYNE.

Experience With Feeding Hogs and Calves.

EDITOR "THE FARMER'S ADVOCATE":

I wish to sum up, in a few words, the results I obtained from experiments I have conducted during the past months.

The first was carried out on a bunch of 22 hogs. My object was to arrive at the cost of producing pork, and to see if the farmer could buy hogs and feed and market them at a profit. When they were seven weeks old I valued them at \$44. During the first 4 months they consumed 1,800 lbs. of oat chop, valued at \$27, and 2,800 lbs. of shorts, valued at \$40. After this period of 4 months they were finished on 26½ bushels of rye at 67½ cents per bushel, valued at \$18, and 46 bushels of buckwheat at 55 cents per bushel, equals \$25.30. Corn on the ear at \$5. We charged them \$24 for skim-milk, and \$22 for pasture. Total cost \$205.30. When the pigs were 6 months old they weighed 4,060 lbs. and were sold for \$8.32 per hundred lbs., bringing \$337.80, or a profit of \$132.50 on 22 hogs.

I am feeding two calves in view of seeing which makes the greatest gain for the least money. One is pail fed, while the other is allowed to run with its dam. Both calves were dropped in April. The pail-fed calf is kept in the stable, and the other runs with the cow. The pail-fed calf consumes about 8 to 10 quarts of skim-milk daily, 2 handfuls of rolled oats three times per day, with about 2 table-spoonfuls of molasses. It has also cleaned up a pail of calf meal valued at \$1, and all the clover hay, water and salt that it wants. The other calf receives from the dam about same quantity of milk. Both cows' milk tests about 5.5 per cent. When the calves were 3 months old the pail-fed calf weighed 176 lbs. and the other 287 lbs.

Let me tell you a little of my experience with lime in connection with agriculture. This spring I put lime on a small plot of clover at the rate of 300 lbs. per acre. The clover yielded one-half heavier on that plot than on any other piece of land the same size in the field. The same held true with a plot of oats I tried it on. They are superior to any oats we have on the farm, being darker in color, longer in the straw and heavier every way you take them. It is not necessary to spread lime evenly all over the surface of the land in order to have all the soil affected for the soil seems to be affected

five to six feet back from the plot line. Therefore, in putting lime on the land I think the best method would be to spread it off the wagon in the spring, and then it would be worked into the soil with the machinery used in the spring work.
Simcoe Co., Ont. IRWIN S. McMAHON.

Profitable Sidelines.

EDITOR "THE FARMER'S ADVOCATE":

To make sidelines profitable on the farm there are several factors which must receive consideration. Most sidelines demand exacting attention, proper type of soil, time, labor, favorable seasons and proximity to good markets.

Sidelines may be considered as a means of turning spare and waste time on the farm, due usually to a lack of careful planning, into dollars and cents. They should be the subject of care in selection, for they should not interfere with the regular routine of farm work any more than is necessary, nor yet clash with one another.

Following this principle we selected as sidelines strawberries, raspberries, early potatoes, beans and bees. The harvesting of the products of these occurs in the order named. To the beginning of this list might be added asparagus, as it comes in season very early and commands high prices. No figures can be given for the potatoes, as the crop was largely a failure owing to the ravages of late blight. The yield of strawberries is a conservative estimate, as the first crop is now being harvested. With the exception of potatoes the stock of each has been increased this year.

Strawberries.

Rent of ¼ acre of land at \$3.....	.75
2,000 plants at \$3.50.....	7.00
Express on same.....	.75
Hoing 50 hours at 20 cents.....	10.00
Cultivating.....	1.00
Weeding 10 hours at 20 cents.....	2.00
Boxes and crates.....	5.50
Picking 900 boxes (estimated) at 1 cent..	9.00
Total.....	\$36.00
Income, 900 boxes at 11 cents.....	\$99.00
Profit.....	\$63.00

Raspberries.

Rent of ½ acre of land at \$3.....	\$ 1.50
650 plants.....	11.50
Pruning 20 hours at 20 cents.....	4.00
Plowing.....	3.00
Cultivating.....	1.20
Hoing.....	4.00
Boxes and crates.....	6.00
Picking 950 boxes at 2 cents.....	19.00

Total.....	\$50.20
Income, 950 boxes at 12 cents.....	\$114.00
Plants.....	2.75
Profit.....	\$116.75
	66.55

Beans.

Rent of ¼ acre at \$3.....	.38
Seed.....	.40
Plowing, cultivating, harvesting, threshing.....	4.00
Total.....	\$ 4.78
Income, 45 bushels at \$3.60.....	\$16.20
Profit.....	\$11.42

Bees.

Interest on investment.....	\$ 6.00
Supplies, frames, supers, cans, foundation, etc.....	16.95
Labor.....	25.00
Total.....	\$47.95
Income, wax.....	\$ 6.25
Honey, 600 lbs. at 12 cents.....	72.00
Total.....	\$78.25
Profit.....	\$30.30

The season of 1915 being unfavorable from the standpoint of the beekeeper, accounts for the small amount of honey made.

The reader is privileged to draw his own conclusions from the figures quoted above, but to the writer one fact stands out prominently, viz., intensive farming yields greater returns for labor expended than does general or mixed farming, provided the conditions previously mentioned are complied with.
Peterborough Co. A. T. BROWN.

Automobiles, Farm Machinery and Farm Motors.

Care of the Tires.

In very hot, as well as in extremely cold weather, the radiator should be given constant attention. Heavy trips on the road during these warm, humid days frequently boil the water used for the cooling of the engine. Never start away on a trip unless you are positive that the radiator is filled to the top of the overflow pipe, and if there is the slightest hissing sound allow the engine to rest. Many people do not take this latter precaution, but those who are wise enough to practice it, save the motor to no inconsiderable extent. Should it be necessary, however, to force the car along until the water is steaming, you should make sure to seek the first chance for a stop and after removing the radiator cap, allow the steam to escape. Do not immediately pour in cold water as the reaction is not good for any kind of metal. Your best policy will be to clean the radiator by running the water off through the drain cock. After the engine is cooled, you can introduce a new supply. If, however, it is imperative that you should rush upon your way, refill the radiator with warm water. The cylinder jackets can always be drained by removing the pipe plugs in the bottom. No bad disaster can occur from using soiled or dirty water, but those who have the best interests of their motor at heart, will use clean, soft water on every possible occasion. About once or twice a year it is well to run a saturated solution of common soda through the radiator. Such a compound will remove all scale and sediment. After this operation, rinse out the radiator carefully with clean water before filling it again for a trip.

Summertime brings a certain amount of annoyance through tire troubles. Of course you will realize that punctures cannot be prevented. Sooner or later you will have one, and it is just possible that it may occur at a point on the road where the sun is blazing overtime and the dust flying in clouds. With such a puncture in mind, you will welcome a suggestion or two regarding tire maintenance. You will lessen the liability of accidents by keeping plenty of air in your tubes. A tire that is not heavily inflated is more likely to attack a sharp object than a casing which is perfectly round under top load. Never go on a trip without carrying a reliable air-pressure gauge and do not fail to make constant use of it. You may kick or rock or examine the point of contact in connection with tires, but this system will not give an accurate idea of the pounds of air contained therein. The gauge is the one method to pursue. Whenever a cut or bruise appears on a tire, do not console yourself with the idea that this point will never strike a sharp object. Fill the hollow or abrasion with cement and thus prevent sand, grit and dirt from enlarging the blemish. If you discover a large cut, rush the tire to a vulcanizing plant and have

it attended to without delay. A "sand boil" is easily recognizable as a lump caused by dirt or sand forcing its way between the rubber tread and fabric. Puncture this swelling immediately, cut away all portions of the tread that indicate wear, wash the hole with gasoline, and vulcanize at the earliest possible moment. It is well in avoiding tire troubles to know that wheels out of alignment cause tremendous friction on tire treads. The back wheels seldom run out of true but the front wheels are subject to it. Do not fail to check the latter up frequently or otherwise you may find your front casings going bad before their time. If during the holidays you decide to lay up your car, do not fail to remove the tires. They should also be washed with soap and water, and later on wrapped in strips of paper or cloth. A dark, cool place is proper storage

figure that by reversing the positions you can prolong the lives of your carriers. It is also well to change the front and rear tires as the last named carry more than half the weight of the car, and consequently do the bulk of the hard driving. Nowadays practically every machine has an extra tire for emergency cases. In carrying this fifth casing and tube remember that sunlight has an injurious effect on rubber and that the purchase of a cover will amply repay you for the small expense incurred.
AUTO.

United States Road Policy.

Co-operation between the U. S. Federal Government and the States in the building of highways has been approved by Congress. In the next five years \$150,000,000 will be expended on a half-and-half plan upon main roads selected by the Highway Commissions of the forty-eight States and subject to the approval of the Secretary of Agriculture. The co-operative plan became effective when the President attached his signature to the bill which resulted from the merging of the two bills passed by the Senate and the House respectively. In greater degree the Senate measure found approval, for it directed more explicitly the expenditure of the money and required the maintenance of the roads after construction by imposing a discontinuance of further funds for neglect in this matter. Under the provisions of the measure New York State will receive \$3,877,500. The Federal distribution is on the



Wheat on a Sussex, England, Field.

Note that it is bound by hand. It was cut with a sickle. This is on the farm of J. Dengate also.

for rubber of any kind. Sunlight is deleterious. Under all circumstances see that the inside of your casings are covered with soapstone or talc as this preparation reduces to a minimum, the friction that is bound to occur between the tube and its cover. Expert motorists who secure large mileage from their tires, give a great deal of credit for the good results achieved, by the attention paid to shifting the casings from time to time. It is a well established fact that tires on the right side of a car receive harder work and tougher usage than those on the left side. Hence it is a simple matter to

basis of area, population, and rural delivery and stage routes. Added to the \$75,000,000 appropriated from the Federal Treasury by the measure will be a like amount from the several States. The first year appropriation is \$5,000,000, with a yearly increase of the same amount during the five-year period. A supplement which survived the report of the conferees gives an additional \$10,000,000 to be expended at the rate of \$1,000,000 a year, on roads within or adjacent to Federal forest reserves, the money to be repaid ultimately out of the sale of timber and from other sources of revenue. The

general policy aims at a connected system of state roads.

Comparative Cost of Farm Power.

EDITOR "THE FARMER'S ADVOCATE":

The figures given on the comparative cost of farm power of different kinds are those obtained in some tests which I made in 1913. I ground 1½ tons of oats and 1½ tons of third grade Manitoba wheat, half of each with electricity and the other half by gasoline. At that time gasoline was costing twenty cents a gallon, and I found that the average cost of grinding 100 lbs. of grain with gasoline at that price was 1.98 cents, or practically two cents. With gasoline at thirty cents a gallon the cost would be 3 cents per 100 lbs., and at 35 cents a gallon 3½ cents.

Electric Power for Grinding Grain.

In grinding by electricity the cost was not so easy to obtain because the electricity is paid for on a flat rate in the country, and is used only a few hours occasionally. However, calculating what the meter rate ought to be to grind at 2 cents per 100 lbs. I found it should be 4¼ cents per kilowatt hour, which is equivalent to \$280 per horse power per year if used twenty-four hours a day every day in the year. If used twelve that would be equivalent to \$140 per horse power. If used eight hours a day \$93.33 per horse power per year, all of which are higher rates per horse power per year than I have seen mentioned by the Hydro-Electric Commission. However, farmers have not worked enough to use electricity eight hours a day. Perhaps 1-horse power one hour a day each day in the year would be a fair estimate of the power requirements on the average farm for such operations as grinding, pumping, churning, etc. The Hydro-Electric Commission made an estimate for one township about that time, assuming that two-hundred-and-fifty persons in the township would take power. The permanent charge for each user would be \$20 per year, which covers the cost of constructing the township system, the power to be supplied at \$30 per horse power per year. Combining these 2 rates 1-horse power would cost \$50; 2, \$80 per year or \$40 per horse power; 3, \$110 or \$36.66 per horse power. For 4-horse power the rate would be \$35 per horse power; for 5, \$34, and for 6, \$33.33. It is possible they may have reduced estimates now, but our cost of grinding by electricity was worked out from those figures and are given in the following table:

Table Showing Cost of Grinding 100 Lbs. of Grain by Electricity, at Various Rates per Horse Power per Year, Flat Rate.

If Full Power is Used.	Cost of Grinding 100 Lbs. Grain with Electricity, at					
	\$50 per h.p.	\$40 per h.p.	\$36.66 per h.p.	\$35 per h.p.	\$34 per h.p.	\$33.33 per h.p.
1st—24 hours per day	.293	.234	.223	.205	.199	.195
2nd—12 " " "	.586	.468	.446	.410	.398	.390
3rd—6 " " "	1.172	.936	.892	.820	.796	.780
4th—3 " 31 min. per day	2.000					
5th—2 " 49 " " "		2.000				
6th—2 " 41 " " "			2.000			
7th—2 " 28 " " "				2.000		
8th—2 " 24 " " "					2.000	
9th—2 " 20 " " "						2.000
10th—1 hour per day	7.032	5.616	5.352	4.920	4.776	4.680

You will note that for each rate I have determined the length of time that the farmer would have to use his hydro-electric full strength each day to grind at 2 cents per 100 lbs. To grind at 3½ cents per 100 lbs., the same as with gasoline at 35 cents, the farmer need not use his hydro-electric so long each day, and the time can be found by taking twenty-thirtyfifths of that

given in the left hand column opposite each two cents. For example, with the current costing \$50 per horse power the farmer had to use his electric current 3 hours and 31 minutes during the day to grind at 2 cents per 100 lbs. To grind at 3½ cents he will have to use the power twenty-thirtyfifths of 3 hours 31 minutes, which is 2 hours 1 minute. I presume the variation of cost per 100 lbs. as the current is used the longer or shorter time per day will not give the reader any difficulty. Similarly if the current is used at only half the strength contracted for, it would have to be used twice as long as indicated to grind at the prices given.

Power Developed by Windmill.

The horse power that is given by different sizes of windmills, may be of special value. For an average wind, that is sixteen miles an hour, the power of different mills is as follows:

Diameter of wheel.	Horse power.
8 feet	1-25
10 "	2-17
12 "	1-5
14 "	2-7
16 "	2-5
18 "	2-3
20 "	3-4

Of course as the wind increases so does the power, only it varies as the cube of the velocity, that is, if we wanted to find from the table above what the power would be for those mills with a wind velocity of 32 miles an hour, multiply each figure by 8, which is the cube of 2. If the wind went up to 48 miles an hour, which is three times as fast as the standard, then we would have to multiply the power given in the table for the different mills by 9.

WM. H. DAY.

Ontario Agricultural College, Guelph.

THE DAIRY.

Paying for Milk According to Quality.

EDITOR "THE FARMER'S ADVOCATE":

So far as comment from the men behind the plow is concerned regarding the new Dairy Standards Act, the dairymen seem to be reconciled to the new regulations.

ards Act, is of great importance at the present time to the producer of milk. It is now several years since our Government commenced a campaign to interest our dairy farmers in the individual weighing and testing of their cows. This work has been hampered all along by the lack of the present Act, which is to be put into force next year. Where factories paid for milk according to the pooling system, as the majority of them do, there was no encouragement given to this much needed work, and, as a result we see in many districts one breed predominating, because as a rule, they give larger quantities of milk than do the other breeds. The pooling system therefore encourages quantity regardless of quality. It is also generally recognized that a large production of milk has a tendency to decrease the percentage of fat in the milk. This probably is the reason why the Holstein, as a breed, is lower in fat test than some other breeds.

Those dairymen who had the fore-sight to practice the individual weighing and testing of their cows' milk years ago will now be in a position to reap their reward, if they have weeded out their low testers, and have been raising their calves from the best. The men in the offices of the Dairy Record Centers will likely have their labors increased next year, as there will probably be many more dairymen start testing their herds.

Other results of the new Act may be to give a boost to some breeds, and also to cause a more thorough sifting of other breeds. It may be that owing to the popularity of the Holsteins of late years, many heifers were raised and sold which should not have been. There is plenty of room in Ontario for the good individuals of all the breeds.

There is one point about the payment for milk according to quality that perhaps is not generally noticed viz., that in paying by the fat plus 2 system a man can be paid for water put into his milk. As an illustration, last month a patron in our factory sent 10,000 lbs. milk testing 3.3 per cent. fat thus yielding 530 lbs. of fat and casein. The price paid was 24.75 cents per lb. thus giving the patron \$131.17. If however, he had added during the month 500 lbs. water his milk would then test 3.18 per cent, and would have yielded 543.9 lbs. fat and casein. The factory would then have paid 24.73 cents per lb. and the patron would have received \$134.50 or \$2.33 for 500 lbs. water. For this reason would it not be better to have Government men do the testing for both fat and adulteration, as many of our cheesemakers would not care to get into trouble with their patrons. There is one reason, however, why the fat plus 2 system appeals to me. It is said that by the fat system the man selling very rich milk gets a little more per hundredweight than he should, while by the fat plus 2 system the man with low testing milk receives a little more per hundredweight than he should. In either case, it seems, a slight injustice must be done; let it be done to the one who is most fortunate. It is said by some that payment for milk according to quality puts a premium on starvation, as starved cows give little, but rich milk. Every good dairyman knows that it is poor policy to starve the dairy cow. Let us strive to increase the percentage of fat by weeding and breeding, as it cannot be done by feeding. The best cow I ever owned was bought at an auction sale, and another which is doing exceedingly well was bought when on her way to the shambles. The tester and scales reveal the good cows.

Carleton Co.

JAS. F. FERGUSON.

A new record for gasoline marketing in the United States was made during the first six months of 1916, viz., 140,000,000 barrels.

Trailers are making their appearance behind autos on Western Ontario roads. Rural store keepers use them in hauling empty boxes, egg crates, etc., to town and returning loaded with goods.

The Ayrshire Breed in the Record of Performance Test.

There are several distinct breeds of cattle that have been bred and selected especially for dairy purposes. It is clearly shown that the more intense breeding along a definite line for special points, the greater the exclusion of certain other qualities. The type and conformation looked for in a milk and butter-fat producer is different from the qualities desired in a beef animal. Likewise the breed giving the highest testing milk as a whole is not large, while the breeds noted for milk production possess great scale. Animals of ideal beef type do not, as a rule, make records at the pail, nor is the championship for milk production and high testing held by the same cow. Each breed has its place and when an endeavor is made to make a sudden change difficulties arise. In generations past breeders had an ideal. They laid the foundation and breeders to-day are reaping the results of their efforts. No herd rises to the pinnacle of fame in a day. Back behind the present success with any breed were years of patient toiling, careful breeding and good feeding. The end is not yet. Perfection has not been reached. There is plenty of opportunity for young breeders to exert their skill and make their chosen breed more famous.

Breeders of beef cattle stake the reputation of their herds on the outward appearance and quality, together with the ability of the sires and dams to produce offspring equal to or better than themselves. Up to a few years ago dairymen estimated the values

This is the first of a series of articles in which an endeavor is made to acquaint the readers with the origin of the present recognized dairy breeds, and to show how selection and breeding with a definite aim in view has fixed a certain type and intensified milk and butter-fat production. The official Record of Performance test has played no small part in increasing the interest among breeders in the testing work and in bringing many individuals of the breeds into prominence. The value of dairy animals is largely estimated by their ability to produce at the pail. What the R. O. P. test has done for the Holstein breeders will be discussed in an early issue.—Editor.

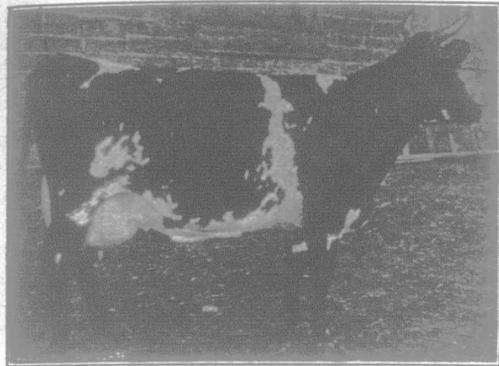
of their herds by this standard, but it slowly dawned upon them that a very important point was being overlooked. The appearance of the cow, size and shape of udder, length of milk veins and number of milk wells are not an accurate indication of the number of pounds of milk and butter-fat the animal is capable of producing in one lactation period. Looks are sometimes deceiving and of recent years the value of females of the dairy breeds is determined not by appearance alone but by their ability and the ability of their

ancestors to produce and transmit that important quality to their offspring. With young animals of both sexes their value is largely estimated by the records of their ancestors. Breeders were slow to take up the testing work, but once its value was realized rapid progress has been made in every dairy breed.

Like many of the other important breeds the foundation of the Ayrshire was laid on the other side of the Atlantic. The native home of this dairy breed is in the county of Ayr, Southwestern Scotland. From there, representatives of the breed have been taken to all parts of the world, and wherever they have gone they have proven to be capable of adapting themselves to new environment and changed climatic conditions.

The origin of this particular breed has been rather a complex one. Early authorities claim it to be the native breed of Ayr improved by certain other stock. It is believed that Shorthorn, West Highland, Devon and Hereford blood have all been used with the native stock, and from this variety of blood has evolved the breed known as Ayrshires. Early breeders selected and bred for milk production. For over a century the breed has been kept pure, and in all that time breeders have been working towards a certain ideal. Breeding to eliminate weak points and selecting to intensify the strong has given a strain of cattle medium in size but with splendid dairy conformation, great vitality and prepotency. Combined with these

qualities is the ability of the breed as a whole to produce high-testing milk of average quality in large quantities, and to transmit these qualities to the offspring. In 1805 individuals of the breed were credited with yielding as high as 30 quarts of milk daily. This would be equal to between 70 and 75 pounds. These records have since become quite common.



Milkmaid of Orkney.

Champion of the three-year-old class in R. O. P. test. Owned by H. McPherson, Orkney, Ont.

The environment and climatic conditions surrounding the Ayrshires in their native land doubtless had much to do with instilling a hardiness into the breed that has not left it during the years that have intervened, and to-day its representatives are found upholding the good name of the breed in every land. They are good grazers with a rugged constitution, and thrive under not the most ideal conditions.

The characteristic color is a combination of red and white, with each color distinctly defined. Some breeders prefer more white than red and vice versa, but that is a matter of individual preference. There is a remarkable uniformity in size and conformation of mature animals. Mature bulls weigh around 1,500 pounds, and mature cows average between 1,000 and 1,100 pounds. This does not constitute a particularly large cow, but, as a rule, the ribs are well sprung and long, thus giving the body great capacity. On account of the blood used in building up the breed Ayrshires rank among the first of the dairy breeds for beef production. It appears natural for them to carry a considerable amount of flesh, even when in heavy milk. An animal of this breed can soon be fed to make a very salable carcass which kills out somewhat better than representatives of the other dairy breeds. However, they do not, as a rule, make as large daily gains as have been reported with other breeds. Ayrshires cross fairly well with beef breeds. Bulls, of beef breeds, used on Ayrshire cows produce calves which fatten easily and make good bullocks, while Ayrshire bulls are frequently used on grade cows to improve the milk producing power of the herd. The inclination to keep in good flesh does not detract from the ability to produce milk and butter-fat in large quantities. The cows contain the machinery for turning their feed into milk and fat as well as meat. The udder development presents a high average perfection of form, being attached high behind with the fore udder extending well forward. Pendulous or meaty udders are uncommon. It is true that short teats, which make hand milking difficult, have been a serious fault of Ayrshire cows, but selection and breeding have materially overcome this trouble. The average modern Ayrshire cow has fair-sized teats.

The Ayrshire Breed in Canada.

Early in the 19th century Ayrshires were introduced into this country when Scotch settlers moved to Canada to hew for themselves homes from the primeval forests. The herds gradually increased and an endeavor was made to keep the breed pure. New blood was occasionally imported from the old land to improve the producing qualities. Its many good qualifications soon made it the popular dairy breed, especially in Eastern Ontario and Quebec. As the number of animals gradually increased it became more difficult to preserve the purity of the

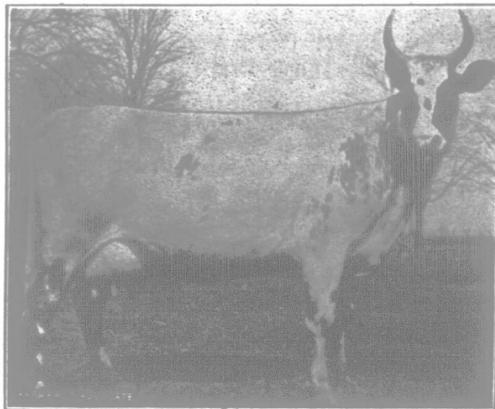


Daisy of Ferndale.

Champion of four-year-old class in R. O. P. test. Owned by W. C. Tully, Athelstan, Que.

breeding and individuality of the respective families of Ayrshires in Canada, owing to lack of a Canadian system of registration. The animals imported were registered in Scottish herd books, but breeders felt it to be to the best interests of the breed in Canada to establish a Canadian herd book. This was commenced by the Ayrshire breeders of Canada in 1872. An effort was made to trace every family recorded to imported stock or to well-known herds of undoubted purity. The first volume of the Ayrshire herd book was issued in 1881, and contained the pedigrees of 1,500 bulls and 1,645 cows. In volume twenty-five of the herd book issued in 1915 the numbers of animals registered run to 48,920.

In numbers there is strength, and the breeders felt that an organization would be of material value in increasing the interest in the breed, consequently the Ayrshire Importers and Breeders' Association of Canada was organized in Montreal in 1870, and the Ontario Ayrshire Record Association in Ontario in 1872. These two associations amalgamated in 1898 and became known as the Canadian Ayrshire Breeders' Association. The membership increased from 207 in 1889 to 1,198 at the close of 1915. During all these years the Canadian Ayrshire Breeders worked together to improve the good qualities of their chosen breed, and to eliminate, if possible, any deficiency. Quietly but nevertheless effectively the work of perfecting the breed has gone on until to-day a line-up of Ayrshires drawn from many herds shows a uniformity of conformation, size and color markings second to no other breed. The average Ayrshire cow is a fairly well-balanced animal. While the breeders were engaged perfecting the animal system the producing mechanism of the breed was not neglected. Milk and butter-fat production were ever in the mind of the breeders, although official testing was not generally practiced. In public tests the Ayrshires usually stand well to the front when yield, quality and economy of production are considered. In short tests remarkable records have been made, but it is the yearly test that shows a cow's true worth as a producer.



Briery of Springbank 2nd.

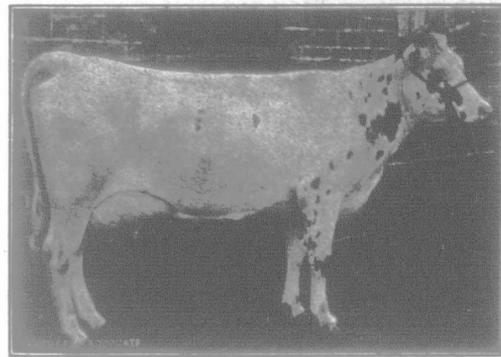
Champion of two-year-old class in R. O. P. test. Owned by A. S. Turner & Sons, Ryckman's Corners, Ont.

Ayrshires in the R. O. P. Tests.

In order for a cow or bull to qualify for registration in the Record of Performance test there are certain rules and regulations which must be complied with. The animals entered in the test must previously be registered in the Canadian Ayrshire Herd Book, and the test is for a period of 365 consecutive days, but no milk from a second freshening within this period shall be considered in a test. The owner of a cow entered in the test is required to weigh each milking and record the weight on special record forms furnished for the purpose. An inspector visits the stable at least 8 times during the year at irregular intervals and stays for two full days. His duties are to weigh each milking and take samples for testing. These samples are used as the basis for computing the record. The inspector compares his weight with the owners' record for two days immediately preceding his visit. In this way there is little opportunity for an unscrupulous breeder to pad the records in order to bring his cow up to a high standing. In order to qualify every cow under test must drop a calf within fifteen months after the beginning of her testing period. This is only fair, as some breeders might delay breeding their cow so that she might have every chance to make a phenomenal record. To be of greatest value a cow must produce a calf each year as well as a large flow of milk. Four classes are made so that heifers will not be competing against mature cows. Heifers from 2 to 3 years are entered in the 2-year-old class; from 3 to 4 years in the 3-year-old class. Cows 4 to 5 years old are considered in the 4-year-old class, and over 5 years in the mature class. In order to qualify for registration in this test all cows must equal or exceed both the following records:

	Lbs. Milk	Lbs. Butter-Fat
Two-year-old class.....	5500	198
Three-year-old class.....	6500	234
Four-year-old class.....	7500	270
Mature class.....	8500	306

Pulls also qualify for registration after having 4 progeny qualify in the Record of Performance, each from a different dam. This test reveals what a cow can produce in one lactation period under average conditions, and a cow that qualifies enhances her cash value as well as that of her offspring. At first breeders were slow to enter their cows in the test,



Lenore 2nd.

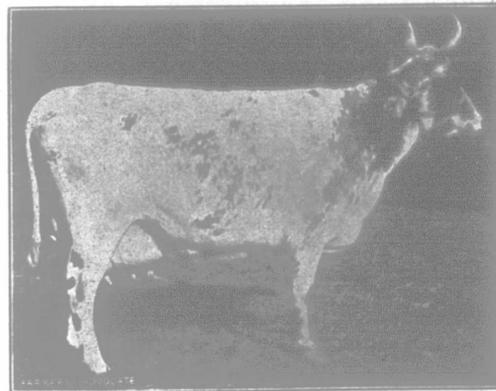
Two-year-old Canadian butter-fat champion in R.O.P. tests. Owned by H. McPherson, Orkney, Ont.

but so soon as they realized the value of knowing their animals by the Babcock test and scales the number of entries advanced rapidly. Many good cows have been drawn to the front that never would have become known had it not been for the Record of Performance. Breeders can ill afford not to enter their cows in this yearly test. Pure-bred dairy stock finds slow sale at private or public sales when their records and that of their ancestors are not definitely known. Animals that have proven their efficiency are in demand to-day. The public realizes that the value of a cow or herd of cows for dairy purposes depends on the net returns they can give year by year at the pail. Ayrshire breeders knowing this have endeavored, through the test, to advertise their breed on its merits as a worker and economical producer. Careful selection of breeding stock has gradually raised the average quantity and quality of milk per cow.

The mature cow, Almeda of Danville, owned by G. A. Langelier, was the first of the Ayrshire breed entered in the R. O. P. test. Her test commenced in October, 1905, and in 365 days she produced 11,337 lbs. milk testing 3.6 per cent., equaling 410 lbs. fat. The following year R. R. Ness was the only breeder to enter a cow. This shows how sceptical breeders were. However, in 1908 there were 66 entries, and from then on the increase has been rapid. In 1915, 598 animals were entered, and in the first 4 months of 1916 there were 290 applications. To March 31, 1916, 743 Ayrshire cows and heifers had qualified, and for the same period 36 bulls have been reported as having four or more progeny registered in the test. Between 750 and 800 Ayrshire cows and heifers are under test at the present time, which gives an idea of the value placed on the official yearly test by Ayrshire breeders.

Statistics reveal the fact that the average production per cow in Canada is around 4,000 lbs. of milk in a year. But records show that 202 mature Ayrshire cows gave a yearly average of 10,277.32 lbs. milk and 412.26 lbs. butter-fat, which, at the present price of milk and butter-fat would bring around \$125 per cow as compared with \$50 for the average cow. Sixty-six 4-year-olds averaged 8,281.50 lbs. milk and 378.86 lbs. butter-fat in one year. In the 3-year-old class 136 heifers averaged 8,340.84 lbs. milk and 344.25 lbs. butter-fat, and 279 2-year-olds averaged 7,501.65 lbs. milk and 309.27 lbs. butter-fat. Many owners of these cows did not know that they had such heavy producers in their herds until they commenced testing.

Milkmaid 7th stands at the head of the mature class. She has a record of 16,696 lbs. milk, with an average test of 4.36 per cent. fat. In the 4-year-old class Daisy of Ferndale is first with 15,534 lbs. milk and 590 lbs. fat as her record. Milkmaid of Orkney heads the 3-year-old class in milk production, having given 14,060 lbs. milk and 534 lbs. fat. Briery of Springbank 2nd is champion of the 2-year-old class, with



Milkmaid 7th.

Champion of mature class in R.O.P. test. Owned by A. McRae & Sons, Charlottetown, P. E. I.

14,131 lbs. milk and 520 lbs. fat to her credit, but she is excelled in butter-fat by Lenore 2nd. One Ayrshire cow has a 4-year record of 58,128 lbs. milk and 2,209 lbs. fat, while another gave 52,520 lbs. milk and 2,378 lbs. fat in the same length of time. Every breeder should breed for production as well as type and conformation, but unless the test is applied many valuable cows will ever remain unknown to the dairy world.

The record in the show-ring, the performance at the pail, together with the fact that she is a good forager and economical producer, is making many friends for the Ayrshire cow.

HORTICULTURE.

Preparing Fruit and Vegetables for Exhibition.

Few are able to appreciate the amount of labor and worry expended on the fruit and vegetable exhibits seen at the large exhibitions. Often passers-by remark "Oh, we have just as good stuff at home." Possibly they have. One exhibit does not contain all the choice products of the province, yet we venture to say that if any one man would attempt to select a quantity of fruit suitable for exhibition in the display from his own plantation his efforts would culminate in disappointment. The large group exhibits are not selected from someone's back garden. Often dozens of orchards and vegetable gardens have been visited by some experienced person who knows what will look right when it is prepared and also what constitutes a perfect specimen. In a favorable season it is not so difficult to find choice material to exhibit, but it is next to impossible to secure perfect specimens. Often an exhibitor will work long and hard to find and prepare some kind of fruit that will be just about right, and after all his labor some critical person will come along and attracted by the excellence of the display will examine it closely. The good samples therein will attract most and usually after a close examination of the package or single specimen he will remark that if it were not for such and such a defect it would be perfect. The visitor is generally correct in his statement and that is the disconcerting feature. The function of an exhibit is to show a perfect specimen when possible and when that is not accomplished the exhibitor feels that, to a certain extent, he has failed in his duty to the public.

The leading paragraph sets forth one phase of exhibition work and while it is not our object here to discuss the preparation of large display exhibits, since they are usually in charge of some experienced person, we have advanced this feature in order to emphasize the fact that fruit and vegetables at all worthy to be shown, and to be awarded prizes or ribbons cannot be chosen speedily or indiscriminately. The industries thus represented are extensive and demand that they be brought before the public in a pleasing and efficient manner. It is an injustice to the industry and the visiting public to display at a fair a quantity of fruit inferior to what may be seen in the window of the town or village fruit store. That is turning the wheels backward instead of forward. We have seen apples that would not even grade No. 2, awarded first prize at an Ontario fall fair. The fruit was wormy and scabby. The judge was as much at fault as the exhibitor, and although, perhaps, it is not within the powers of a judge he should have thrown the exhibit out of the window rather than award it a prize. The incapacity of the judge in this regard was demonstrated by the fact that a choice sample of Spys, smooth and well-colored, was passed over because the defective sample was larger. The decisions made at many fairs have been responsible to a large extent for the quality of many poor entries at the present time. Judges should be fruit or vegetable men of experience if they are to educate the public as to the outward indication of perfection in such products.

Selecting and Preparing Fruit.

First be sure of the variety when entering in a certain class. A perfect sample of Ontario has no claims to a prize in a class for Northern Spys. Then the quality must be considered. Eliminate all wormy and scabby stuff; it will not even grade No. 2, in a commercial package. Color is the next consideration, and it is a very good indication of what the quality of the interior will be. It also indicates maturity. A medium-sized specimen of a variety is usually superior to an over-grown one. Size does not count for so much unless it is accompanied by good color and all the earmarks of maturity. Over-maturity must likewise be avoided and only firm specimens selected. Fruit should be normally developed. That is, all sizes should be uniform and as near equal in size as possible. In dessert apples or fruit usually packed in boxes this is becoming quite an important factor, for irregularly shaped specimens do not pack well in such containers. Furthermore, it is not a perfect sample if larger on one side than on the other. Some varieties have this peculiarity to a slight degree, but when it is not a characteristic it is frequently due to improper fertilization or the attack of insects or fungus. Single specimens may be either large or small so long as they possess the desired qualifications, but in a plate of five or more all should be as near the same size as it is possible to get them. Uniformity in this regard has a wonderful influence on the capable judge. When fruit is only to stand on exhibition for one day perhaps it will look as well with the natural bloom left on it. However, apples are sometimes improved by being polished with a clean, soft piece of cloth and

all fruit should be wiped in this way after dust gathers, which it frequently does in a fair building. In a group, arrange each specimen so the best-appearing side is visible. It should be unnecessary to proffer this advice, but too often, one enters a fair building and beholds the defective side of a specimen turned boldly to the public gaze in a very defiant manner.

Selecting and Preparing Vegetables.

What has been said relative to fruit will apply in a broad sense to the selection and preparation of vegetables. Do not choose the large samples unless they are smooth, typey, firm and heavy for the size. Considerable washing and cleaning are necessary in the case of vegetables, for dirt will detract from the appearance and prejudice the exhibitor's chances of receiving any prize thereon. A brush is a very useful article in removing particles of soil or small scabs. After cleaning, the entry should be kept in a cool place until handed over to the exhibition committee.

Potatoes are judged largely according to their size and smoothness. They should be perfectly free from particles of dirt, but the skin should not be removed in the process of preparation. Internally the potatoes should be solid at the heart, free from any discoloration or streaks, and of a texture that would indicate a mealiness when cooked. The skin should be thin and the exterior surface should be smooth. Deep eyes are objectionable as are protuberances or any bulging of the surface.

Uniformity can hardly be over-done when gathering a sample of vegetables. They should all be as near the same size as possible in the one bunch or measure.

Begin Now.

The selection and preparation of fruit or vegetables for exhibition should begin now. Single out specimens on the limbs or in the ground and afford them every opportunity to develop and mature. Cultivate the vegetables frequently and provide plenty of moisture. Allow the sunlight access to any fruit that will mature about the time it will be needed for the fair.

FARM BULLETIN.

War Profits.

BY PETER MCARTHUR.

The report of the Meredith-Duff Commission certainly did not contain much nourishment for those who looked for a fine juicy scandal. The Minister of Militia has been exonerated, the Shell Committee has been exonerated and only Col. J. Wesley Allison has been censured. While it is gratifying to find that there was so little foundation for the charges that were made so clamorously it is not pleasant to remember that these charges were made at a time when the attention of the country should not have been distracted from the war. Charges should not be made at such a time unless those who made them were sure that they could be fully proven. It is nonsense to say that the investigation helped to clear the air. The air should not have been fouled. Of course it is a good thing to curb the profitably patriotic activities of Col. Allison, and to discourage all others of his kind, but the charges revived partisan bitterness and that probably over-balances any good that may have been accomplished. I am not surprised that a soldier writing to me from the trenches, "Somewhere in Belgium," remarks somewhat pathetically, "All news from Canada is good news, except news of politics." When so many Canadians are making heroic sacrifices, we who are at home should be able to employ ourselves with something better than party squabbles.

Yesterday's papers carried an item of news that is more important and more illuminating than the findings of the Meredith-Duff Commission. Mr. F. W. Baillie, Manager of the Canadian Cartridge Company of Hamilton, has returned to the Government the sum of seven hundred and fifty thousand dollars representing the company's profits on war orders to date. Of course everybody applauds Mr. Baillie for his patriotic action in manufacturing munitions at cost, but the question immediately arises, how did he manage to make such vast profits? As yet there is no report of the extent of the orders he handled though it is mentioned that he was given the contract by the Shell Committee "at the prevailing rate." This means that all manufacturers of similar munitions have been in a position to make similar profits. Perhaps all orders for munitions have been placed on the same liberal basis. Up to the present, over five hundred million dollars' worth of munitions have been ordered in Canada by the British Government. The orders have been placed with over four hundred firms in different parts of the country. It is not likely that Mr. Baillie's company received an unduly large order, and yet he made a profit of three quarters of a million. If the other manufacturers are doing equally well their war profits will swell into many millions. They will hardly thank Mr. Baillie for the sudden light he has cast on the profits of the munition business. Here again we are confronted by the fact that while many are making the last possible sacrifice for their country others are straining every nerve to make profits. Mr. Baillie has set an excellent example, and it will be interesting to see how many will follow it. He at least cannot be accused of profiting by the necessities of the Empire—an intolerable thing for any Canadian to do. If the other manufacturers do not follow Mr. Baillie's example the Minister of Finance should devote some special thought to their case. Their

profits are more justly open to taxation than any other source of revenue in the country. They are making profits where excessive profits should not be made. The British Empire is now spending over thirty million dollars a day on the war, and one does not like to think that any considerable part of it goes to swell the profits of Canadian munition manufacturers. But Mr. Baillie's company cleared three quarters of a million on contracts that I understand were awarded last August—less than a year ago. What are the other fellows making? Some questions are justified by Mr. Baillie's action. He has made no charges, but he has done something more deadly. He has proven that great profits are being made, by the fact that he has returned to the government his own amazing profits. It will be interesting to see what view the people of the country will take of this surprising act of patriotism.

* * * *

This week I received a letter dated "Somewhere in Belgium," from a boy—a stranger to me—who was a reader of "The Advocate" when at home in Canada. As the letter had to be passed by the censor he confined himself largely to telling me about the kind of farming he saw in Europe, but the closing sentence seemed like an accusation and I am going to quote it in the hope that it may sound accusing to others. He wrote, "You are enjoying yourself, while we are strafing the Hun." As I read that, and pictured to myself a lonely boy in the trenches writing a letter to a stranger whose name he happened to know, in the hope that he would get a letter from "God's country," as he called Canada, I felt that there was something wrong about "enjoying myself." I am afraid that we do not realize sufficiently how lonesome and homesick those boys are. Another letter that I saw last week was from a man who had left his wife and children behind. His wife had sent him a photograph of the family and he said that when he got it he cried. And he could hardly write to her because of the tears in his eyes. It is hard for us who are at home enjoying ourselves to realize what those at the front are feeling and suffering. Above all things they seem to want letters from home, and I think we should all write to them as often as we can. If you know a soldier at the front you should write to him, whether he is a friend or relative or not. He is making his great sacrifice for you as much as for anyone else, and if a chatty letter from you will help to cheer him up for a few minutes you should not begrudge the slight task of writing it. I shall certainly write to the lonely boy who wrote to me, and hope that readers of the Advocate will write to any lonely soldiers they may know. We would then have a little better right to enjoy ourselves at home.

Manitoba Provincial Exhibition.

The Manitoba Provincial Exhibition, one of the best shows of Western Canada, was held at Brandon, Man., on July 17 to 22. The machinery display, dairy, poultry and other agricultural exhibits all contributed to make the Brandon event a most outstanding one from an agricultural viewpoint. The turnout of the horse kind was a feature of the livestock department, and of all the breeds the Clydesdale was most conspicuous. The cattle classes were not contested so strenuously as last year, although keen competition was to be seen, and some of the most noteworthy animals, representing the highest of constructive breeding on the continent, came into the ring. This was especially true in beef cattle, where many notable herds of Shorthorns, Aberdeen-Angus and Herefords attracted much ring-side attention, and demanded a very close scrutiny on the part of the judge. The dairy breeds while being forward with nice specimens did not present the same strenuous competition. The sheep and swine display did not surpass in numbers the exhibit of previous years, yet it was in many instances of better quality, representing rather a higher class of exhibits in all breeds than usual.

The judges in the live-stock department were: Clydesdales, John Gardhouse, Weston, Ont.; Percherons and Belgians, Dean Rutherford, University of Saskatchewan; light horses, E. W. McLean, Winnipeg; beef cattle, Prof. Pew, Ames, Iowa; dairy cattle, W. H. Gibson, Supt. Experimental Farms, Indian Head; sheep, A. J. McKay, Macdonald; swine, Dean Rutherford.

Horses.

The Clydesdale classes were exceedingly strong, and represented a class of horse with a little more substance than has been observed in some show-rings of the West. In a lot of ten aged stallions, Belle Isle, exhibited by O. J. White, of Hamiota, Man., received the red ribbon. Mahomet, the horse found in second place, and owned by G. A. Stutt, never came out in better shape. Next to him stood Prince of Aden. In the three-year-old stallions, Royal Shapley 2nd, won the class for F. J. Hassard, Markham, Ont. In two-year-olds, King of Brookside, a deep bay with lots of substance, won over Grand Royal Gem, a colt of very correct underpinning but not so massive. These two horses were owned by Frank Brooks, Chater, and G. A. Stutt respectively. Prince Charnock, sired by Charnock, was easily the winner in the class of thirteen yearlings. The stallion championship went to the winning aged horse, Belle Isle.

Some very nice specimens of the Clydesdale breed came out in the classes for females. R. H. Bryce's Doune Lodge Lady won over Rosie B. in the three-year-old fillies. Seventeen two-year-old fillies were to the front, and from this number Lady Jane, shown

by W. inhibited honors out one all in Charnock & Sons' Dun Young brood r Belle. yeld ma The tested, The ch Roberts honor. one, wh also the

As a headed again a both th Bowes c yearling Conquer cal' cla In concl A. F. 8 Drumbo In th shown l Auld's 9

Tom

Recep Stock Ya July 31, 103 cal Butcher lower. A sheep st to \$12.50 quoting The to the City the past

Cars..... Cattle..... Hogs..... Calves..... Sheep..... Horses.....

The to two mo week of

Cars..... Cattle..... Hogs..... Sheep..... Calves..... Horses.....

The co at the tw show a d 657 sheep increase d for the co

The co had the in and lower stock du was a ve cattle, bu

All kinds however, ers and fe cially on busy hayin cleaned u in good d were stea calves fou 11c. to 1 calves we to 10c. pe price of v very select

Butcler steers, \$8.5 choice bu to \$8.25; g \$7 to \$7 Cows.—Ch \$5.75 to 5 common, \$ cutters, \$ \$7.50 to \$ \$6.25 to \$ Stockers an medium, \$ springers— medium, \$ and water

by W. J. Young, and Duchess of Harviestown, exhibited by J. H. Daly, were given first and second honors in the order named. Yearling fillies brought out one of the best classes of the show when eighteen, all in fine form, lined up before the judge. Rose Charnock by Charnock and shown by A. C. McPhail & Son, received first prize. Dunrobin Sweet Briar and Dunrobin Bluebell took second and third for W. J. Young. A very nice lot of mares came out in the brood mare class with first prize going to My Daisy Belle. The female championship went to the winning yearling mare Valdorah from the stables of O. J. White.

The Percheron classes were only moderately contested, although a few good individuals were present. The champion stallion, Kolombin, owned by C. D. Roberts & Son, Osborne, Man., was worthy of the honor. The brood mare class was easily the best one, where Ella and Russellette took first and second, also the championship and reserve.

Cattle.

As at the more western fairs Burnbrae Sultan headed the aged bull class in Shorthorns, with Fairview again a close second. The winner was later awarded both the senior and grand championship. Yule & Bowes came to the fore in both the senior and junior yearling classes on Oak Bluff Marshall and Kimmel Conqueror. Royal Triumph, the winner in the senior calf class, was awarded the junior championship. In conclusion Burnbrae Sultan stood champion for A. F. & G. Auld, Guelph, Ont., while Kyle Bros., Drumbo, Ont., were reserve with Sea Gem's Pride. In the aged cow class Fairview Baroness Queen, shown by J. D. Baron, Carberry, Man., defeated Auld's Silver Queen. Lady of the Valley 7th for

Kyle, and Spring Valley Buckingham for Yule & Bowes were next in order. Countess 16th, Auld's two-year-old winner, gained a close decision over the winning aged cow for the senior championship. Evelyn, the winning junior yearling, stood reserve.

Herefords were out in goodly numbers and local breeders added very materially to the competition. The struggle, of course, was between the herds of L. O. Clifford, Oshawa, Ont. and F. Collicut, Crossfield, Alta. In the end the Clifford herd had carried off all championships. Two surprises took place, however, one being in the aged cow class where the Collicut cow, Sally, was awarded the red ribbon over Clifford's Miss Armour. In the two-year-old heifer class Beau Fairy, was beaten by Della Fairfax by a narrow margin.

Competition in the Aberdeen-Angus classes was between the herds of Jas. Bowman, Guelph, Ont. and J. D. McGregor, Brandon, Man. Besides these local breeders were present. The placings of greatest importance were much the same as at the Alberta fairs.

In the point of numbers the Ayrshire classes were somewhat disappointing, though the quality of the individuals brought out was well up to the standard set at former exhibitions. As was expected the herd owned by Rowland Ness of De Winton, Alta., made a fine showing and captured most of the prize money. W. Baird of Oak River, Man. and P. Evans, Killarney, were other exhibitors, the quality of whose stock was worthy of mention.

The entries in the Holstein classes were confined to the herds of two well-known Alberta breeders, Geo. Bevington, Winterburn, and Jos. H. Laycock, Okotoks. Local breeders in the case of Brandon Fair unfortunately did not bring their stock out.

Champions at Brandon.

- Clydesdales.—Belle Isle, O. J. White; Valdorah, O. J. White.
- Percherons.—Kolombin, C. D. Roberts; Ella, C. D. Roberts.
- Shorthorns.—Burnbrae Sultan, A. F. & G. Auld; Countess 16th, A. F. & G. Auld.
- Angus.—Black Abbot Prince, J. D. McGregor; Key of Heather 2nd, J. D. McGregor.
- Herefords.—Lord Fairfax, L. O. Clifford; Della Fairfax, L. O. Clifford.
- Holsteins.—Korndyke Posch Pontiac, Jos. Laycock; Princess Holdenby de Kol, Jos. Laycock.
- Ayrshires.—Morton Mains Planet, R. Ness; Lessnessock Pansy, R. Ness.
- Jerseys.—Pet's Kentucky Wonder, Jos. Harper; Noble Ibsen, Jos. Harper.
- Shropshires.—Ram, A. McEwen; ewe, A. McEwen.
- Oxfords.—Ram, Arkell & Sons; ewe, Arkell & Sons.
- Suffolks.—Ram, Jas. Bowman; ewe, Jas. Bowman.
- Leicesters.—Ram, Herbert Smith; ewe, Herbert Smith.
- Berkshires.—Boar, A. G. English; sow, Dolson & Son.
- Yorkshires.—Boar, W. H. English; sow, A. D. McDonald.
- Poland Chinas.—Boar, D. W. Agnew; sow, D. W. Agnew.
- Duroc-ferseys.—Boar, O. C. Miller; sow, O. C. Miller.
- Tamworths.—Boar, Dolson & Son; sow, Wm. Gilbert.

Toronto, Montreal, Buffalo, and Other Leading Markets.

Toronto.

Receipts of live stock at the Union Stock Yards, West Toronto, on Monday, July 31, numbered 78 cars, 1,524 cattle, 103 calves, 361 hogs, 646 sheep. Butcher cattle slow at 25 to 50 cents lower. All other grades steady. Light sheep steady. Lambs sold at \$11.50 to \$12.50. Hogs were steady, packers quoting \$11.90, off cars.

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

	City	Union	Total
Cars.....	40	419	459
Cattle.....	358	3,222	3,580
Hogs.....	450	7,617	8,067
Calves.....	104	798	902
Sheep.....	930	1,990	2,920
Horses.....	153	2,694	2,847

The total receipts of live stock at the two markets for the corresponding week of 1915 were:

	City	Union	Total
Cars.....	13	529	542
Cattle.....	101	4,146	4,247
Hogs.....	314	5,434	5,748
Sheep.....	616	2,961	3,577
Calves.....	31	530	561
Horses.....	1	4,640	4,641

The combined receipts of live stock at the two markets for the past week show a decrease of 83 cars, 667 cattle, 657 sheep and 1,794 horses, and an increase of 2,319 hogs and 341 calves for the corresponding week last year.

The continued spell of hot weather had the inevitable effect of slow markets and lower prices on most kinds of live stock during the past week. There was a very small run of all kinds of cattle, but plenty to meet the demand. All kinds of butcher cattle were steady, however, at the reduced prices. Stockers and feeders were slow selling, principally on account of farmers being busy haying. The market was, however, cleaned up. Light handy sheep were in good demand all week, while lambs were steady to strong. Choice veal calves found a ready market at from 11c. to 12c. per lb.; other grades of calves were also steady at from 6c. to 10c. per lb. Hogs reached the record price of \$12.40, weighed off cars, for very selects.

Butchers' Cattle.—Choice heavy steers, \$8.50 to \$8.75; good, \$8 to \$8.25; choice butcher steers and heifers, \$8 to \$8.25; good, \$7.50 to \$7.85; medium, \$7 to \$7.25; common, \$6.50 to \$7. Cows.—Choice, \$7.25 to \$7.50; good, \$6.75 to \$7; medium, \$6.25 to \$6.50; common, \$5.25 to \$6; canners and cutters, \$4 to \$5. Bulls.—Choice, \$7.50 to \$8; good, \$7 to \$7.25; medium, \$6.25 to \$6.75; common, \$5 to \$6. Stockers and feeders.—Best, \$6.75 to \$7; medium, \$5 to \$6.50. Milkers and springers.—Best, \$30 to \$37.50 each; medium, \$20 to \$27 each. Hogs, fed and watered, \$11.90 to \$12.10; weighed

off cars, \$12.25 to \$12.40 Choice. spring lambs, 13c. to 14½c. per lb.; culls, 10c. per lb.; light handy sheep, 7c. to 8½c. per lb.; heavy fat sheep, 4c. to 6c. per lb. Veal calves.—Choice, 11c. to 12c. per lb.; medium, 10c. to 10½c. per lb.; common, 8½c. to 9½c. per lb.; culls, 6c. to 7½c. per lb.

Breadstuffs.

Wheat.—Ontario, No. 1 commercial, \$1.01 to \$1.03; No. 2 commercial, 98c. to \$1; No. 3 commercial, 92c. to 94c.; feed wheat, 89c. to 91c. Manitoba, (track, bay ports)—No. 1 northern, \$1.28½; No. 2 northern, \$1.26½; No. 3 northern, \$1.22½.

Oats.—Ontario, No. 3 white, 47c. to 48c. Manitoba oats (track, bay ports), No. 1 C. W., 51½c.; No. 3 C. W., 51c.; No. 1 feed, 50½c.; No. 2 feed, 49c. Barley.—According to freights outside, malting barley, 65c. to 66c.; feed barley, 60c. to 62c.

Peas.—According to freights outside, No. 2, nominal, at \$1.75 to \$1.85; according to sample, \$1.25 to \$1.50.

Buckwheat.—According to freights outside, nominal, 70c. to 71c.

Rye.—According to freights outside, No. 1 commercial, 96c. to 97c. Corn.—American (track, Toronto), No. 3 yellow, 92½c.

Flour.—Manitoba first patents, in jute bags, \$6.50; second patents, in jute bags, \$5.80. Ontario, winter, according to sample, \$4.15 to \$4.25, track, Toronto, \$4.25, bulk, seaboard.

Hay and Millfeed.

Hay.—No. 2, per ton, best grade, \$14 to \$15; low grade, per ton, \$11 to \$13.

Straw.—Car lots, per ton, \$6 to \$7, track, Toronto.

Bran.—Per ton, \$20 to \$21.

Shorts.—Per ton, \$22 to \$24.

Middlings.—Per ton, \$24 to \$25.

Good Feed Flour.—Per bag, \$1.65 to \$1.70.

Beans.—Beans are very scarce; prime whites selling at \$5, and hand-picked at \$5.50.

Country Produce.

Butter.—Butter remained about stationary on the wholesales during the past week. Creamery, fresh-made lb. squares, 30c. to 31c. per lb.; creamery, solids, 29c.; separator dairy, 25c. to 27c.; dairy, 23c. to 25c.

Eggs.—New-laid eggs also remained stationary on the wholesales during the past week; the case lots are now selling at 30c. to 31c. per dozen, and cartons at 33c. to 34c. per dozen.

Cheese.—Old, 21c. to 22c. per lb.; new, 17c. to 17½c.

Poultry.—Spring chickens—Ducklings were shipped in freely during the past week. Hens being the exception, as they were scarce. Live weight—Spring chickens, 25c. per lb.; spring ducks, 17c. per lb.; turkeys, young, 20c. Fowl, 4 lbs. and over, 15c. per lb.;

fowl, under 4 lbs., 14c. per lb.; squabs, per dozen, \$3.50 to \$4 (dressed).

Hides and Skins.

Wool continued to come in freely with very little demand. Lamb skins and pelts, 55c. to 70c.; sheep skins, city, \$2.50 to \$3.50; sheep skins, country, \$1.50 to \$3; city hides, flat, 20c.; country hides, cured, 18c.; country hides, part cured, 17c.; country hides, green, 16c.; calf skins, per lb., 30c.; kip skins, per lb., 24c.; horse hair, per lb., 43c. to 45c.; horse hides, No. 1, \$5 to \$6; horse hides, No. 2, \$4.50 to \$5.50; tallow, No. 1, 7c. to 8c.; wool, washed, 42c. to 46c.; wool, rejections, 35c. to 38c.; wool, unwashed, 32c. to 35c.

Wholesale Fruits and Vegetables.

Lemons were the feature on the wholesale fruit market during the past week, as the demand was so great during the continued hot weather the supply was not adequate, therefore, the price advanced by leaps and bounds, reaching \$8 per case towards the end of the week—one case having been sold at \$10—an advance of \$6 per case in less than two weeks.

Oranges, too, sold well for this season of the year, and advanced slightly in price, selling at \$5 to \$5.50 per case.

The receipts of Canadian fruits and vegetables were extremely light during the past week—strawberries having disappeared for this season.

Raspberries opened at 16c. to 20c. per box; slumping in one day to 10c. to 13c. per box, and firming towards the end, when they sold at 10c. to 15c. per box.

Cherry shipments decreased; only an odd basket of the sweet variety having been received—the sour ones selling at 75c. to \$1 per 11 qts., and 35c. to 55c. per 6 qts.; an odd basket of sweet ones selling at \$2 to \$2.50 per 11 qts.

Red currants, after having been so plentiful suddenly became very scarce, and in better demand, selling at 7c. to 8c. per box, and 60c. to 75c. per 11 qts.

Gooseberries also advanced, selling at 7c. per box, and 75c. to \$1 per 11 qts.

Black currants came in a little more freely, and brought from \$1.25 to \$1.50 per 11 qts.

Blueberries were very soft, and varied in price from \$1 to \$1.75 per 11 qts.

Canadian tomatoes began to come in more freely, and were a good sale at \$1.25 to \$2.25 per 11 qts.

The California and southern fruits continued to come in freely, and were of splendid quality—peaches selling at \$1.25 to \$1.50 per case, and \$3.25 per bushel; plums went at \$2 to \$2.50 per case, and pears at \$3 to \$3.25 per case; Malaga grapes at \$4 per case.

Western cantaloupes at \$2.25 to \$2.40 for flats, \$5.50 for Standards, and southern cantaloupes at \$1.50 for flats, and \$2 to \$3 per case for Standards.

Carnots and beets decreased in quantity and then increased in price, selling at 25c. per dozen bunches.

For cabbage the demand was not so good owing to the continued hot weather, causing the price to decline slightly; they sold at \$1.75 to \$2 per case, containing 12 to 24 heads, and \$2 to \$2.50 for larger case.

Canadian corn made its first appearance and was of fair quality, selling at \$1.75 to \$2 per sack containing ten dozen—and also at 25c. per dozen.

Cucumbers were shipped in lightly, selling at 75c. to \$1.25 per 11 qts.

Onions continued to be quite scarce; the Spanish variety selling at \$2 per case of 40 lbs., and \$4.50 per large case.

New potatoes after declining to \$3.50 per bbl. firmed slightly, selling at \$3.60 to \$3.65 per bbl.

Vegetable marrow began to come in, gradually increasing in quantity, and sold at 60c. to 75c. per 11 qts.; an odd basket which was especially well filled bringing \$1.

Montreal.

The local cattle market was easier last week than it has been for some time past, and a decline of about ½c. per lb. took place in good quality stock. The offerings of this quality showed a considerable increase, and as a consequence the volume of business was fairly large, particularly as offerings have been light during the previous hot weather.

Choice steers sold at 8½c. to 8¾c., while good ranged from 7¾c. to 8¼c., with fair about ½c. below, and common ranging down to 6c. per lb. Butchers' cows ranged from 6c. to 7c. per lb. for good quality and down to 5c. for poor, while best butchers' bulls were 6c. to 7c., and ordinary stock down to 5½c. per lb. Canners cattle sold generally from 4½c. to 5c. per lb. The market for sheep and lambs was steady, sheep being in good demand at 7c. per lb., and lambs at 10c. to 11c. There was a fair amount of activity in the market for calves, and milk-fed stock sold at 8c. to 9c. per lb., while grass-fed calves were as low as 5c. per lb. The market for hogs was fairly steady, selects continuing to sell at 21c. to around 12½c. per lb., while rough and mixed lots sold at 11c. to 11½c., and sows at 10c. to 10½c. per lb., weighed off cars.

Horses.—The hot weather was exceedingly hard on horses, and as a result of considerable mortality and a number of casualties, some of the transportation companies had to make a few extra purchases, otherwise, the market was dull, and prices were steady as follows: Heavy draft horses, weighing 1,500 to 1,700 lbs., \$200 to \$250 each; light draft horses, weighing 1,400 to 1,500 lbs., \$150 to \$200 each; small

SAVE YOUR MONEY

FOR THE DOMINION WAR LOAN

TO BE ISSUED IN SEPTEMBER.

By purchasing a bond you will help to WIN THE WAR and obtain for yourself an investment of the highest class yielding a most attractive rate of interest.

DEPARTMENT OF FINANCE
OTTAWA.

THE ROYAL BANK OF CANADA

Capital Authorized - - \$ 25,000,000
Capital Paid up - - - 11,785,000
Reserve Funds - - - 13,236,000
Total Assets - - - 214,000,000

HEAD OFFICE: MONTREAL
Branches throughout every Province
of the Dominion of Canada.

Accounts of Farmers
Invited

Sale Notes Collected

Savings Department at all
Branches

horses, \$100 to \$125 each; culls, \$50 to \$75 each; fine saddle and carriage horses, \$200 to \$250 each.

Dressed Hogs.—The tendency in the price of dressed hogs was downwards, owing possibly to the warmer weather, and purchases were being made at slightly lower prices, the quotation being 15c. to 16½c. per lb. for fresh-killed, abattoir-dressed hogs.

Potatoes.—No Canadian potatoes were yet available on the local market, but American stock was constantly becoming cheaper, and went down to \$3.25 per barrel in car lots, ex-track, while jobbing lots were \$3.75, ex-store.

Honey and Syrup.—This market was unchanged. Pure maple syrup sold at 85c. to 90c. per 8-lb. tin; \$1 to \$1.10 for 10-lb. tins, and \$1.25 to \$1.50 for 13-lb. tins, while pure sugar sold at 12c. to 14c. per lb. Honey showed no change, white clover comb selling at 15c., and extracted at 12c. to 12½c., while brown clover brought 12½c. to 13c., and extracted 10c. to 11c. Buckwheat honey was 9c. to 10c. per lb.

Eggs.—The demand for eggs was active, but the recent hot weather had a bad effect on the quality of the stock, so that the choice eggs were very firmly held. Straight gathered stock was quoted at 50c., No. 1 select, 33c.;

No. 1 candled at 30c., and No. 2 candled at 26c. to 27c., while strictly new-laid stock was 35c. per dozen.

Butter.—The tendency in prices during the past week was slightly upward, and choicest creamery was being quoted here at 30c. to 30½c. per lb., while fine stock was 29½c. to 30c., under-grades bringing about ½c. less. Dairy butter ranged from 22c. to 25c., according to quality.

Cheese.—The market has been somewhat erratic. At the auction here, No. 1 white Quebec sold at 16½c.; No. 3, 14½c.; No. 2, 3-16c., and colored, 15½c. At Ontario country boards price for best was 15½c.

Grain.—The market for oats was slightly firmer, No. 2 Canadian Western being 53½c. to 54c.; No. 3, 52½c. to 53c.; No. 2 feed, 50½c. to 52c.; and Ontario and Quebec No. 2 white, 52½c.; No. 3, 51½c., and No. 4, 50½c. per bushel, ex-store.

Flour.—One large miller was asking 30c. per barrel higher for Manitobas, but quotations given by other millers were \$6.60 per barrel for first patents; \$6.40 for seconds, and \$5.90 for strong bakers', in bags, flour in wood being 30c. more. Ontario winter wheat flour was \$6 to \$6.25 per barrel, in wood, for patents; \$5.40 to \$5.60 for 90 per cent's., and \$5.10 to \$5.30 for straight rollers, the latter being \$4.80 to \$5 in bags.

Milled.—The market was steady at \$21 per ton for bran; \$24 for shorts; \$26 to \$27 for middlings; \$28 to \$30 for mixed mouille, and \$30 to \$32 for pure grain mouille.

Baled Hay.—Hay was \$20 per ton for No. 1; \$18.50 to \$19 for extra good No. 2; \$17.50 to \$18 for No. 2; and \$15.50 for clover mixed, ex-track.

Hides.—Sheep skins were up to 80c. each; horse hides were \$1.50 for No. 3; \$2.50 for No. 2, and \$3.50 for extra No. 1. Calf skins were 31c. for No. 2, and 32c. for No. 1. Horse hides were 21c. per lb. for No. 3; 22c. for No. 2, and 23c. for No. 1. Rendered tallow was 8c. per lb., and rough 2½c.

Buffalo.

Cattle.—Trade the last week was the worst that has been witnessed this year. The dressed meat market has

been in such bad shape that only a light supply was needed, but instead, Monday's run reached right at 160 cars, which proved far too many for the demand, and the result was that buyers had the market well under control, breaking prices on steer cattle, with the exception of a few tippy loads, a quarter to fifty cents from the previous Monday. Even at the decline the market was the slowest seen here for a long time, and several loads had to be carried over unsold. The top for the day was \$10, which price was secured for two loads, and the cattle that brought this price were better than the ones that sold at this figure the previous week. It took strictly dry-fed, finished cattle, however, to sell above \$9.25, and medium steers that carried weight ranged from \$8 to \$8.75, with some common better than 1,100 pound steers selling down to \$7.50. Medium steers showed the full decline of the day, those that were carried over unsold were mostly on this order. Butchering grades also showed a drop of a quarter to fifty cents, very few that could be called handy steers selling above \$8. A few odd head of fancy cows reached up to \$7.50 and \$7.75, but most of the good butchering cows went at a range of from \$6 to \$6.50, and medium kinds sold around \$5.50 and \$5.75. The cheaper class of cows were scarce, and on canner stuff the market ruled about steady. Yearlings were lower, top for these being \$9.25. Stockers and feeders looked about steady, bulls showed little change, and fresh cows and springers sold full steady, compared with the previous week. The trade was in a demoralized condition, and about the only thing that will prevent a further decline in price is a very short supply. Plenty of cattle, however, are in the country, and predictions are being made that with continued hot weather it will be hard to get back any of the recent declines, even with light receipts. For the past week the run reached 4,150 head, as against 4,500 head for the week previous, and 3,325 head for the same week a year ago.

Quotations:
Shipping Steers.—Choice to prime natives, \$9.25 to \$10; fair to good, \$8.50 to \$9.15; plain, \$8 to \$8.50; best Canadians, \$8.50 to \$9; fair to good, \$8 to \$8.50; common and plain, \$7.50 to \$8.

Butchering Steers.—Choice heavy, \$8.50 to \$8.85; fair to good, \$8 to \$8.50; best handy, \$8.25 to \$8.75; yearlings, prime, \$9 to \$9.25.

Cows and Heifers.—Best handy butcher heifers, \$7.40 to \$7.60; common to good, \$6.50 to \$7.25; best heavy fat cows, \$7 to \$7.50; good butchering cows, \$6 to \$6.50; cutters, \$4.50 to \$4.75; canners, \$3.25 to \$4.25.

Bulls.—Best heavy, \$6.75 to \$7; good butchering, \$6.25 to \$6.50; light bulls, \$5 to \$5.50.

Stockers and Feeders.—Best feeders, \$7.50 to \$7.75; common to good, \$6.75 to \$7.25; best stockers, \$7.25 to \$7.50; common to good, \$6 to \$7.

Milchers and Springers.—Good to best, in small lots, \$80 to \$100; in carloads, \$70 to \$75; medium to fair, in small lots, \$60 to \$65; in carloads, \$55 to \$60; common, \$40 to \$50.

Hogs.—Prices held to a high level again the past week, Wednesday's market being higher than any previous time this year. Monday it was generally a one-price deal of \$10.45 for best grades, with pigs selling at \$10; Tuesday top was \$10.60, with bulk going at \$10.50, and pigs \$10 to \$10.15; Wednesday best grades brought \$10.60 and \$10.65, bulk \$10.65 and pigs reached \$10.25; Thursday values were five to ten cents lower, and Friday best grades moved at \$10.50, few made \$10.55, and lights and pigs ranged from \$10 to \$10.25. Roughs sold anywhere from \$9 to \$9.25, and stags \$7.75 down. Receipts the past week were 19,300 head, being against 24,833 head for the week previous, and 22,800 head for the same week a year ago.

Sheep and Lambs.—Receipts the past week were a little larger than they have been running, grand total being approximately 3,900 head, as against 3,527 head for the week before, and 3,300 head for the same week a year ago. The past week started with top lambs selling at \$10.50 and \$10.75, with culls going from \$9 down, and before the week was out best lambs sold up to \$11, and culls made \$9.25.

Sheep were steady all week, wether sheep on the tippy order that contained a few ewes selling around \$8, and the range on strictly ewes was from \$7 to \$7.50, most of the heavy ones going at \$7.

Calves.—Handy veals were active the past week, and weighty lots continued very slow. Monday tops sold at \$12.50 to \$12.75, and culls went from \$11.50 down. Tuesday's trade was steady, and the next two days best lots sold up to \$13. Friday's market was on the red-hot order, prices showing a jump of from 50 to 75 cents over Thursday, best sorted lots reaching up to \$13.50 and \$13.75, latter price equaling the former record for the local yards. Weighty calves, as a rule, undersold the handy lots of the same quality and finish by from \$2 to \$3 per cwt. For the past week the run totaled 2,000 head, as compared with 2,199 head for the week before, and 1,900 head for the same week a year ago.

Chicago.

Cattle.—Beeves, \$7 to \$10.50; western steers, \$6.75 to \$8.60; stockers and feeders, \$5 to \$8; cows and heifers, \$3.50 to \$9.25; calves, \$8.50 to \$12.

Hogs.—Light, \$9.60 to \$10.15; mixed, \$9.25 to \$10.15; heavy, \$9.15 to \$10.15; rough, \$9.15 to \$9.30; pigs, \$7.75 to \$9.70; bulk of sales, \$9.55 to \$10.05.

Sheep.—Lambs, native, \$7.25 to \$11.05.

Cheese Markets.

New York State, whole milk, flats, fresh specials, 16c.; average fancy, 15½c.; London bid, 16½c.; St. Hyacinthe, Que., 15 11-16c.; Belleville, 16½c.; Vankleek Hill, white, 15 13-16c., colored, 15 15-16c.; Kemptville, 15½c.; Waterdown, 14½c.

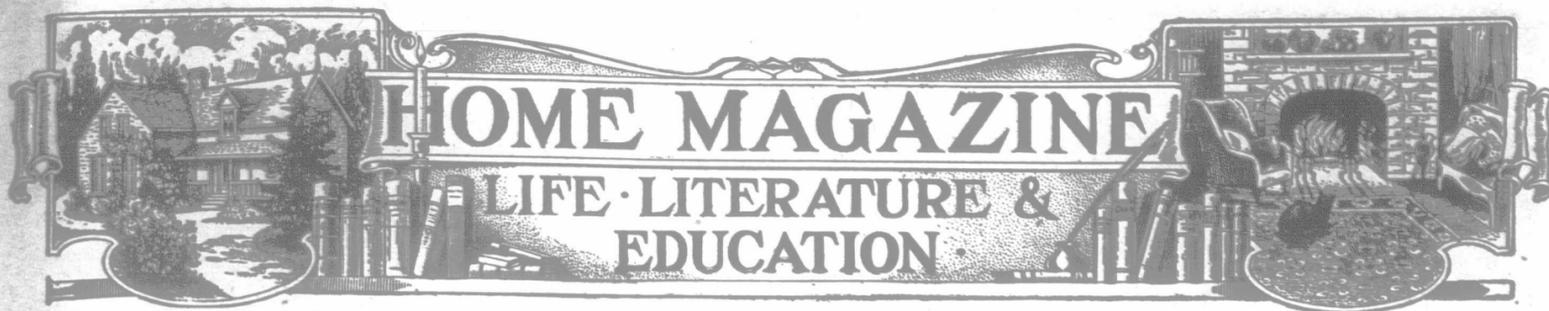
Why Suffer From Heat in the City When You Can Cool Off on the Great Lakes?

Take the Canadian Pacific Steamship Express from Toronto any Tuesday, Thursday or Saturday at 2.30 p.m. for Port McNicoll, where direct connection is made with either the "Assiniboia" or "Keewatin" for Sault Ste. Marie, Port Arthur and Fort William. An ideal Vacation Trip at small cost. Particulars from any Canadian Pacific Ticket Agent, or W. B. Howard, District Passenger Agent, Toronto.

Coming Events.

North Battleford Summer Exhibition, August 7 to 9.
Prince Albert Summer Exhibition, August 10 to 12.
Vancouver Exhibition, Vancouver, B. C., August 14 to 19.
National Exhibition, Toronto, August 26 to September 11.
Western Fair, London, Sept. 8 to 16.
Central Canada Exhibition, Ottawa, Sept. 9 to 16.
Eastern Exhibition, Sherbrooke, Que., Sept. 2 to 9.

On a recent visit to Maple Lodge Stock Farm, owned by Miss C. Smith, Clandeboye, R. R. No. 1, we found the herd of Shorthorn cattle and flock of Leicester sheep in excellent condition. Gypsy, the well-known Guelph dairy-test winner, was in good fit and milking as only the strictly dual-purpose Shorthorn can. Despite her age she is still a valuable individual of the herd. In the pasture were two heifers from her. These young things were typically Shorthorn, but they are expected to produce at the pail as well. Another good thing was a heifer from the cow Gertrude, which during her last lactation period gave over 10,000 lbs. of milk at Weldwood Farm. Gertrude is of splendid type, and the young cow promises to make a good one too. These are only a few of the splendid individuals of the herd seen. There are other young heifers and calves that will maintain the good name of Maple Lodge stock, which combines Shorthorn type and milking propensities to a marked degree. The flock of Leicester ewes were in good condition, and were bringing on a nice crop of lambs.



Rag-time in the Trenches.

Tommy Atkins is no grumbling, pessimistic individual. Even in the trenches his irrepressible love of fun manifests itself. "Roll up, rally up!" is one of the favorite songs in the billets, sung often, "accompanied by a rumbling syncopation obligingly furnished by H. M.'s. and S. M.'s. artillery:

Roll up, rally up!
Stroll up, sally up!
Take a tupp'ny ticket out, and help to tote the tally up!
Come and see the Ragers in their "Mud and Slush" revoo.
(Haven't got no money? Well, a cigaret'll do).
Come and hear O'Leary in his great tin-whistle stunt;
See our beauty chorus with the Sergeant in the front;
Come and hear our gagers
In their "Lonely Tommy" song;
Come and see the Ragers,
We're the bongest of the bong.

Roll up, rally up!
Stroll up, sally up!
Show is just commencing and we've got to ring the ballet up.
Hear our swell orchestra keeping all the fun alive.
Tooting on his whistle while they dance the Dugout Dive.
Come and see Spud Murphy with his double-ration smile,
("Tisn't much for beauty, but it's Phyllis Dare for style);
Come and see our scena,
"How the section got C. B.;"
Bring a concertina
And we'll let you come in free.

Roll up, rally up!
Stroll up, sally up!
First and last performance. If you want to see it, allez up!
Come and sit where "Archibalds" won't get you in the neck
(If it's getting sultry you can take a pass-out check).
Come and hear the Corporal recite his only joke;
See the leading lady slipping out to have a smoke;
Sappers, cooks, flag-waggers
Dhooly-wallahs too;
Come and hear the Ragers
In their "Mud and Slush" revoo.

The Movies.

Upon the occasion of every spectacular parade or other unusual event there may be seen somewhere, as a rule, a solitary individual, standing in a wagon perhaps, industriously turning the crank of an apparatus that stands up as slender and inconspicuous as a periscope. He is a moving-picture photographer, and the effect of the crank that he turns is to take an endless number of pictures on endless yards of film. These when manipulated by the moving-picture machine in a theater or elsewhere, produce the well-known "movies."—Who is there who has not seen the movies?—and yet the inventor's memory might be as extinct as the dodo for all the majority of people know of him.

Of course, as with other things, the movies, in their present, wonderful perfection, grew from a very crude beginning, the outcome of an idea in the brain of some unknown inventor, who would have been astounded indeed, if he had been able to foresee the development to which his first odd toy would reach. This toy, first seen in Great Britain in 1833, was called the "wheel of life," and was described as "a hollow cylinder turning on a vertical axis, and having its surface pierced with a number of slots. Around the interior was arranged a

series of pictures representing parts of the figure intended to be seen in motion, and when the cylinder was rotated the observer, looking through the slots, experienced the illusion of seeing the object in motion." The first made represented a galloping horse.

Fifty-two years later, Mr. Friese-Greene of London, Eng., who may be looked upon, perhaps, as the real inventor of the moving-picture machine, was busy with his experiments, and before long gave exhibits on a screen, the first of which was shown at Bath. It represented a girl moving her eyes from side to side, and we are told that

found thier way to the front and are duly appreciated by our "boys."

"The Pathoscope machines received from the Canadian War Contingent Association have proven a real help and enabled our Secretaries to add very much to their usefulness. I have used the one which was sent to me for the various small units, such as Division Train companies, Ammunition Columns, etc. in this way men who are living in almost inaccessible parts of the country, away from villages, and living under hard conditions, have been cheered and helped by an evening's entertainment once a week. The Government has con-

the phonograph played pieces they knew they all joined in, and several times during the evening they enlivened the old barn with selections that were not known when the First Division left Canada. Eight rolls of films were shown, and when at the close of the evening the Colonel called for cheers for the Y. M. C. A. they made the rafters ring, and an officer from the column who accompanied me said: "The 'Y' sure has a place in the hearts of those men!" Five nights a week are spent in this way, and so far the column have loaned me a car so that these places can be reached. They average about eight miles from this Central 'Y'. Recently I asked an officer from an Ontario town to accompany me on one of these trips and operate the machine, which he gladly did, and at the close of the evening said: "Do you know, the last time I was in a 'Y' they put me out for using bad language, and there I've run through six films and haven't sworn once." At the close of a meeting last Sunday evening an officer from the West said: "We used to think out our way that the Y. M. C. A. was a very expensive luxury, but now we have come to the conclusion that we could never carry on without it."

The British Associations have sent over a large picture machine, showing regular size films and Charley Chaplin reels, and we have an opportunity occasionally of having these pictures in our larger places, such as Armour's and the Neuve Eglise Tent.

As the time goes on many new opportunities open up whereby our services are multiplied. There are times when, under the long hours and never-ending strain, our Secretaries become discouraged but each day brings its new duties and a hundred blessings follow each hard task."—Canadian Manhood.

Smiles.

A friendly American who has just arrived in London brings a nice story of Edison. The great inventor was present at a dinner in New York to which Count Bernstoff had found his way. The Count spoke of the number of new ships which Germany had built since the war began. He was listened to respectfully enough although a little coldly, because the sympathies of the party were not with him or Germany. When he had stopped, Edison looked up and said in a still, small voice and with a serious face: "Must not the Kiel Canal be very crowded, Your Excellency."—Glasgow Herald.

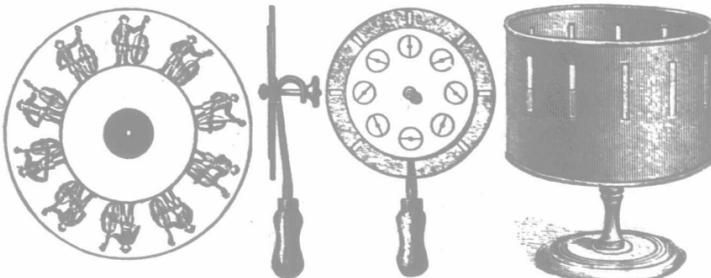
There is a certain dear old lady who owns a little farm and takes a few boarders in summer.

Recently an anxious young mother, who has been industriously delving into medical literature of late, inquired of the old lady whether or not the milk served at her table was Pasteurized.

"Of course!" was the old lady's indignant reply. "Don't we keep all the cows we've got in the pasture all summer long?"

For an hour the teacher had dwelt with painful iteration on the part played by carbohydrates, proteids and fats, respectively, in the upkeep of the human body. At the end of the lesson the usual test questions were put, among them:

"Can any girl tell me the three foods required to keep the body in health?" There was silence till one maiden held up her hand and replied, "Yer breakfast, yer dinner and yer supper."



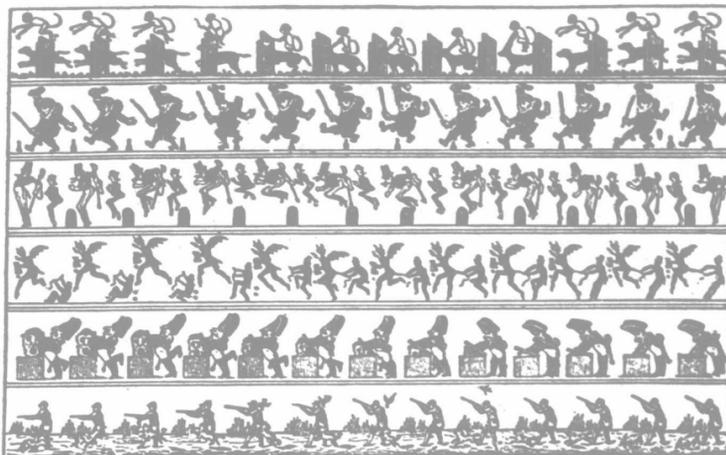
The Germ of the Moving Picture.

A mechanical toy called the "wheel of life." It gave the effect by an optical illusion.

one lady in the room insisted on going up to the front and touching the eyes, to satisfy herself that they did not belong to some confederate behind the canvas.

By 1889 Mr. Friese-Greene was so sure of ultimate success that he had bought two cameras at £50 each and spent about £1,000 in the promotion of his machine, which by this time could produce an animated picture somewhat resembling a modern film. But it was the invention of the celluloid roll film for photography by Marcy, in 1890 that made the movy, as we know it, possible. Mr. Friese-Greene was quick to seize upon its possibilities, and before long able to present a picture of traffic passing Hyde Park Corner, with

structed in many places 20 x 40 huts to be used as recreation centres, and these provide a great opportunity for us. The officers, whose men use these centres, send in regularly for supplies of writing paper, envelopes, pencils, games, etc., and such things as we can supply free, and in this way our constituency is much enlarged. This work is also developing in the Second Division. Recently a Colonel sent in a request for a night's entertainment for his men, but added that it might be wise to send someone in advance to view his accommodation, as all he had was an old barn. Of course, we did not send an advance agent, but gave him an evening at the first opportunity. We found the officers and all the men as



Twenty Inches of Pictures Made the First Cinematograph.

about twenty feet of film, a feat that created quite a sensation.

It was not for Mr. Friese-Greene, however, to bring his invention to perfection. "The Americans and the Germans," he says, "particularly the Germans, seized upon my invention, and working on it for all they were worth, soon left me with little but the satisfaction of knowing that I had discovered something which marked an epoch."

Movies at the Front.

The following, taken from "Canadian Manhood," shows that the movies have

sembled in the old barn, and, although without heat or light, we had a merry evening. The piles of last year's straw served as desirable seats for a large number, the loft made a serviceable gallery, while the upper heavy beams were crowded with those who wanted uninterrupted views. The curtain was suspended among the cobwebs and the machine mounted on a couple of bully beef boxes, while the gramophone was honored with a small table borrowed from a farmhouse. No audience at a famous theatre could have enjoyed the evening better than those chaps. When

Hope's Quiet Hour.

Coward or Hero?—Both.

Verily, verily, I say unto thee, the cock shall not crow, till thou hast denied Me thrice.—St. John 13:38.

Verily, verily, I say unto thee, when thou shalt be old, thou shalt stretch forth thy hands, and another shall gird thee, and carry the whither thou wouldest not. This spake He, signifying by what death he should glorify God.—St. John, 23:18, 19.

Both these prophecies, so opposite in character, were literally fulfilled. The apostle who eagerly denied his Master—afraid of a woman's taunting laugh—bravely endured the awful death of crucifixion rather than deny that same Lord. Was St. Peter a coward or a hero? He was both. So are other people.

Elijah was brave as a lion on the mountain, when he stood alone for God before a wicked king and hundreds of heathen priests. Then, in desperate fear, he fled before the threat of a woman.

Hosea says of Jacob: "By his strength he had power with God," yet the same Jacob had stooped to deceive his blind father by low trickery, and had stolen the birthright from his twin brother.

The prophet Jonah cared more about a plant which sheltered him from the sun than he did for the lives of 120,000 little children. We are apt to call him a selfish coward, because he ran away from his duty. Yet he afterwards faced probable scorn and insult, danger and death, when he daringly proclaimed God's wrath against the wicked and mighty city, Nineveh. He walked through its streets, denouncing king and people in no measured terms. Men—on this side of the ocean—condemn the Kaiser and his advisers quite fearlessly. What have they to fear?—at this distance! But a man who ventures to loudly denounce the German emperor in the streets of Berlin is not a coward. Would you dare to do it? If not, be very careful how you speak slightly of Jonah. We are so apt to remember his running away in fear—his fear was not surprising, when you think of the daring duty demanded of him—that we perhaps forget that he afterwards preached so forcefully that the king of Nineveh and his people repented of their wickedness in sackcloth and ashes. We forget that—through Jonah's preaching—that great city was saved from destruction, for "God saw their works, that they turned from their evil way; and God repented of the evil, that He had said that He would do unto them; and He did it not."

Think of the great work God was able to accomplish through Jonah, and then look down upon him as a "selfish coward" if you dare! He may have been afraid—once. He may have complained over a trifling discomfort—once. But he was a grand hero when he marched boldly through Nineveh proclaiming his message of God's judgment on the guilty city.

These are a few instances. You know of many more. Plenty of men were far from heroic before the war; following others to evil because they were afraid of being called "goody-goody," and making a fuss over the smallest interference with their comfort or pleasure. Yet those very men have gone forward fearlessly in the midst of shot and shell, have laid down their own lives to save wounded comrades, or have endured the most awful pain with a laugh. Many of them are even now facing a cheerless future—they are blinded, maimed or helpless—facing it not only uncomplainingly but cheerily.

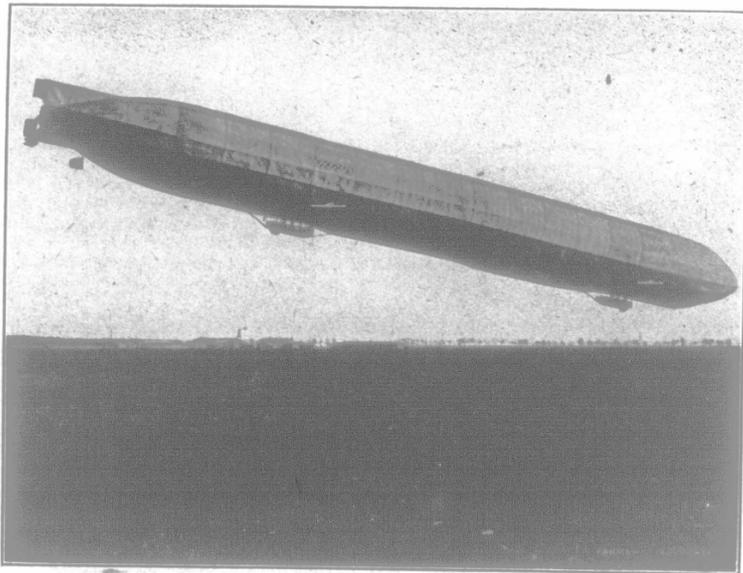
The "coward" is also a hero, the "sinner" is also a saint. Perhaps the reason we are so apt to think and speak slightly of our brothers and sisters is because we only see the weaker side of them, while God can see the glorious possibilities which may blossom and bear fruit any day.

Our Lord's first "verily verily" to St. Peter (in our text) was a loving warning, intended to arouse him to the knowledge of his danger. The second "verily verily," was intended as a needed encouragement to the discouraged

sinner whose revealed weakness threatened to drag him down to despair.

What lesson should this teach us as regards other people? I think one lesson is this—and we all need to learn it. The person we despise and condemn may one day prove himself to be far superior to ourselves. Let us not push ourselves into the highest place, lest a more honorable man appear, and we begin with shame to take the lowest place. Our continual faultfinding is not only wrong but it is a proof of our own foolishness. As Hannah said long ago: "Talk no more so exceeding proudly; let not arrogance come out of your mouth: for the LORD

brothers of apparently hardened men pray on, in radiant hope and fearless faith. God is constantly working miracles of healing redemption. Christ came to save sinners, and His earth-mission cannot be a failure. Many a man who seemed for years to be recklessly wasting his life—the life God gave him in trust—has come face to face with death and has made the great discovery, has found God and learned the priceless value of the soul he was recklessly allowing to drift to destruction. Of many an apparently commonplace man it has been said: "He has done what we would all like to do, die for England."



A Zeppelin Leaving Its Aerodrome.

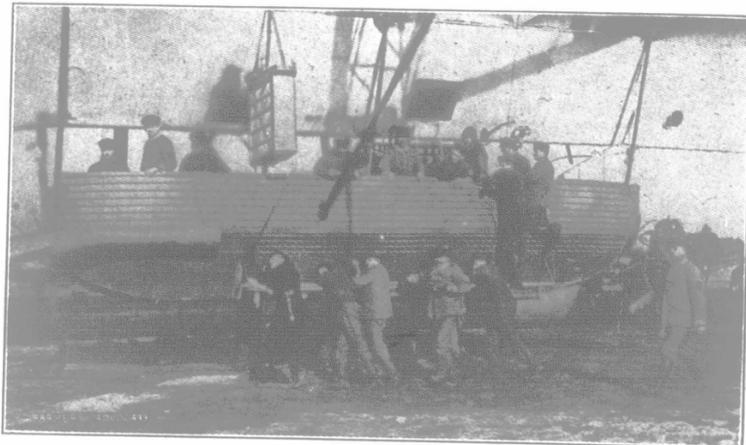
Each carries two gondolas. International Film Service, N. Y.

is a God of knowledge, and by Him actions are weighed. The bows of the mighty men are broken, and they that stumbled are girded with strength."

Mighty Germany scornfully trampled weak Belgium under foot—yet already Belgium's name towers high among the nations. She promised unto her neighbors and disappointed them not, though it meant torture to herself. God holds her reward in His hand, "He raiseth up the poor out of the dust. . . . to set them among princes, and to make them inherit the throne of glory. He will keep the feet of His saints, and the wicked shall be silent in darkness; for by strength shall no man

Wilfrid Meynell says: "We are born heroes, and born cowards; there's a saint in every sinner, and a sinner,—both him!—in every saint."

Therefore, let us not feel uplifted—like the Pharisee—nor thank God that we are not like our neighbors. Let us not look down on them as greater sinners than ourselves, nor jeer at them as "professing saints." Rather let us thankfully remember that we are as other people are. We may be cowards to-day, but God is able to make us heroic, too. We may be sinners now, falling when we try to climb, and slipping back when we should be moving forward. But God can see



The Gondola of a Zeppelin which is Just About to Ascend on One of Its "Baby-killing" Escapades.

International Film Service.

prevail. . . . the LORD shall judge the ends of the earth." Those words also are taken from the thanksgiving of Hannah, the "woman of a sorrowful spirit," who took her troubles to the throne of God and found that He could turn them into great joy.

Another lesson we may learn is Hope. One who is a coward now may become a hero. One who is selfish now may lay down his life unhesitatingly for others. One who is openly irreligious now may become a loyal soldier in the army of the Great King of all the earth. Let the wives, mothers and

the germ of the saint in the heart of the sinner—how eagerly the King of Love welcomed, as His companion in paradise, a man who had been a notorious thief and robber! This story is told in a book called "Halt! Who Goes There?"

"In a scattered sortie, one of our men stooped down and possessed himself of the wrist-watch of a dead soldier. Three minutes later I saw the thief—O, well, the Good thief!—run forward under a rain of fire on the chance that he might retrieve an exposed wounded comrade. He fell prone. A little later,

the gusts of fire veering like a wind-blown shower, I went to see if the man I had just before wanted to shoot at sight could still himself be succored. No, he was stone dead, smiling like a stone saint—perhaps he was a saint at last. . . . I, who stood one moment his accuser, knelt the next his client." God has never appointed any one of us the judge of our fellows or of ourselves. We do not know the wickedness, nor the nobility, that lies hidden from sight. Judgment is placed in the hands of Christ, because He is Divine in His absolute knowledge of us and human in His sympathy and tenderness. If He can know our weakness and sin, yet still love us, there must be something worth loving in each one of us. Let us believe in the hero when we can see only the coward, let us reverence the growing saint when only the sinner is manifest; and let us never, never lose faith in the ultimate victory of righteousness. The farmer can rejoice in the coming harvest while the seed is still hidden underground, so God—who sees the end—can rejoice beforehand over sinners who will some day become saints. Our Father's beauty of holiness draws us after Him.

"Like a snowy mountain peak above us,

'Be ye perfect!' daz'les our dim eyes. Canst Thou look from Thy pure height and love us?

May our earth-clogged feet to Thee arise?

"We before the Vision veil our faces, Yet would have it not a ray less bright;

Shine into our sin's dark hiding places, Flood our lives with Thy transfiguring light."

DORA FARNCOMB.

Berry-pickers Cause Fires.

Carelessness with Fire Results in Destruction of Forest Resources.

Many causes are responsible for Canada's heavy forest fire losses. Some of the erstwhile greatest offenders have come to realize the destruction which their negligence was causing and have adopted systematic measures to overcome the loss.

Several causes of forest fires have not, however, received sufficient attention. Dr. C. D. Howe, in Forest Protection in Canada, 1913-1914, states that in the settled areas, one of the chief classes of persons responsible for fires are berry-pickers. Smouldering camp fires, or sparks caused by smoking, fall into dry grass or brush, starting small fires; fanned by a high wind the fires rapidly become uncontrollable, spreading from the berry patches to the larger timber.

With the berry season at hand, it should surely be necessary only to draw the attention of berry-pickers to the destruction which their carelessness or indifference is causing, to secure an immediate reduction in the number of forest fires for which they are directly or indirectly responsible.—From "Conservation."

Not Fatal.

A certain clergyman was much grieved to find his "special services for men only" were so badly attended. He expressed his regret to the verger one evening when, as usual, they were the only two at the meeting.

"I really think they ought to come," he said, sadly.

"That's jest what I've zed to 'em over an' over again," said the verger, consolingly. "I sez to 'em, I sez, 'Look at me,' I sez; 'look at me. I goes to all them services,' I sez, 'an' wot 'arm does they do me?'"—Tit-Bits.

French in the Trench.—Tommy (to Jock, on leave)—"What about the lingo? Suppose you want to say 'egg' over there, what do you say say?"

Jock—"Ye juist say 'Oof!'"

Tommy—"But suppose you want two?"

Jock—"Ye say, 'Twa oofs,' and the silly auld fule wife gies ye three, and ye juist gie her back one. Man, it's an awfu' easy language."—Glasgow Herald.

The Dollar Chain

A fund maintained by readers of The Farmer's Advocate and Home Magazine for (1) Red Cross Supplies. (2) Soldiers' Comforts. (3) Belgian Relief. (4) Serbian Relief.

Contributions from July 21st to July 28th: "Alvinston," \$2.00; Ladies' Aid, Mars Hill, Brinsley, Ont., \$5.00; Mrs. Geo. H. Ridley, St. Mary's Ont., \$2.00.

Previously acknowledged.....\$2,639.70

Total to July 28th.....\$2,648.70

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

Mr. F. W. Baillie of Hamilton, Manager of the Canadian Cartridge Company, has returned to the Government over \$750,000, the firm's profits on war orders to date. The money is to be used for patriotic purposes.

German farmers are said to be making small fortunes by the sale of rabbits for meat.

Sir William Ramsay, famous British scientist, died in London, on July 23rd.

Fashions 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 fifteen cents PER PATTERN. If two numbers appear for the one suit, one for coat, the other for skirt, thirty 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.....



Girl's dress, 10 to 14 years.



Gown with three or four-piece skirt, 34 to 46 bust.



8695—Gown with Raglan sleeves, 34 to 44 bust.

Farmer Corning was asked whether he had had a good year. "Gosh, yes!" he exclaimed. "I had four cows and three hogs killed by railway-trains and two hogs and eleven chickens killed by automobiles. I cleared near a thousand dollars."

The Ingle Nook.

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

Dear Ingle Nook Friends—Still it's hot—*beastly* hot—too hot even to think up a heading for this Ingle Nook talk, too hot to write anything except something that slips around on the surface, too hot to do anything but sizzle and growl at the weather. Yesterday it was 96½ in the shade; to-day it promises to make up that extra half degree, if not more. Everyone who can has fled from the city. On the street people look wilted and "faggy."

One thing one has been compelled to notice about the garb of the feminine element during these dog-days,—never in the history of dress have the woman who are not at summer resorts looked so summer-resorty. Awning-striped skirts with white waists, or white skirts with awning-striped waists, silk sweaters of rose and blue and gold in the evenings, Panama hats—and scarcely any kind other than Panama with just a wisp of silk scarf or ribbon—this is the where-withal-we-shall-be-clothed that one sees everywhere, even in church. And bright colors seem to have run rampant. By the way, why will some people insist on wearing the red shades in warm weather? We saw a woman yesterday—just at the very sizzliest moment, too,—wearing a pink dress of a peculiarly brilliant shade. She was big and fat and red-faced, moreover, and she hove into sight like a burning fiery furnace. One felt like begging her please to disappear until the weather got cooler, because she made everything in sight seem hotter still. Really there are only two colors other than white for very warm weather, and they are the cooler shades of blue and green. White, with just a touch of either, is ideal.

On the way home on the car last night, the attention of those near was attracted by a party of very stylishly dressed, rather loud-voiced people, the chief characteristic of whose talk was that it murdered the King's English at every turn. Really it seemed scarcely worth while to spend so much time and money on clothes and devote so little attention to the manner of one's speaking—for the initiated would always *know*. Very fine people it is true, may speak with very little regard to the rules of grammar, and yet it seems a pity that they should do so since the effect is usually quite as grating as "bad" manners or atrocious taste in dress. It is a pity to be put at a disadvantage by a thing that can be avoided.

A bit of verse picked up recently enlarges on the idea. It is entitled "In a Paris Restaurant."

I gaze, while thrills my heart with patriot pride,
Upon the exquisite skin, rose-flushed and creamy;
The perfect little head; on either side
Blonde waves. The dark eyes, vaguely soft and dreamy,
Hold for a space my judgment in eclipse,
Until, with half a pout, supremely dainty,
"He's real mean"—slips from out the strawberry lips—
"Oh, ain't he?"

This at her escort, youthful, black-mustached
And diamond-studded—this reproof, whereat he
Is not to any great extent abashed.
(That youth's from "Noo Orleans" or "Cincinnati,"
I'm sure.) But she—those dark eyes doubtful strike
Her sherbet-ice. . . . Won't touch it. . . . Is induced to.
Result. "I'd sooner eat Mince-Pic, Jim,
like
We used to."

While then my too-soon-smitten soul recants,
I hear her friend discoursing with much feeling

Of tailors, and a garment he calls "pants."
Fnote into her eyes a softness stealing—
A shade of thought upon her low, sweet brow—
She hears him not—I swear, I could have cried here—
The escort nudges her—she starts, and—"How?"
The ideer"

This was the finishing and final touch. I rose, and took no further observation. I love my country "just about" as much—I have for it as high a veneration—As a man whose fathers fought for liberty, Whose veins conduct the blood of Commodore Perry, can. But *she* was quite too very awfully American.

Why in the name of all that is reasonable, in these enlightened days, should anyone say "ain't," or "them folks," or "me and him went?" Everyone knows better nowadays, and there is little excuse for crass carelessness. Thanks, be, not very many people are guilty but why need any be?

Just here, don't you dislike stories that pile the dialect too thick and deep upon country folk? It seems to me that such writing is a bit of an insult to the better class of rural dwellers everywhere; and we should see to it that, year by year, it is still more uncalled for. If our manner of speaking is above reproach it will not be long until "rural dialect" in stories finds the limbo it deserves, or is tolerated only as a relic of what once was in a few isolated localities.

But this is becoming too serious for to-day, so off with it.
Oh, it's hot—"ain't" it?

JUNIA.

Setting a Table.

Someone asked recently how a table should be "set." The first thing to remember is that everything should not be put on all at once. Keep the courses—even if there should be only two—entirely separate. The table looks better so, and the food tastes better if one is not tired looking at it.

When anything is to be served from the end of the table it is quite permissible to put the plates there in a pile. They should be heated if for hot dishes. Only the knives, forks, spoons, etc., need be at each place. Usually at informal meals two knives are placed at the right and two forks at the left. The largest knife and fork should be farthest from the plate. A dessert spoon may also be placed at the left of the knives; teaspoons are served on the saucers with the tea.

At the point of the dinner-knife put the glass of water, and at the left of each "place" put a folded napkin with a roll or cube of bread in it.—This is for dinner; at other meals a bread-and-butter plate is placed at the left of the forks, and plates of bread may be on the table.

The center of the table is invariably given over to cut flowers or a pot of fern on a pretty center-piece. Otherwise nothing need be placed on the table except salt and pepper and pickles. If time in serving must be considered, a green salad on individual dishes may be put at each place, or if grapefruit or anything of that kind is to be served first, it may be put around before the diners sit down. You see, if daintiness and convenience are considered there is little likelihood of any grievous mistake.

As a rule, at dinner, tea is not served until the end of the meal, when it may be poured by the hostess and served at the table, or in the drawing-room or on the verandah afterwards. Personal taste and the amount of time to be devoted to meals (not very much, on a farm, in the busy season, is it?) are the only considerations in regard to this.

With perfectly clean and well-ironed linen and a pretty center decoration any table should look attractive. It goes without saying that the cutlery should be carefully placed, straight and parallel, not thrown down anyhow, and that the dishes should be dainty and glittering. Gaudy or heavy patterns on china seldom look well.

A useful hint is to have cheesecloth covers large enough to cover the table completely when it is set. When the dishes are washed, put them in their places at once, then put on the cover to keep off dust and flies. This will save many steps for the busy house-

EATON'S

SEMI-ANNUAL SALE



BIG BARGAINS FOR YOU !!

ARE OFFERED IN OUR SALE CATALOGUE

Don't miss this great saving opportunity. Order from your Catalogue now. This sale is for a limited period, and many of the notable values now possible cannot be repeated for a long, long time to come. Should you not have a copy of our Sale Catalogue of 48 pages send us your name and address without delay. We have but a few left and those who want one should lose no time in writing to us.

**THIS SALE ENDS
AUGUST 15th, 1916**



T. EATON CO LIMITED
TORONTO CANADA

wife. Another "wrinkle" of great use, especially where there are children, is to make strips of old tablecloth, long enough to go down the sides of the table under the plates. These may be changed when necessary, without removing the tablecloth, and as they are much more easily laundered than large cloths the difference in the work will be appreciated. By using them, even where there are children, a tablecloth should be presentable for a week. White oilcloth strips are very useful, but those made of old linen are more attractive.

Midsummer Cookery.

Hermits.—Make a panful of these on a cool day. They keep fairly well, and will be on hand some hot day when needed for accidental visitors. Take 1 cup sugar, 1/2 cup molasses, 2/3 cup butter, 2 eggs, 1 cup raisins chopped fine, 2 tablespoons milk, 1 teaspoon soda, 1 teaspoon cinnamon, 1 teaspoon nutmeg, 1/2 teaspoon cloves, flour to roll. Cream the butter and sugar together, beat the eggs and add, then stir in the molasses, milk and spices. Add the raisins which have been covered with flour and last of all the flour into which the dry soda has been sifted. Roll out and cut in small cakes.

Old-time Gingersnaps.—These also will keep for a long time if kept in a covered crock or tin box. 1 cup molasses, 1/2 cup butter or lard, 1 teaspoon soda, 1 teaspoon ginger. Boil the molasses 5 minutes. Remove from the fire and

Homeseekers' Fares
FROM TORONTO

To Winnipeg and Return.....	\$35.00
To Regina and Return.....	38.75
To Saskatoon and Return.....	39.75
To Edmonton and Calgary and Return....	43.00

EVERY MONDAY TO OCTOBER 30TH
Proportionate Fares from and to other Points
ELECTRIC LIGHTED TOURIST CARS

For our Booklet, "Homeseekers' and Settlers' Guide," tickets and information, apply to nearest Canadian Northern Agent, or write to
R. L. Fairbairn, General Passenger Agent, 68 King Street E., Toronto, Ont.

ONTARIO LADIES' COLLEGE
and Conservatory of Music and Art, Whitby, Ont.
A SCHOOL OF IDEALS AND AN IDEAL SCHOOL FOR GIRLS
Healthful, picturesque location, with the outdoor advantages of the country as well as the cultural influence of Toronto, which is only 30 miles away.
Academic courses from Preparatory work to Junior Matriculation, Teacher's Certificates and First Year University; Music, Art, Oratory, Domestic Science, Commercial Work, Physical Training by means of an unusually well equipped gymnasium, large swimming pool and systematized play.
COLLEGE RE-OPENS SEPTEMBER 12th, 1916
FOR CALENDAR WRITE REV. F. L. FAREWELL, B. A., PRINCIPAL

add soda, butter and ginger. When cooled a little stir in the flour until stiff enough to roll, then roll very thin. Cut out and bake in a hot oven being careful not to burn. If the oven gets very hot at the bottom bake the snaps on an inverted tin.

Peach Custard.—Arrange alternate layers of stale cake and sections of peaches, raw or canned, in a glass dish, and pour over hot boiled custard. Serve cold.

Peach Jam.—Pare and quarter the peaches, cook till tender and mash. Allow 3/4 lb. sugar and 1 cup water to each lb. fruit. Cook, stirring constantly, for 15 or 20 minutes.

Baked Peaches.—Peel, cut in half and remove stones of 6 peaches. Place in a shallow pan. Fill each cavity with 1 teaspoon sugar, 1/2 teaspoon butter, a few drops of lemon juice and a slight grating of nutmeg. Bake 20 minutes and serve on buttered toast.

Cantaloupe Salad.—Cut the edible portion of the melon into small cubes. Mix together 1/2 cup sugar and a scant teaspoon of cinnamon; sprinkle this over 1 quart of melon, toss together, put back in the shell and serve cold.

Plum salad.—Scald the plums, remove skins and put on ice to chill. Open the plums and remove stone, replacing it with half of an English walnut or an almond. Arrange on lettuce and serve with French Dressing.

Plum Jelly.—Cook plums to a pulp and drain. Measure the juice, add pound for pound of hot sugar, and boil 20 minutes.

Floating Island.—1 quart rich sweet milk, 4 eggs, 1 cup sugar, 1 teaspoon cornstarch, 1 teaspoon vanilla, pinch of salt. Whip the whites of the eggs stiff. Put the milk over the fire and when almost boiling drop the beaten whites by spoonfuls into it and leave a few minutes to cook. With a skimmer remove these "islands" to a plate. Beat the yolks of the eggs with the sugar, salt and cornstarch, and stir into the milk until it thickens a little and cooks. Flavor and cool. Serve in a glass dish with the "islands" on top.

Coffee Jelly.—1 small box of gelatine, 1 pint strong coffee, 1 cup sugar, 1 scant quart boiling water, vanilla to flavor. Soak the gelatine in cold water for 15 minutes. Stir into the hot coffee and add sugar, salt and water, then the vanilla. Pour into a mould and set away to cool. Serve with sweetened cream. Better make the day before using.

The Scrap Bag.

To Lengthen the Life of a Broom.

A broom will last much longer if dipped for a minute or two in a pail of boiling suds, once a week.

To Clean Nickel.

To clean nickel stove trimmings rub with kerosene and whiting, and polish with a dry cloth.

To Keep Salt Dry.

Put a little cornstarch in salt shakers. This will prevent the salt from becoming too moist to shake out.

Baking Cup Custards.

Set them into a pan of hot water and put in the oven. When you remove them from the oven set them at once in a pan of cold water to prevent longer cooking, which will harden the custard.

To Iron Embroidery.

Place the embroidery right side down on a pad of soft flannel or Turkish towel and iron.

A Drawer that Sticks.

Should a dresser drawer not slip in and out easily rub the unvarnished edges with paraffin, wax or soap. The same treatment may be given to the running gear of an extension table.

Value of Gelatine.

It was thought for a while that gelatine was of no importance as a food. Recent investigation has discovered that it is of great value, especially when used in conjunction with albuminous food—as in egg custards

stiffened with gelatine, e. g. Russian Cream. Less fat is required when it is used in the diet.

Some Beauty Hints.

To Improve the Eyebrows.—When the eyebrows are thick and bushy, brush and pinch them frequently into shape. When they are thin apply crude petroleum or petroleum jelly every night.

Sound Teeth.—To prevent decay and pyorrhea (receding gums, developing into ulcers at the roots of the teeth) it is absolutely necessary that the teeth be kept perfectly clean from babyhood upward. They should be brushed every morning and every night, also after each meal, dental floss being used to keep the crevices between clear. Use a good antiseptic paste or powder at least every night and salt—or salty water if the enamel is not hard—at other times. In addition a reliable dentist should examine the teeth once a year, or more frequently, if necessary; some teeth require dental care every three or four months. It is worth while to take care of one's teeth; health, as well as a pleasing appearance and clear speech, depends upon it.

Violet Cold Cream.—Mix together over warm water: 90 grains white wax; 90 grains spermaceti; 1 oz. sweet almond oil; 1 oz. rose water; 68 drops extract of violets.

The Beaver Circle

A Red Rose Tree.

[A story for girls. By Fanny Kemble Johnson, in Youth's Companion.]

It grew very innocently out in the side yard, that tree, near the wicket gate that opened into the little creek meadow.

You were inclined to praise it for its particularly large and perfect flowers, that glowed unwithered for many days longer than their fragile sisters, the tearoses. Yet it was to work much mischief before being revealed as a tree of the cunningest double-dealing.

All that May morning Elvira had been plaiting palmetto braid out under the willows of the meadow, and thinking, thinking how she should trim the hat into which she meant to sew the braid.

The cannon at Richmond and Petersburg might shake the earth. Every man between sixteen and sixty might go marching away from Liberty; but war or no war, girl nature remained pretty much the same, and girls must still be tricked out newly with the world of springtime.

This was a difficult matter to compass, you may be sure, in Virginia in the springtimes of '63 and '64, but Elvira had been unusually fortunate. She had been able to make herself a dress entirely suitable to her seventeen years out of a set of white dimity bed curtains covered with a pattern of little scarlet rosebuds.

Elvira had golden-brown, smiling eyes, and red-brown, smoothly shining hair, and a rosy complexion. She could have found nothing more becoming for a dress than that white dimity covered with little scarlet rosebuds.

But a dress is not everything. You can make it long to hide knitted cotton stockings, and full and flowing to cover home-made shoes, but you cannot arrange it to screen deficiencies in head-gear.

Now a hat, pure and simple, was easy enough to manage. The palmetto had come from a friend farther south. The village milliner had taught Elvira the arts of plaiting and sewing braid, but there was nothing, nothing at all to trim this hat with after it had been plaited and sewed.

Elvira rolled up her yards of complicated palmetto braid and turned to go home through the wicket gate. It was then that the rose-tree saw its chance to whisper in her ear. It detained her by catching at her copper-brown braids with a dozen tiny green thorns. She reached up to free herself, and her eyes fell on the perfect buds of the red rose-tree. In a few days they would be in every stage of a beautiful unfolding.

"Why not?" whispered the rose-tree.

"Why not what?" asked Elvira, artlessly.

"Use my flowers?" murmured the rose-tree.

"Oh, oh!" cried Elvira. Mischief lighted her golden-brown eyes, and made a dimple at the corner of her mouth.

She flew to the house, gathered together her sewing things, and hastened down the village street to Miss Molly's.

The small shop was scantily stocked that spring of '64. Miss Molly's trade was a making-over trade almost altogether. To renovate old ribbons and lace rosettes, to recurl a feather or redye a flower or bleach a sunburned old straw—to this had Miss Molly come, she of the deft fingers and sure eye for effect.

She brightened as Elvira ran in. It was a pleasure to see something fresh, if only a girl's face. She grew nearly animated as the braid took shape; but when she held the completed hat on her twirling finger-tips, the cloud descended again.

"But, dear me, you've nothing new to put on it, child."

"What ought I to have?" asked Elvira.

"Well, roses," said Miss Molly. "Red, of course, for you."

Elvira laughed. "I've some that might do."

"I hate to put old flowers on a new hat," said Miss Molly. She laid the shape down as if she had lost interest in it; but in a moment she began to rummage in a drawer. She brought out a length of tulle.

"Something like this would do better," she said, in a half-discouraged way.

"See, caught round loosely like this."

Elvira had a vision of her roses half-veiled in the thin silvery tissue.

"I'd like that, too," she exclaimed, "if you'll let me plait you some braid for it, Miss Molly!"

That agreed on, Elvira bore off the hat and the tulle, put them safely away in her wardrobe, and hurried to her daily tryst with her very best friend in all Liberty. Their meeting-place was a bench under an old apple-tree that had shouldered aside the fence dividing two orchards. The gap had been there for a long time now. As Elvira hastened down the path, she intended to tell Alice about everything, hat, tulle, red-rose scheme and all; but when she caught sight of Alice's soft little face bent beneath a shadow of fair, waving hair, she changed her mind. Girls are curious as to what other girls are going to wear. Anybody could get anything out of Alice, bless her!

But Alice was too full of her own thoughts that morning to be inquisitive about Elvira's. She had brought her hat—Elvira had made it for her, too, before touching her own—to show.

Alice had shirred a pale blue silk shoulder scarf of her mother's round the low crown; the heavy fringed ends drooped gracefully over her looped-up plaits. Nothing could have been more maidenly, more becoming. The blue of the scarf matched her eyes, the droop of the hat brim her natural pose. Aunt Alice was making her a new white dress out of the tamboured parlor window curtains. Her mother had given her the old clover-leaf table-cloth for a new white petticoat to wear with the dress. Both the girls laughed over that.

"I wonder what it will seem like to have really new things again?" said Alice, relapsing into pensiveness.

"Oh," cried Elvira, "it wouldn't be half so interesting!"

By Sunday the rose-tree had beautiful blossoms, with deep golden centers and thick velvet petals of a wonderful hue.

Elvira ran out before breakfast to gather the half-dozen most beautiful—one full rose, two almost full, one half-unfolded bud, two unfolded, and a few sprays of green foliage. She wound the stems carefully with wet cotton, and then deftly inserted these stems into a couple of tiny vials, which she fastened firmly to the hat. Thus there would be small chance of those impostors of roses betraying their true origin, even during old Doctor White's longest sermon. The tulle, aided by carefully disposed rose foliage, concealed the two tiny vials.

Elvira deceived her own unsuspecting, half-invalid mother with those roses. That gentle lady eyed them without the faintest idea that they were not some old ones that she had worn on a black velvet bonnet years before.

"They do very well under the tulle," she commented. She was much more occupied with her admiration for Elvira's beautiful vivid young face.

"Do I look pretty well, mother?" asked Elvira.

"You look very well indeed, dear. That dimity made up better than I thought it would. What has Alice for to-day?"



Milk Wanted

Wanted at once, 100 permanent shippers of whole milk. Must be within easy shipping distance of Toronto.

PRICE'S DAIRY, Toronto



Before Investing

You should see that your judgment regarding the security is backed by facts. According to Canadian Government Statistics, never a Dollar has been lost in Canadian

Mortgage Corporation Debentures

The Debentures of the Standard Reliance Mortgage Corporation yield 5% interest payable half yearly. One thousand dollars invested in Standard Reliance Mortgage Debentures at 5% (compounded) for 5 years amounts to \$1280.28. A gain of \$280 or 28%.

Invest your surplus funds in Mortgage Debentures. No worry—No trouble—Absolute safety.

4% allowed on Savings deposits. Subject to cheque withdrawal.

An interesting booklet about Profits from Savings, which gives some very valuable financial advice, will be sent free on request. Write for it today. Address Dept.: 9



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

Branches: Ayr, Brockville, Chatham, Elmira, New Hamburg

AGRICULTURAL LIME

From the celebrated Beachville Quarries. Highest testing and purest lime in Canada. Why pay \$20 to \$35 per ton for your fall wheat fertilizer when we can give Ontario farmers the highest testing Phosphate and Lime ingredients to make two tons for \$20, analyzing 14.87% Phosphoric Acid and 50% Lime? Progressive farmers by thousands are using these high-grade materials for profitable, permanent agriculture. No high-priced soil stimulants for them. Our traveller will call if you are interested. Agents wanted in unrepresented districts.

THE HENDERSON FARMERS' LIME & PHOSPHATE CO., Woodstock, Ont.

Take the hard work out of Washday

THIS MAXWELL "HOME" WASHER takes all the back-breaking work out of washing. Just put the clothes in. The washer does the work—easier and better—in less than half the time. Delicate fabrics are washed and cleaned just as easily and well as blankets, table-cloths or sheets—no tearing or wearing.

Maxwell

"HOME" WASHER

—is light, noiseless and easy running. Enclosed gears make it safe in operation. The "springs" in the lid make the cover lift up easily. Constructed of best quality Cypress, and handsomely finished.

Insist on seeing this Maxwell "Home" Washer at your Dealer's, or write to us.

MAXWELL LIMITED
St. Mary's, Ont.
Dept. A



Gurney-Oxford GOLDEN NUGGET

\$34.25 Freight paid as far West as Ft. William 100 days trial for satisfaction.

Steel range value possible only from the largest makers of stoves, furnaces, etc. in the Empire. Our famous divided flues, exclusive fire-box, scientific oven make it a splendid cooker on very little fuel.

Complete with six 9" covers—20' oven, right hand reservoir, warming closet, ruggedly strong, weight 340 lbs. Put one in your kitchen and enjoy real comfort.



Catalogue with Prices—**FREE**

Our new low factory-fixed prices save you money. Send for "The Stove Problem Solved," a splendid guide to stove buying, shows hundreds of styles and sizes of ranges, heaters, feeders, etc. Write to-day for it.



THE GURNEY FOUNDRY CO. LIMITED
Dept. 823
Montreal Hamilton Toronto Winnipeg Calgary Vancouver

CALDWELL'S DAIRY MEAL

A milk producer

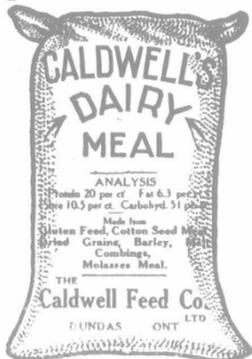
It supplies not only the protein, but the other necessary ingredients required—in a balanced ration—for high milk production.

Palatable, Nutritious

Caldwell's Dairy Meal is not only balanced, but easily digested and assimilated. It contains a variety of pure high-class material, including our Cane Molasses Meal.

Analysis—Protein 20%, Fat 6.3%, Fibre 10%

Secure Caldwell's Dairy Meal at your feed store, or write us, and we will supply you promptly. Booklet and prices on request.



THE CALDWELL FEED & CEREAL CO., LIMITED
Dundas, Ontario

"She trimmed her hat with her mother's blue silk scarf, and her aunt made her a lovely dress out of the parlor curtains." Elvira laughed, but her mother drew one of those long, sighing breaths that made truly grown-up people such dismal companions in war-time days. They were always sighing, even when, like her mother, they had no masculine relatives closer than a second cousin of whom to get bad news.

Elvira knew that war is a dreadful thing. She used to think about it sometimes in the night, after the report of a big battle had come and the name of some girl friend's father or brother had been on the list killed. But in the intervals between the big battles and the neighborhood tragedies her youth rose up and went its normal way. So when her mother drew that long, sighing breath, Elvira felt a pang of vexation, which she strove to conceal even from herself by an extra loving hug and kiss before she went to join Alice at the apple-tree.

Alice, a blue-and-white-lady girl, out of a Godey's Lady's Book, clasped her soft, slender hands when she saw Elvira, and uttered a little cry of pure delight over her radiant friend.

"And the roses!" she cried. "O Elvira, where did you get the roses?"

Elvira's eyes twinkled teasingly. "That's a secret."

"From me? O Elvie!"

"I'll tell you some day, but it's a secret just now. Do you mind?"

"No," said Alice, "not a bit." But her tone held the tiniest reserve.

She kept stealing glances at those glowing tissue-veiled roses, while they went along the street together. She never wore any shade of red herself, but she could not help feeling a little hurt because Elvira had not offered to share the roses, or the chance of getting them, with her.

Here you may see the beginning of the mischief wrought by that wicked rose-tree; for of course the suspicion that popped into Alice's fair little head was the quite pardonable one that the roses, and goodness knew what else, had been smuggled through the lines; and along with this suspicion came the equally natural grievance that Elvira and her mother had selfishly kept to themselves some splendid chance of getting new things.

No one now is expected to understand the seriousness of this offense against neighborliness; but in those days, when such chances offered, you were expected to share them with your friends, and if you did not, they would soon show what they thought of you.

Elvira, as she went up the aisle, preened herself as prettily and unconsciously as a pigeon. She was young and lovely and becomingly dressed, and she felt so contented and happy that she made the brightest spot in all the dull old church.

After the service the other girls clustered about Alice and Elvira, examining, exclaiming. They knew all about Alice's hat and dress, for every one had seen the blue scarf and the parlor window curtain; they knew, too, the genesis of Elvira's flowered dimity, but the roses were undeniably new. They had not been dyed over or trimmed off, or refurbished in any way whatever. The roses were new. Where did Elvira get the roses?

Elvira's eyes sparkled mischievously. "It's a secret," she said, over and over again. "I'll tell you some day, but it's a secret now."

She and Alice got away together at last, and everyone of those girls went home so perfectly certain that Elvira was decked out in selfishly smuggled roses that they told it as a trouble-making fact to inflammable elders, who, naturally enough, desired their girls to look as fresh and pretty as anyone else's girl.

So a lot of mischief was caused by a rose-tree experienced enough to have known better—a vain old rose-tree that had merely wished to show off its roses on Elvira's beautiful young head, regardless of consequences. There were to be plenty of consequences.

Judge Cary's wife was fairer than most, and gave Elvira the benefit of a doubt. "Miss Molly," she said, "have you any more of those lovely roses? I do hope you saved me some for Julie." "What roses?" snapped Miss Molly. Millinery was a sore subject in the make-over days.

"Why, like those you trimmed Elvira Benton's hat with."

"My goodness!" said Miss Molly, contentiously. "I haven't had a flower you could call lovely in the shop for a year, and I never trimmed Elvira's hat. She told me she had some roses she might use on it—old ones, I understood."

"No," said Mrs. Cary, "they are perfectly fresh, new ones. They look like fine French flowers to me."

"Well, she didn't get them here," said Miss Molly, with a satiric glance at her dingy boxes and empty show-case.

Mrs. Cary, having been generous, felt herself justified after this interview in becoming bitter.

A few weeks later Elvira said to her mother, "Isn't it strange that none of the girls have been over to see me? I don't mean Alice."

"It's housecleaning time," said Mrs. Benton. "Everyone's busy. We are." "I never knew of their mothers being busy keeping Julie and Bella at home," said Elvira.

"Don't say sharp things, Elvie." "It's odd," persisted Elvira, "that none of them have run in."

She mentioned it to Alice that evening. Alice was loyal to Elvira. The ugly suspicion had popped into her head, but she had faithfully tried to turn it out. She would have entirely succeeded in this endeavor had it not been for the other girls. Housecleaning had not kept them from visiting Alice. They came to see her oftener than usual, and did their best to make Alice think as they did.

"Elvie wouldn't do anything mean," said Alice, stubbornly. She clung to this formula.

But she hardly knew what to say to an Elvira seemingly so unconscious of having given any cause for offense. She hesitated, stammered. "It must have just happened so, Elvie," she said, at last.

"Alice is keeping something from me," said Elvira to herself; but she saw that Alice was distressed, and she did not question her further.

Another week, and Elvira's pride was up. She could not doubt now that the girls were avoiding her intentionally. She went to her mother again. Mrs. Benton's sigh lasted longer than usual.

"Perhaps it's your Great-Uncle Andrew," she said. "I never told you, Elvie, but when he came home from England this spring he sided with the North." The words were whispered. Elvira gazed at her mother in wide-eyed horror. Uncle Andrew was the rich member of the connection. Everyone knew of his great business houses in Charleston and London.

"I suppose," said Elvira, bitterly, "that he thinks more of his money than anything else."

"O Elvie," protested her mother, "I can't think one of your dear father's family could sink so low as that. No, we must try to think that your Uncle Andrew acted according to his convictions."

"Still," said Elvira, "I can't see why that should make our friends treat us coldly. We haven't sided with the North."

"It's just the bitterness everywhere, I suppose. Now that the South is so unfortunate, such things cause more hard feeling. But I dare say you've imagined a lot of it, Elvie. Why not ask Alice?"

"That's exactly it, mother. I know Alice is keeping something from me. You can tell in a minute, because it's so hard for her to keep a secret."

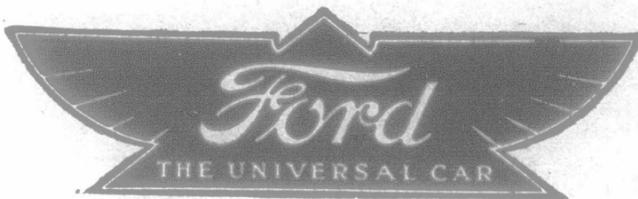
"Well, dear," said her mother, vaguely. She crocheted a while, then stopped and asked, "What shall you do about your birthday? It comes Saturday, you know."

Elvira lifted her head proudly. "I shall do just as I've always done. If the girls don't come, why, that settles it. I can get along without them."

But she turned and left the room to hide her brimming eyes.

She went out into the garden, and saw through her tears that the strawberries were as big and sweet and splendid as usual. The sight of them cheered her a little. She began to think that perhaps she had imagined much of the coldness and avoidance. She knew that she was rather quick to take offense; it is a fault that often goes with golden-brown eyes and red-brown hair.

She sent out the notes of invitation to the half-dozen girls whom she had always thought of as her best friends,



New Prices August 1st, 1916

The following prices for Ford cars will be effective on and after August 1st, 1916:

Chassis	\$450 ⁰⁰
Runabout	475 ⁰⁰
Touring Car	495 ⁰⁰
Coupelet	695 ⁰⁰
Town Car	780 ⁰⁰
Sedan	890 ⁰⁰

f. o. b. Ford, Ontario.

These prices are positively guaranteed against any reduction before August 1st, 1917, but there is no guarantee against an advance in price at any time.

Ford Motor Company of Canada Limited

Ford, Ontario

next to Alice, and spent Friday making and frosting a host of little cakes for the birthday feast.

Early Saturday afternoon Alice came over, and the two girls set the table, which was a large flat rock under a group of old willows in the little meadow. The white table-cloth hung to the grasses on which the girls were to sit, picnic fashion, and at each girl's place was a great grape leaf piled with uncapped strawberries. These were also heaped in baskets of vine leaves woven together and placed here and there on the table, alternating with piles of the sparkling heart-shaped cakes. Tall water-bottles were filled with a ruby liquid,—no more than raspberry sirup, however,—which was to be poured into the tiny wine-glasses in gay pretense. As a finishing touch, Elvira had put at each girl's place a lovely scarlet rose from the tree at the wicket gate.

"O Elvie," cried Alice, clasping her hands in her favorite gesture, "isn't it charming? And aren't you glad it's such a perfect day?" She ran to kiss Elvira.

Elvira held her off by her slender shoulders. "Allie," she said, "are the girls coming?"

Alice could not help looking confused. "Why, of course, Elvie!" she faltered. "Julie told me she was."

Elvira accepted her kiss soberly. "If any girl does not come," she said, "I'll never speak to her again."

Alice felt an immense relief when every single one of those girls filed through the wicket gate and Elvira went to meet them in her gayest and sweetest manner. The idea of any two of the girls never speaking to each other again had filled Alice's gentle heart with the deepest dismay.

Different reasons had induced the

girls to come. Time, as is his friendly habit, had lessened the supposed offense in their minds, too young yet to be experienced in hoarding hard feelings, if one excepts Julie's, which were somewhat precocious in this respect. Probably, too, the assertion of a very natural habit of fondness for Elvira had a great deal to do with bringing them. Also, they were still young enough to have a pardonable predilection for frosted cakes and big, sweet strawberries, which seemed to grow so big and sweet only in Mrs. Benton's garden, and in honor of Elvira's birthday.

Everything, everyone, was the same, thought Alice in exultation, as she watched the girls grouped about the table in their old white dresses, their pretty hair uncovered and at the mercy of the soft June wind. She drew a contented breath, and was giving herself up to complete enjoyment, when Julie Cary

attracted her attention. You could always count on Julie to say or do some little jarring thing, thought Alice, in vexation.

The other girls had picked up their roses and fastened them in hair or bodice, but Julie was looking at her flower so queerly that Elvira noticed it.

"Isn't your rose a good one, Julie?" she asked.

"Oh, yes," said Julie, and she stuck it carelessly in her dark curls. "I was only thinking how exactly it is like the roses on your new hat, Elvira."

"How perfectly horrid of Julie!" thought every other girl at the table; but Elvira only laughed a little.

"Why, so it is, Julie," she agreed. Her voice and manner were devoid of any trace of a suspicion that Julie's speech had an unkind significance; and indeed, she had no such suspicion at that moment. Only after she answered

Cost and Service

The two factors considered before a purchase is made.

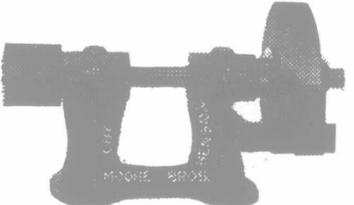
Steel Truss Barns

measure up to every requirement. They are as sturdy as a skyscraper. They have no cross-beams to hinder unloading or mowing away. They are fire and lightning-proof. They have metal clad, roller doors, lift roof-lights, sliding side windows and "Acorn" ventilators. The cost will compare favorably with a wood frame barn.

Send for a copy of new book, "The Steel Truss Barn."

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

THE "LITTLE GIANT" EMERY GRINDER



Weight, 33 pounds. Stone, 7-in. diam., 1 1/2-in. face. From our agent or prepaid from works. **\$7.00**
MOORE BROS., HENSALL, ONT.

Patented Jan. 25th, 1916. No. 167260



Lying Grain Lifters

Farmers, get all your grain by using a set of to attach to your binder. A post card will bring you full information and prices. Write to-day.
DICK AGRICULTURE WORKS
Bolton, Ontario

YOU CAN ASSURE YOUR FAMILY A MONTHLY INCOME FOR LIFE

or assure yourself an income during your old age, by means of an **Imperial Monthly Income Policy**. Write for particulars now and mention the Farmer's Advocate. Address: **IMPERIAL LIFE ASSURANCE CO., of Canada.** Head Office: **TORONTO**

Any Money Invested Now in SASKATCHEWAN LAND

will bring handsome returns at close of war or sooner. Crops never better; self-evident bargains in land offered. We show it free of charge. Buy ticket to Canora, Sask., on C.N.R.
Scandinavian Canadian Land Co.
Canora, Sask.

95 AMERICAN CREAM SEPARATOR
Upward
\$15
Sent on Trial. Fully Guaranteed. Easy running, easily cleaned. Skins warm or cold milk. Bowl a sanitary marvel. Whether dairy or household use. Address: **AMERICAN SEPARATOR CO., Bainbridge, N.Y.** Box 5200

CHURCH BELLS CHIMES AND PEALS
MEMORIAL BELLS A SPECIALTY
FULLY WARRANTED
McSHANE BELL FOUNDRY CO.,
BALTIMORE, Md., U. S. A.
Chicago Office: Room 64, 154 W. Randolph St.
Established 1854

Julie did she realize that the other girls had glanced at each other oddly, and that Alice had looked troubled. Elvira had her share of intuition. Suddenly everything fell into place, and the puzzle was solved. So that was what the girls thought of her! The bright color burned in her cheeks, but she was gayer than ever during the remainder of the little feast.

When the time came for the party to disperse, she said, "Come up to my room, please, before you go, girls."

The girls felt that there was storm in the air. They followed her up the stairs curiously but uneasily.

Elvira flung open her door and went to her wardrobe. She took out the hat, which still had last Sunday's withered roses on it. She had felt too dull and heartsick to take them off as usual when she came home.

"I'll show you the reason your rose looked like these, Julie," said Elvira, coldly. "I just meant to play a little trick on you girls. I never imagined what you were thinking until a moment ago."

She stood silent, unfastening the dead roses. "See, they came off the same bush," she said at last, holding them out and tossing the hat on her bed. "You thought we'd been getting things through the lines, didn't you? And you thought we were selfish and mean and kept such chances to ourselves?"

She glanced from one to the other with accusing eyes.

"O girls," she cried, "girls that I've grown up with, how could you?"

Most unexpectedly she dropped down on the foot of the bed and hid her scornful face in her hands. Elvira was crying.

The next moment you could not see her for girls, for girls who were ashamed and sorry, for girls who kissed and besought her, for girls who were going to cry, or die, if she did not forgive them.

Elvira lifted a laughing, tearful, no longer scornful face.

"Alice never believed anything mean of me," said Elvira. She reached out her hand to Alice, who ran to take it. Still holding to Alice, she looked round the contrite group. "Oh, well," she said, generously, "they did look like French flowers under the tulles, didn't they, Julie?"

When the girls had gone, Elvira went back to the meadow to bring in the table-cloth, and again at the little gate the green thorns pricked at her bright braids.

Elvira stood still and looked at the rose-tree. "I've a great mind," she said out loud to the tree, "to get Uncle Dan to cut you down for causing me all this trouble, and I don't want your roses."

Elvira walked pensively to church the next morning, her lovely face thoughtful beneath a palmetto hat trimmed solely with a length of silvery tulle. She had abandoned even the most innocent of pretenses, had Elvira.

Current Events.

The great drive of the Allies which began on July 1st continues without cessation, the only point where it has slackened in the least being at Verdun where the attacks of the Germans have

weakened, probably because troops have been taken away to oppose the British advance farther to the north. During the week Gen. Haig reported the taking of the village of Pozieres by the Australians, also the taking by English and Canadian forces of the village of Longueval and the Delville Wood. In Pozieres every house had been transformed into a fortress sheltering machine guns.

On July 28th the Russians under Gen. Sakharoff occupied Brody, an important railroad junction north-east of Lemberg. About the same time the division under Gen. Kaledines won an important victory near Lutsk.

It appears, also, that the drive of the Allies in the Balkans has begun, the Serbs winning the first laurels by driving the Bulgars from several important positions east of the Vardar Valley.

From the vicinity of the Tigris comes the news that on July 24th the forces of Grand Duke Nicholas captured the fortified Turkish stronghold of Erzingan in Central Armenia, his advance now being towards Sivas. From the difficult fighting ground where the Italians meet the Austrians alone comes news of successful resistance of the foe, whose heavy guns are holding their own at some points, yet even from Italy, latest reports bring news of gains in the Dolomites. Upon the whole, on every part of the war-front, the war goes well for the Allies, although everywhere the toll of life is terrible. Nearly 2,000,000 men are now fighting almost night and day.

Twelve cases of infantile paralysis have been discovered in Ontario.

Fires in Northern Ontario have caused much destruction of property and loss of life. Cochrane, Matheson, and some smaller places, have been practically destroyed.

Our Serial Story

The Road of Living Men.

BY WILL LEVINGTON COMFORT.
Author of "Down Among Men," "Fate Knocks at the Door," "Red Fleece," "Routledge Rides Alone," "Midstream," "Child and Country," etc.
Serial Rights Reserved.
III.
6

"I don't think I told you," Romany remarked as the flying courier neared, "that Santell is second in command to Viringhy."

The mule—I learned this gray brute afterward—had gained full momentum, and had lost the "feel" of the bit. It was like trying to stop a locomotive on a greased down-grade. There was a laugh in the spectacle—frail feathery Santell, braced back and sawing, his woman's jaw set, and his slender arms, bare to the white of the arm-pits. He got his mount down to a turning, a hundred yards past. Huntoon waited patiently.

The curses in the air as Santell spurred his beast back, were startling as foulness in the mouth of a child. I found myself thinking he couldn't comprehend what he said. A dissipated, unshaven, dare devil face—but feminine—a high queer voice, and a fresh red mouth. The message he brought was but a thin shaving of substance in a thick layer of blasphemy.

"We sighted a steamer at day-break. Mile off shore. Orion started attack ten minutes ago. We can hold 'em off—"

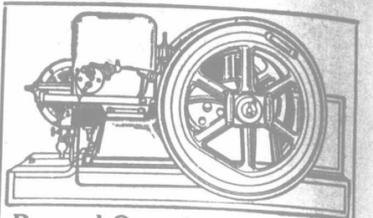
Romany checked him. We four moved on at a trot.

I was waiting to speak to Santell. He saw me, his mouth twitched, and he looked miserable. Presently he turned to Huntoon.

"Good mule—four-mile mule," he confided. "Wound up up for the whole run to the valley, you see. Hard to stop her under a mule, when she gets going like that. You have to talk to her—"

"I could see she was beginning to listen, as she went by—ears turned right back toward you—" Huntoon observed.

Some novel ignition had fired the latter's temperament. Romany glanced at him from time to time. The day grew hotter as we neared the sea at a fast trot. The fierce torrid light was thrown from behind. Through the rift of the gorge at last, I



Beyond Question, the leader among engines

Yet its price is only \$42.50

Get one of these "little wonder" engines on our try-me-a-month plan—and keep track of the way it saves you money.
THE PAGE ENGINE
in this size is almost unbelievably economical; uses about 2c. worth of fuel per hour. Write for particulars of this and the larger Page engines, so much prized by farm owners for the heavier-work of the farm.

1 1/2 h.p.	\$49.00
3 h.p.	55.00
5 h.p.	140.00
6 h.p.	174.00

The Page Wire Fence Company, Limited, 1135 King Street West, Toronto

CREAM WANTED

We think we have the longest experience. We try to give the best service. We need your cream and will make it "worth your while" to ship to us. A card brings particulars.

Toronto Creamery Co., Ltd.
TORONTO

CREAM

Where are you shipping now? And what are you getting for your cream? We want more individual shippers and more men to gather cream for us.

Write for our proposition.
Silverwoods Limited
LONDON, ONTARIO

CREAM WANTED

Ship your cream to us. We pay all express charges. We supply cans. We remit weekly. We guarantee highest market price.

Ontario Creameries Limited
London, Ont.

DO YOU NEED FURNITURE?

Write for our large photo-illustrated Catalogue No. 7—it's free to you.

THE ADAMS FURNITURE CO., Limited
Toronto, Ontario

"1900" Gravity Washer

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

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

SHERLOCK-MANNING

20th Century Piano
you get
"Canada's Biggest Piano Value"
and at the same time save fully \$100. Write Dept. 18 for Catalogue "T."
THE SHERLOCK-MANNING PIANO CO.
London, Canada
(No street address necessary)

WILLIAMS

The Perfect Piano for the Home
NEW SCALE
The choice of the World's Great Artists
THE WILLIAMS PIANO CO.
Oshawa, Ontario

DOUGLAS' EGYPTIAN LINIMENT

Stops Bleeding at once.
Removes all Inflammation.
Prevents Blood Poisoning.
A Speedy Cure for Thrush.

For Sale Everywhere.
Free Sample on Request.

DOUGLAS & COMPANY MFRS.,
NAPANEE, ONTARIO

R. M. S. P.

FORTNIGHTLY SAILINGS
by
Twin-Screw Mail Steamers
FROM
ST. JOHN (N.S.)
AND
HALIFAX (N.S.)
TO THE
WEST INDIES

Excellent Accommodation for 1st, 2nd and 3rd Class Passengers
SPECIAL FACILITIES FOR TOURISTS

NEXT SAILING FROM HALIFAX:
R. M. S. P. "Chaleur"
August 11, 1916

APPLY TO
The Royal Mail Steam Packet Co.,
57-59, Granville St., HALIFAX (N.S.)
OR TO THE
Local TICKET AGENCIES.



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.

EXCEPTIONALLY HIGH-CLASS FOX-hound pups, ready for delivery. Clarence Brodie, Glanworth, Ont.

FARM FOR SALE.—FIRST CLASS DAIRY farm of 200 acres, ten miles from London. Apply box "N" Farmer's Advocate London Ont.

WANTED—ONTARIO FARM IN EXCHANGE for 480 acres in Weyburn district of Saskatchewan, 375 acres under plow, and fair buildings, 160 acres fenced. Ref. No. 555 when writing: Walch Land Co., Winnipeg, Canada.

WANTED—MARRIED MAN TO WORK ON dairy farm; strictly temperate and reliable. Free house, garden, etc. Apply, stating wages, to Griesbach Bros., Collingwood, Ont.

PATENTS AND LEGAL FETHERSTONHAUGH & CO., PATENTS Solicitors—The Old Established Firm, Head Office Royal Bank Building, Toronto, and 5 Elgin St., Ottawa, and other principal cities.

FARM HELP

We would recommend the farmers of the Province of Ontario requiring farm help to send their applications at once to the nearest officer in charge of their County Battalion, stating wages and length of time services required.

Hon. G. Howard Ferguson, Minister of Lands, Forests and Mines. H. A. Macdonell, Director of Colonization, Toronto.

Keep Your Live Stock Healthy

and in prime condition by supplementing the feed with

LINSEED OIL CAKE, "Maple Leaf" Brand

With a trial ton order, we will send you free, "The Veterinarian," a valuable book about the diseases of cattle.

The CANADA LINSEED OIL MILLS, Ltd.
Toronto and Montreal

Men's Clothing For Sale

Get your new suit from Catesby's, London, England, for half what you pay local tailor. Best materials, style, fit guaranteed, or money back. Write for free catalogue, self-measurement form and patterns. Address:

CATESBYS LIMITED, Canadian Office
119 West Wellington Street, Toronto
Mention "Farmer's Advocate"

saw the Pacific. The glare was blinding. Firing was steady ahead, but not thick. I wondered if Orion were trying to cut off the neck of the Headland.

I appeared to be the only member of the quartet who had a thought of the personal equation. Romany was reckoning with the end of the day and what it would bring. Huntoon was uplifted with strange animation at sound of the shots. Santell leaned forward on his gray mount and seemed to regard us bashfully. . . . The truth is I was gun shy from the yellow river.

There is a force in the riding of four men into action—a sort of elemental driving energy enough to carry one forward, against disinclination far greater than mine. It must be so many times when men advance into action. With Huntoon it was different. He was shaky still; his canteen was full of water, and his head, of decent resolutions. Physically he was in the worst possible shape for a display of nerve; yet the firing worked upon him better than any alcohol. He loved it—that was it.

"I'm on parole to-day," he whispered. I laughed at him. . . . His talk grew unconnected:

"Services as usual in the settlement church to-night. . . . We must get back before sun-down. . . ."

I could see him urging the mule with his leg-muscles, although Romany's beast fixed the pace, and Huntoon's would have held it with a slack line.

"Sure—charge a nigger-works—that's what I do best," he laughed; and then added quietly with a glance at me: "But I'm a non-combatant to-day."

Over the last bend in the shelving trail our mules swung to the Causeway; and below on the terrible slope from the river to the Headland (behind the barb of the arrow-head, where Huntoon and I had climbed), I saw the white puffs of Orion's soldiers among the rocks. This narrow stretch of the trail, approaching the Headland from Tropicania, sagged enough to be exposed to fire from the opposite cliffs. Orion was sweeping the Causeway now from across the gorge, while he sent his forces in a charge up the slope.

I wish I could suggest the tremendous setting of this little drama. It was like the lofty places of Wagner's music in the immensity of it—gorge, headland, mountain and sea. . . . The shots from across and below came to my ears badly out of time and tune. The attack was half-hearted, it seemed to me, and the scorn of Huntoon was militant. . . . Orion found it difficult to drive his men up the half-nude slopes, under the leisurely fire of Viringhy above. I rather admired the men. Orion was not leading any of these charges in person; and it was he who had the fortune to win. I'd have needed a cell and a year to make Huntoon see this.

Already I heard the nasty sound of steel cutting the air, and was coughing from the dust, as the bullets splintered the rock. Romany bent forward, and spurred his mule to a gallop. Lean, gray and old, that profile, all but the eyes that flashed piercingly through the shade of his wide Peruvian hat.

The sound of a slug above my head was like a curse—a quick-growled curse, with a murderous force behind it. I dropped forward over the mule's bristles. Santell rode lightly, apparently giving no thought to the gathering fire that we drew; his lips parted, his black eyes filled with a softness I could never understand—bland, wide-open, calm, yet some hell was in them which I divined, though I could not utter. Huntoon was riding as if up and down in front of a red-hot battery, his face flushed with excitement—queer, humorous figures of speech dropping from his tongue. It was drink to him, and bread, too. And now, we four were half-way across the Causeway at a gallop, and the air was venomous with bullets. It seemed they marked me off as a knife-thrower outlines his accessory. . . . There was a cheer in the air, and Viringhy's soldiers were grinning around me, before I straightened up and reined. Looking back, I saw Romany and old Viringhy of the white moustache disappear in the latter's headquarters.

The steamer that had caused the attack was now a mile off shore, straight out, trailing her plume of jet, but making no change in course. Sentries were stationed at the point to report every movement of the trouble-making vessel. . . . The firing kept me restless. A

Twenty Years After

LOCK ahead twenty years; it seems a long period, but it swiftly passes when one is engaged with pressing duties.

An endowment policy in The Mutual Life of Canada, payable twenty years hence, seems at first thought a slow method of saving money.

But, should the assured die at any time during the twenty years, immediately the whole amount of the policy is available for his family.

On the other hand, should he live to the end of the twenty years, he himself receives the amount of the policy with accumulated profits.

The Mutual is paying from \$140.00 to \$150.00 at the end of the 20-year endowment term for every \$100.00 invested: you will be satisfied while the policy lasts and also when it matures "twenty years after" if it is a policy in The Mutual Life of Canada.

Is there a Mutual Policy in your Home?

The Mutual Life
Assurance Company of Canada
Waterloo, Ontario

80

1 Boy and 10 Hogs
MADE
\$350
AT OUR 1915 SHOW

The same chance for a bright boy at
The Seventh Annual
Toronto Fat Stock Show
Union Stock Yards, TORONTO
December 8th and 9th, 1916

Premium List with many new classes now ready.

C. F. TOPPING, Secretary
Union Stock Yards Toronto, Ontario

Many Thousand
Farm Laborers Wanted
FOR HARVESTING IN WESTERN CANADA

"Going Trip West" | "Return Trip East"
\$12.00 TO WINNIPEG | **\$18 from WINNIPEG**

GOING DATES

August 17th and 31st (From Toronto-Sudbury Line and East, but not including Smith's Falls or Renfrew, also from Main Line East of Sudbury to, but not including, North Bay.)

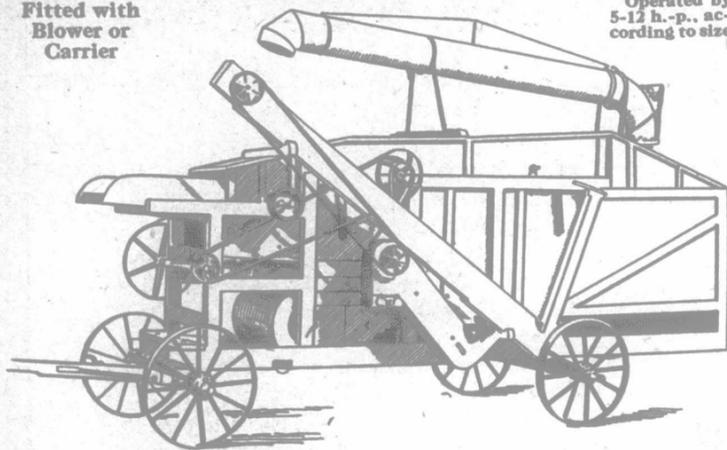
August 19 and September 2 (From Toronto also West and South thereof)

Further particulars from Canadian Pacific Ticket Agents, or W. B. Howard, District Passenger Agent, Toronto.

Lister Ideal Threshers

Fitted with Blower or Carrier

Operated by 5-12 h.-p., according to size



The Best Individual Outfit on the Market

Users say about it, that :

"We can thresh 1,000 bushels a day. I threshed 450 bushels in four hours. One must use your thresher to know it."

"Cleans the grain well, and the blower works fine."

"Threshes clean in any kind of grain."

WRITE FOR INFORMATION TO THRESHER DEPT.

R. A. Lister & Co., Limited, Toronto
Winnipeg Quebec St. John, N.B.



ALMA LADIES' COLLEGE
OPENS ITS THIRTY-SIXTH
YEAR ON SEPTEMBER
TWELFTH: NINETEEN
HUNDRED & SIXTEEN

For calendar and terms: R. I. Warner, M.A. D.D., Alma College, St. Thomas, Ont.

The Toronto Economy Silo

YOUR SILO must be air-tight, frost-proof and acid-proof. You can't make a good silo at home. The Toronto Economy Silo is made of 2 inch spruce, creosoted, double tongue and grooved, with steel splines in stave butts; Doors have beveled edges, with three sealing surfaces; silage pressure makes them air-tight. Get this Silo. Set it up yourself. Circular free.

WRITE us for our Silo Folder and Engine Book. We will tell you the modern way to Farm for Money.

ONTARIO WIND ENGINE & PUMP CO., Ltd.
93 ATLANTIC AVENUE, TORONTO
Branches:—Montreal, Winnipeg, Calgary, Regina.

Besides our Silo, we make Blowers, Feed Grinders, Tanks, Barn and House Water Systems, Litter and Feed Carriers. We completely equip your barn for efficient labor saving, dairy and feeding work.

Folder Free



Bales at Highest Speed—Lowest Cost

UNBEATABLE records for baling greatest amount of hay in the shortest amount of time and at lowest expense for power and crew being made constantly with

The Admiral Motor Hay Press—The Hay Press With the Hustle

Has the hurry built right into it. Simple as A.B.C. Free from needless parts. Smooth running—easy on the engine that runs it. Engine absolutely dependable, thoroughly tested for all conditions of field work. Plunger operates on the power which comes through a long lever working against the sharp grip behind the plunger head. Result, each stroke is powerful, with no back kick. Many exclusive features. A big money maker for the man who uses one. J.N. Inman & Sons, (Haybalers), Independence, Mo., say: "Bales 90 lb. bales in 65 minutes from windrow, and 70 lb. bales in 50 minutes from stack. Have made big money." Hundreds have had the same experience.



Admiral Hay Press Co., Box F Kansas City, Mo.

Pratts

Poultry and Animal Regulators

A remedy for every ailment. Write now for FREE advice and descriptive literature. Address: PRATT FOOD CO. OF CANADA, LTD. 686 Charemont St., Toronto

Harab-Davies Fertilizers

Yield Big Results

Write for Booklet.

THE ONTARIO FERTILIZERS, LTD. West Toronto

big gun crashed at intervals, followed always by a cheer from Romany's defenders.

At the door-way of Headquarters, a steel slug drove into the masonry a foot from my head, and filled my eyes with rock-dust. Wherever I moved along the lines, my presence appeared to be the signal for fresh animation among Orion's sharpshooters. I had little sympathy for Huntoon's ill-concealed pleasure in these activities. I liked not the fear of being cut off by a successful charge of the enemy up the slope. The Causeway, to me, was like a throat that was being strangled.

It was too hot for tobacco. There was a binding regulation on the drinking supply, and it actually appeared as if Viringhy's soldiers had to have permission every time they fired a shot. A pressure was brought to bear on this matter which filled me with a deep and morbid terror. It was a sure-thing sort of defense, a reliance almost entirely upon the position. One of two things was obvious: either Romany was excessively delicate about decreasing Orion's force, or else he thought more of Springfield and Remington cartridges than he did of nuggets from the Rio Calderon. The game was not my specialty. Nothing about it appealed to me as a pastime that I should seek with passion on a second occasion.

The big gun crashed again. Evidently, thought I, Romany has battery-fodder, other than rifle-cartridges this morning. The cheer died away—and was raised over more. I wondered what the big gun had struck this time. In any event, Orion wasn't stopped—for a cry began at one end of the slope, and sped like fire along his lines. I glanced out at sea and beheld the steamer. She had not turned in, but was straight off the Point. Obviously, this was Orion's cue for his charge.

Old Viringhy had shot a skirmish line out on the Causeway. The intrenchments that rimmed the Headland were manned; and queerly enough, a certain animation replenished me and eased the tension that had worn my nerves thin. I saw Orion's soldiers forming to charge—companies of his men queerly knotted, among the rocks below. Viringhy would centre his fire upon them; a few fallen would slow the charge, as if their bodies were tied to the others; another careful volley; and the knots gave way. This was the routine.

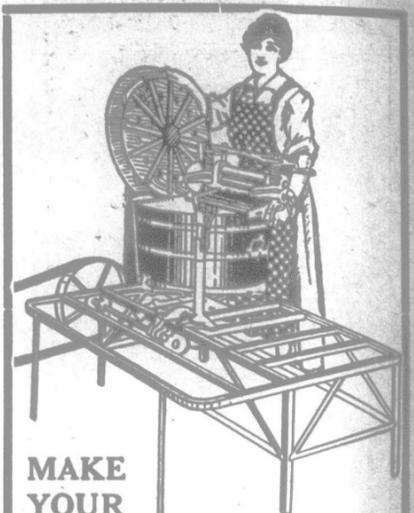
The main force of Orion's infantry held the opposite cliff and fired at the Causeway line and the exposed bodies in our intrenchments. . . . A sudden crash of the big gun at the left shook the very centres of my life. In a kind of fascination I had wandered close to the hooded part of the cliff where Romany's artillery had held forth all that day.

A strangely familiar smell was in the air. I was compelled by the idea of peering in upon that tireless, impregnable gunner under the hood of rock. Around the works I made my way. Romany's soldiers, hoarse with thirst, lay in the trenches. Their humor was dry and biting. They were attentive but not rushed. To save cartridges was the order and they chafed when opportunities came and went. None minded me, and I crawled along the edge to the crevasse where the gunner was stationed. And now the familiar odor moved my brain with boyhood memories, and the rock was drifted with burnt paper—a red and white litter and smudges of splintered wadding.

Just at this instant Santell corralled me roughly. His face was evil, as he commanded me back to Headquarters. But I had seen. In the ledge of rock with a sputtering fuse, set a giant fire-cracker—lodged in the crevasse where it would reverberate with compounded effect.

"My God," I muttered, "this is pure morality."

But I had not pleased Romany by my enterprise. Huntoon's every movement was followed by a sentry. . . . The routine of breaking Orion's charges continued; and yet the face of Romany was gray with anxiety, and often he stared back to the sea, where the steamer moved on almost imperceptibly, her smoke trailing off to the north. She was slow and heavily laden. . . . The Chief made no comment, as I followed Santell back. Viringhy hurried up to report some fresh pressure on the Causeway. Romany drew him into Headquarters. Huntoon happened to pass the door



MAKE YOUR ENGINE do the washing

Almost every farm household has its gasoline engine. One of the best uses you can put it to is connect it up with a

PAGE WASHER

\$32.50 delivered anywhere in Ontario

Here is a power washer that we are prepared to back against any other on the market. In strength, in simplicity, and in sheer ability to wash clothes clean, it just has no competitor. Will do the heaviest wash in less than an hour—that means about 2 cents worth of gasoline per week. Not only washes clothes clean, but wrings them dry too.

The Page Wire Fence Co., Limited
1143 King St. West, Toronto

Save a Team During Harvest—Run Your Binder with 2 horses and a Cushman Engine

Better than 4 horses without the engine. Team simply draws machine. Engine does all operating. Sickle never stops when bull wheel skids. Easily attached to any binder. 4-cyl. 4-H.P.



Weights Only 167 pounds

Quickly detached for any other farm power work. Delivers full 4 H.P. Speed changed while running. Has patented clutch pulley with sprocket for chain drive to double sprocket on binder. Schebler Carburetor. Also 2-cylinder 6-H.P. up to 20-H.P. heavy duty, light weight specialty farm engines. State size wanted.

CUSHMAN MOTOR WORKS OF CANADA, Ltd.
283 Princess St., Winnipeg, Canada

Farm Cushman The Original Under Engine

GRAND TRUNK RAILWAY SYSTEM

Attractive Trips

TO Muskoka Lakes Lake of Bays Georgian Bay Algonquin Park French River Kawartha Lakes Maganetawan River Temagami, etc.

Round trip tourist tickets now on sale from certain stations in Ontario at very low rates, with liberal stop-overs.

Muskoka Express

Leave Toronto 12.01 p.m. daily except Sunday, and 2.05 a.m. daily for Muskoka Wharf. Connections are made at Muskoka Wharf for Muskoka Lakes. Leave Toronto 10.15 a.m. daily except Sunday, and 2.05 a.m. daily for Huntsville, for points on Lake of Bays. Equipment the finest.

Full particulars on application to Agents

just as Viringhy rushed forth again; and the two collided. The old soldier snarled something in Spanish to the effect that passengers invariably were in the way—and never could do their dreaming at night.

"I thought I heard the dinner-gong, Colonel," Huntoon said scornfully.

And now Santell, striding jauntily ahead of me, began a report in his thin voice—but was silenced by Romany.

I remember thinking how definitely Huntoon and I had hampered the old Master. Most men would have had us in irons.

Just at this instant I saw a quick change in the back of Santell's neck—as if a blur of red had crossed my eyes. He had turned into Headquarters behind Romany. The boy's bare slim arms lifted, and he toppled over backward at my feet. . . . And now I was looking down at his face. His large eyes had darkened, some deep staring light far within, but all soft and expressionless about. The glare had softened. They roved to me—to Huntoon—to Romany—but could not hold, nor see.

There was a quiver of infinite pathos about the girl-mouth, and then I heard—directed to no one in particular—words which made me understand he was going out in the arms of his father.

Romany held the frail figure so—long after it had divided.

7

One thing was certain to me—Romany would not have asked us to ride to the Headland that day, if he had expected the fight. The slow steamer that caused it, had gone on about her business and Orion had withdrawn his lines, convinced at last that the ship had no cargo for Romany.

The old Master, Huntoon and I, were riding back toward the valley late in the afternoon. The former had not spoken since he waved an adios to Viringhy across the Causeway, a half-hour before. I alone knew how the death of Santell had struck him. Even Mary Romany couldn't know that. Her father, knew also that I had heard those last words, but not that I had looked under the hood of rock were the paper cannons were celebrated. Santell had not been given time to tell him. I was glad Huntoon had not seen that.

My heart was deeply stirred. And Santell had brought her letters in the night. . . . We were nearing the Pass, making the last up-grade through the darkening gorge. I started, when the old Master spoke:

"You see how easily Orion is held off," he said wearily.

Huntoon spoke up. "That Headland wasn't meant to be taken—"

"A fortress not built by hands," said Romany.

I knew it could be taken. If the ship had turned in toward the Promontory, I believed Orion could have forced a command up to the Causeway this very day, against the pitifully diminished fire of Romany's men. Yet the old Lion-heart kept up his bluff:

"The fact is, I don't dare to whip Orion. My only business is to hold what I have, and keep him thinking he can take the Headland at the proper time. . . . My poor Santell—his room was ready." . . . He glanced at me.

Four or five rifles cracked, slightly below us across the canyon—from the thick growths at the very edge of the precipice.

"Run for it," Romany commanded, leaning forward and rowelling his mount. We thundered down the rocky slope, the rifles emptying their magazines behind.

"That was damned clever of Orion," Romany remarked faintly, as we turned past the valley outposts. "Lucky he didn't get one of you fellows. Orion wants me badly. It was meant for me—this firing—and so was the slug that got poor Santell to-day—" He spoke in a wheezy way and jerkily, as one fighting for air.

"But you're hit—" I cried, grasping his elbow.

"I guess I am," he said quietly, "but I can't be hard-hit—didn't even knock me out of the saddle. It's in the shoulder somewhere, I think. . . . I can make Headquarters all right."

And now, whether it was meant or not (I could not tell at the moment), Huntoon had uncovered—ridden around to the opposite side of the old Master, and uncovered. It was rather dark for me



You can keep the fine natural color in Raspberry Preserves

if you make them with

Lantic Sugar

Long cooking fades raspberries. You can avoid this by using LANTIC SUGAR which dissolves instantly on account of its "FINE" granulation. LANTIC is the best sugar to use for all preserving on account of its purity and high sweetening power. LANTIC is a pure cane sugar equally good for the table, for general cooking and for preserving.

100-lb. Bags
10 and 20-lb. Bags
2 and 5-lb. Cartons

"THE ALL-PURPOSE SUGAR"

Order from your grocer by name in these full weight original packages

PRESERVING LABELS FREE—Send us a red ball trade mark cut from a bag or carton and we will send you a book of 54 ready gummed printed labels containing 6 for each of the following fruits: strawberries, raspberries, blackberries, currants, grapes, cherries, plums, peaches, and pears. Address

Atlantic Sugar Refineries Limited, Power Bldg. Montreal

38



"KODAK on the Farm"

Is the title of a beautifully illustrated and interesting little book that your dealer will give you or that we will send free upon request.

CANADIAN KODAK CO., Ltd., 592 King St. W., Toronto

Free Land FOR THE SETTLER IN Northern 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
HON. G. HOWARD FERGUSON, Minister of Lands, Forests and Mines
Parliament Buildings, TORONTO, ONT.

to study my friend's face. Thus we rode to the Pass and down the long dark grade to the valley.

Romany had been struck in the shoulder by a steel bullet, which luckily had not stopped there. His left arm was useless, but no bone was splintered. Jason, the young surgeon of the settlement, took care of the wound. That night I sat on the edge of Romany's cot. We whispered long.

"It was clever of him—that assassination party," he mused. "Orion understands that one tired old man holds this outfit together."

He was greatly suffering.

"It's a peculiar thing—he said, and there was a long silence. Through the dusk of the candles I saw the grip of pain tighten and relax. We were thinking of the death of Santell, and of the woman who would never know.

"You were there in the pinch at Liu chuan," he said finally. "You were there at the end this morning—and you have come from the girl. . . . You really ought to be next to me here. I need you, Mr. Ryerson—but what's this talk of the men about Huntoon? The men are afraid of Huntoon. He was with Orion—a week ago—"

I told him Huntoon had reached Libertad two weeks before me; that he had gone after the rum. In trying to reach Tropicania he had been taken into camp by Orion, who spotted him for a good soldier out of a berth. I explained my idea—that Huntoon had made certain promises in the glibness of alcoholic poisoning, in order to re-connect with me. I told the good of Huntoon in hard-unsentimental English; of our

The Finest Separator in the World is Made in Canada "MAGNET"

Square Gears
One-Piece Skimmer
Double Support For Bowl
Solid Construction
Perfect Skimming
Long Life

Make More Money from Cows

Get More Cream—Cut the Cost of Running Your Dairy.

A cheap separator steals your dairy profits. A Magnet delivers all the butterfat the milk contains. It will skim as close in fifty years as it does to-day. Its solid construction, its sturdy materials, its special design make it a long-life separator that can never wear out. It must be well built to stand the terrific speed at which the bowl turns. Oiling and adjustment are rarely needed because it runs so easily and is so conveniently designed for quick cleaning.

Long Service: Perfect Service

The first Magnet Separator ever built is in our factory. It has been run the equal of fifty years twice-a-day service. Yet it skims as close and clean to-day as if it were new. Runs as smoothly as a watch because it is mechanically true. Every Magnet built has been constructed on the same lines with new features added that give years to the life of the machine.

MAGNET CREAM SEPARATORS

STURDY BUILD

Look at the strong build of the Magnet. Solid perfect castings, sound steel parts and bronze gears, designed with the weight low down. You need not handle the Magnet gently—it's built for hard wear, and years of it.

LONG-LIFE SQUARE GEARS

Beware of the quick-wearing worm-gears that are built to make cheap separators. Magnet works on square gears which mechanics have found to be best for high speed work. Remember they have the heft and weight to carry the load when milk is poured into the tank. And they are balanced true so that they will never wear out.

EASY TO RUN

There are scores of children operating Magnets to-day—it's the smoothest running separator in the world. Write Mr. Vipond of Donegal, Ont. whose seven year old daughter operates a Magnet. No stopping for oiling and adjustment, or taking the clogging matter from the skimmer.

EASY TO CLEAN

Best of all for the woman on the farm, the Magnet can be cleaned in five minutes. Henry Weimar's boy (Belmore, Ont.) was taking apart and fixing the Magnet at 8 years of age. Skimmer one-piece and open, can be cleaned by hand and a cloth. No awkward bends in spouts—cleaned quickly with our brush.

SKIMS THE LAST DROP OF CREAM

A clean, close skimmer, too, that takes off the very last drop of cream. Hot or cold milk, level or rough ground the Magnet will skim clean even up to 56 per cent. cream. Magnet wrench is only tool needed for any adjustment.



WRITE FOR OUR
FREE BOOKS and
A DEMONSTRATION

Here's the coupon. Fill in now and by return mail you will receive a beautiful big catalog and dairying literature. Illustrates every part of the Magnet. Read what farmers in your own province say. And we'll gladly come and operate a Magnet in your own dairy if you ask—not one cent of cost or the least obligation on your side. So write now—it will be to your benefit.

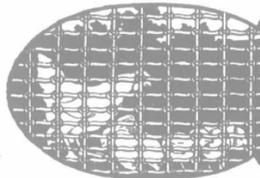
THE
PETRIE MFG.
Co. Limited

Hamilton, Winnipeg, Montreal,
St. John, Calgary, Edmonton,
Regina, Vancouver, Lethbridge

Please give me your Book and your Demonstration.

Name

Address



PEERLESS POULTRY FENCE

A Real Fence—Not Netting

Strongly made and closely spaced—making it a complete barrier against large animals as well as small poultry. Top and bottom wires No. 9—intermediate No. 12 wire—made by the Open Hearth process which time and other tests have proven to be the best. Send for catalog. Ask about our farm and ornamental fencing. Available nearly everywhere. Agents wanted in unassigned territory. The Banwell-Hoxie Wire Fence Company, Ltd., Winnipeg, Man., Hamilton, Ont.



Clydesdales We have still left some exceptionally good draft stallions, ranging in age from one to eight years, prizewinners, including champions; also in-foal mares and fillies. There is a horse boom coming. Buy now. SMITH & RICHARDSON, Columbus, Ont.

talk on the trail in the morning; that I was waiting until he was right, to have a complete understanding. I had to make it clear that I was for Huntoon every step of the road.

"But, will you vouch for him not throwing us?"

He could not have asked less of me, nor more. I saw the other side—how little I really knew about Huntoon; how strong a string it seemed to be that held him over the canyon; what might happen if he told Orion certain matters which I now suspected.

"Yes," said I.
"We'll say no more about that," Romany replied briefly.

But it haunted me; and the more I thought, the greater appeared the old Master's nerve and repression in staking on my mere word—that seemed a life or death issue. Weakness and pain had brought the past before him. He asked many questions about Mary Romany—that a father could learn only from another. "It's worth the wound to hear all this," he whispered. "And so you believe in the Year, and really want an old man mixed up in your happiness venture? . . . I hardly know what to expect from you, Mr. Ryerson. I'm saving you up for some big leisure-time. You were much too much for poor Santell.

"And little Mary," he went on after a pause. "I've always been somewhat awed before her. When I find deep places in other people, I like to sound; but with Mary, the deep places frightened me off. They seemed too pure for my tampering. I wonder if she knows how much I have thought about her—how I see her still in her ribbons—matters of fifteen years ago, quite as sharp as our last day in New York together. There is much about her, which even a father must grow older and wiser to understand—essences of character. Her mother and I never managed together, but I loved her mother. That's queer, isn't it? Mary and her mother cried in the same way—I never could stay—when they cried."

He could only reveal the shadows of the substance his heart held. He had preserved a fineness of spirit back of the the life-long passion of a gold-hunter. I saw that he loved the drama, the great gamble; that his strange character found expression in remote ventures and difficult masteries among men. I saw here that the cause was more to him than his own fortune; that to Romany, Tropicania meant enough for all. His enemies were Powers, not men.

"I wasn't meant for family life," he added. "I should not have married Mary's mother; and yet, sometimes when I think of myself—just myself—it's the only worthy thing I ever did. The other and rational side is that I made her unhappy, her whole life unhappy. . . I remember when I was like you—afield with a woman's loveliness brimming over every thought. Many years ago. I had seen Mary's mother and could think of none other. I went away, when she would have had it otherwise—to make a fortune for her. I thought of her day and night—day and night. I went back with a bit of a fortune, too,—but I couldn't stay. It's my devil. Some men have drink, some have women, and some have money-devils—mine were the far chances. And yet only afield—does a man know how much he needs a woman."

"The thing about you, Mr. Ryerson, is that you see the commonness, the boyishness of all this Lure. You don't deny the romance of it—but you know there is a greater romance. Tropicania looks like a big game to the world, but you know a finer one, more subtle and difficult—a game that requires more of a man than this valley does. Just making a woman happy. . . I couldn't see it—until I was an old man. I was old before I could put away these boyish things—and the time was past for me. You've got it young, Mr. Ryerson. You can put 'em away. I know you can—from what you say and look—and there's another reason—"

"Yes?"
"Because Mary says so. I think she knows. I've a great respect for little Mary. You'll do what only the giants can do—make a woman happy. . . I'm—it's irritating—this getting hit to-day—"

I bent forward.
"I don't mean the suffering—nor myself—but this Tropicania. I'd like

to close it right, within your Year. I want to take a hand in your venture."

"That would be bringing a gift back."
"When I was hit to-day," he said, "I sort of saw the end. I'm an old man—times are running close. It's not all as I told you. We're strapped. There aren't five rounds of ammunition in my command. . . And then, if I'm down—there's no other. I've learned command, Mr. Ryerson,—there's no joy in it, no pride in any part of it—to an old man. . . I should have seen these things younger—as you have—"

"I didn't see them—it was your daughter who showed me."

"And she learned it from the misery of her mother," he added. "We're all bound together. A lot of people live and die—for one boy and girl to see. Just a little realization, the fruit of many lives of hard service—and the result—it's too stiff, this thinking good-night—"

His hand came out in the dark and gripped mine—a lean and feverish hand. I asked to have my cot taken next to Huntoon's. There were no more words that night.

To be continued.

Good versus Bad Roads.

EDITOR "THE FARMER'S ADVOCATE":

Good roads! What do they mean to the farmer? They mean ease and comfort, a saving of time, money, and labor. How pleasant it is to travel on a well-built macadamized road! How easy for the horses! No jolting or jarring for the occupants of the wagon. Why did not Canada make roads when labor was cheap? Probably because there was less travelling in those days. Motor cars and bicycles were unknown. Recently, a farmer had to draw a hay-press about 8 miles. His team was unable to draw it over a certain part of the way. He hired a neighbor with his team. The time taken was over 5 hours to go the 8 miles and back—the soft part of the road being at the far end of the journey. The lack of a good road right through cost this farmer about \$2 extra for the one trip.

A few weeks ago, I crossed the St. Lawrence from Quebec to Ontario. I landed at S. about 9 o'clock p. m. I had 3 miles to walk to my destination. Part of the "road" was over-shadowed with trees—not a particle of sunlight could penetrate. That road was a pure-bred quag-mire, every step up to the ankles. I struck matches to see dry spots. None in view. I stood exhausted and glued to terra firma. I do not mean terra firma, but terra—and whatever the Latin word is for "not firm." When my breath got more normal, I repeated the words of Robbie Burns:

"Altho' I'm not in Scripture cramm'd,
I'm sure the Bible says,
That heedless sinners shall be damn'd,
Unless they mend their ways."

I reached the village of W. about midnight—6½ miles of my journey gone. Being a stranger, I tried to waken some kind soul to direct me the last mile and half. However, no one would respond to my knocking, except an infant who yelled furiously. I beat a hasty retreat from this house, fearing that father would come after me with the poker or some other unpleasant weapon. Tired and weary, dust-stained, and mud-bespattered, I lay down on the hotel veranda until daylight. I recommenced my journey by guess work, and happily landed at the right place, at the same time vowing that I would never again tackle unknown Ontario roads in the dark.

Long ago, in Scotland, a certain General Wade built good roads. A writer of those days tells us:

"Had you seen these roads before they were made,
You would hold up your hands and bless General Wade."

It seems strange that you can see a road before it is made, but the Scotch are a "bittie queer" as well as "canny."

JAMES KENNEDY,
Huntingdon Co., Que.

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.

Miscellaneous.

Absence of Oestrus.

I have a cow which freshened first of April and seems perfectly healthy in every way yet has never showed oestrus, what would be the cause and is there any remedy that would cause no serious after effects?

K. C. L.

Ans.—We can suggest very little but waiting patiently. It is difficult to understand the cause of these abnormal conditions. It might be good practice to tie the cow in a stall adjoining the bull, or turn her loose in a box stall or paddock for a short time each day. Two drams of nux vomica three times daily has sometimes apparently had the desired effect by stimulating the nervous system.

Grain Carrier Attachment for the Threshing Machine.

As we are short of help this year we would like to secure an attachment for our threshing machine that would put the grain direct from the machine to the bin. As we thresh by the bushel we would want one that would record the number of bushels of grain threshed.

Ans.—We do not know of any particular manufacturing Company making this attachment especially, but we understand that several of the threshing machine manufacturers now attach this extra equipment to their machines. Write the firm from whom your machine was secured and if it does not supply what you want communicate with some of the other firms manufacturing threshing outfits.

Power for Pumping and Lighting.

I have read with great interest your articles on supplying water to the farm home, and I would like to ask if you could supply power for electric lights at the same time and if we could, how much more power would we use than would be required for pumping the water? 2. If it took much more power would a windmill not be cheaper?

E. A. A.

Ans.—1. With a good equipment a 2 1/2 h. p. gasoline engine would only require operating about one-half hour daily to supply the house, barn, and buildings with water. At any other time the same engine could be attached to electric power plant to light the same buildings. Complete equipments nowadays operate automatically by switching on and off the lights. The same engine should produce electric light and do pumping.

2. No doubt a windmill would provide cheaper power, but when a man is depending upon it for both light and water a calm spell of considerable duration might interfere very materially with the efficiency of plants.

Volume 38 of the Clydesdale Stud Book issued by the Clydesdale Horse Society of Great Britain and Ireland, is now off the press and ready for distribution. A copy has been received at this office through the courtesy of the secretary, Archibald MacNeillage, 93 Hope St., Glasgow, Scot. The contents of this 38th volume when compared with those in volume 37 show a substantial increase amounting to a total of 514. Mares are recorded numbering from 38,456 to 40,307. Stallions are included numbering from 18,536 to 18,958.

The man and wife whose frequent quarrels had become a neighborhood scandal were severely reprimanded by the priest.

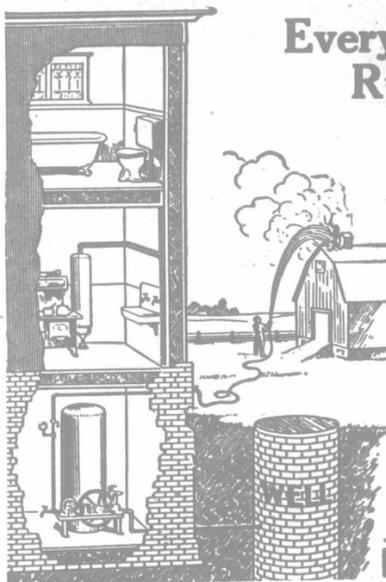
"Why," said the priest, "the cat and dog that you have agree better than that."

"May be," said Patrick, "but just tie them together and see what happens."

The Trophy-Winning Shot Shell must be a load that is fast, hard-hitting and reliable under all conditions. Careful selection of materials, perfect balance of powder and shot and intensive inspection combine to make Canuck the best of all trap loads. It's speed and powerful impact have gained for it an enviable reputation as the "trophy-winner" at the traps. Crown, Sovereign, Regal and Imperial are other popular Dominion smokeless trap loads. The "Big D" on every box is your guarantee of satisfaction and the best in shot shells and metallic cartridges. All good dealers sell Canadian made Dominion Ammunition. Send for free colored hanger "A Chip of the old Block." Dominion Cartridge Co., Limited, 829 Transportation Bldg., Montreal. Ask us about Dominion Hand Trap.

Empire WATER SUPPLY System

Every Modern Convenience in the Farm Home Running Water for Every Farm Need



WHY not provide your farm home with just as good conveniences as any city house? It can easily be done at a most moderate cost, and it will not only provide greater comfort for your family and lighten burdens, but will increase the value of your property as well. Just think of a strictly modern bathroom with all fittings—running hot and cold water in the kitchen and other parts of the house, in the barn and outbuildings. Do away with the old, unhealthy, inconvenient outdoor cesspool and water-lugging methods.

SEND FOR FREE BOOKLET TO-DAY

—describing the EMPIRE SYSTEM. Write us your requirements, and we will send you full particulars and the cost of a system adapted to your particular needs.

Outfit includes bathroom fittings, kitchen sink and hot water boiler for range, Pneumatic Pressure plant and all piping complete. Price \$225, or more for extra fittings. NOW is a good time to find out about it. Let us send you a free estimate.

Empire Manufacturing Co., Limited East London, Ontario

ORCHARD GROVE HEREFORDS

Have several young bulls and heifers for sale. Satisfaction guaranteed. L. O. Clifford Oshawa, Ontario

WOODLANDS BROWN SWISS AND PONIES

We have no Clydes. left for sale. Our special offering is Brown Swiss bulls, out of high-testing and big-producing dams. Strictly high-class. Also Shetland and Welsh ponies. R. BALLAGH & SON GUELPH, ONTARIO

Oakland--48 Shorthorns

Present offering is one choice red bull, 20 months old, price \$175; also three about seven months old. A few cows with calves at foot and bred again, and some fine heifers bred. All registered and priced to live and let live. JNO. ELDER & SONS, HENSALL, ONT.

Spruce Glen Shorthorns

When in want of Shorthorns visit our herd. We have 70 head to select from. Minas, Fames, Miss Ramsdens, Also several young bulls of Florence, Emils, etc. Many of them one and two-year-old heifers. Also several young bulls of breeding age—level, thick, mellow fellows and bred just right. James McPherson & Sons, Dundalk, Ont.

Canada's Grand Champion Shorthorns of 1914-1915

are headed by the great "Gainford Marquis" Imp. Write your wants. J. A. WATT, ELORA, ONT., G.T.R. & C.P.R.

Maple Shade Farm Shorthorns

The products of this herd have been in very strong demand. There's a reason. Can always supply a good young bull at a price which will make him well worth the money. Not many females for sale, but can show a few which should interest you. Brooklin, G.T.R., C.N.R.; Myrtle, C.P.R. W. A. DRYDEN, Maple Shade Farm, Brooklin, Ont.

Pleasant Valley Shorthorns

Special Offering, Sittyton Favorite one of the best individuals and stock bulls we know of. Also young bulls and females bred to (imp.) Loyal Scot and Sittyton Favorite. Write your wants. We can suit you in merit, breeding and price. GEO. AMOS & SONS, Moffat, Ont. Moffat, 11 miles east of Guelph, C.P.R.

Make Your Own Tile Cost \$4.00 to \$6.00 per 1,000. Hand or Power. Send for Catalogue. Farmers' Cement Tile Machine Co. Walkerville, Ontario

Steel Rails for Reinforcing Bridges and Barn Driveways CUT ANY LENGTH JNO. J. GARTSHORE 58 Front Street West, Toronto

DANGEROUS

as well as painful
 Backache Neuralgia
 Lumbago Rheumatism
 Stiff Joints Sprains
Combault's Caustic Balsam
 WILL RELIEVE YOU.
 It is penetrating, soothing and healing and for all
 cases of Wounds, Felons, Exterior Cancors, Burns,
 Boils, Carbuncles and all Swellings where an outward
 application is required. CAUSTIC BALSAM HAS NO
 EQUAL. Removes the scrores—strengthens the muscles.
 Price \$1.50 per bottle. Sold by druggists or sent
 by express prepaid. Write for Booklet L.
 The LAWRENCE-WILLIAMS COMPANY, Toronto, Can.

Don't Cut Out
 A SHOE BOIL, CAPPED
 HOCK OR BURSTITIS
 FOR
ABSORBINE

will remove them and leave no blemishes.
 Reduces any puff or swelling. Does not
 blister or remove the hair, and horse can be
 worked. \$2 a bottle delivered. Book 6 K free.

ABSORBINE, JR., the antiseptic liniment for man-
 kind. For Boils, Bruises, Old Sores, Swellings, Varicose
 Veins, Varkoetics. Allays Pain. Price \$1 and \$2 a bottle
 or druggists or delivered. Will tell more if you write.
 W. F. YOUNG, P.D.F. 258 Lyman's Bldg., Montreal, Can.

Dr. Page's English Spavin Cure
 Cures the lameness from Bone-Spavins, Side-
 Bones, Ringbones, Curbs, Splints, etc., and
 absorbs the
 bunnies;
 does not kill
 the hair, ab-
 sorbs Capped
 Hocks, Bog-
 spavins thick
 pastern joints;
 cures lame-
 ness in
 tendons;
 most power-
 ful absorb-
 ent known; guaranteed, or money refunded.
 Mailed to any address, price \$1.00. Canadian
 Agents: J.A. JOHNSTON & CO., Druggists,
 171 King St. East, Toronto, Ont.

ALLOWAY LODGE STOCK FARM
Angus, Southdowns, Collies

Special this month
Southdown Prize Rams
ROBT. McEWEN, R.R.4, London, Ont.

The Glengore Angus We have
 couple of nice yearling males, sired by Middle
 Brook Prince 3rd, for sale at reasonable prices.
 Particulars on application.
GEO. DAVIS & SON, R.R. No. 1, Erin, Ont.

Beaver Hill Aberdeen-Angus—Males and
 females, all ages. Also one
 Ayshire bull, 2 months old, for sale. Prices
 reasonable. **ALEX. MCKINNEY, R.R. No. 1,
 Erin, Ont. Erin, C. P. R., Cheltenham, G. T. R.**

Burnfoot Stock Farm—Breeders of
 dual-purpose Shorthorns, with a splendid confor-
 mation for beef. Visitors welcome.
S. A. MOORE, Prop., Caledonia, Ont

Glenfoyle Shorthorns
 Large selection in females all ages, bred
 from the best dual-purpose families. One
 extra choice fifteen-months bull, some
 younger ones coming on. Priced well
 worth the money.
Stewart M. Graham, Lindsay, Ont.

Shorthorns—"Pail Fillers"—Our Short-
 horns are bred and developed
 for big milk production. If you want a stock bull
 bred that way, we have several; also Clyde, stal-
 lion rising 3, won 2nd at Guelph the other day in a
 big class. **P. Christie & Son, Manchester, Ont.**

SHORTHORNS
 Bulls, females, reds, roans, size, quality. Breeding
 milkers over 40 years. Cows milking 50 lbs. a day.
 Big, fleshy cows that will nurse calves right. Prices
 easy, write:
THOS. GRAHAM, R. R. 3, Port Perry, Ont.

FLETCHER'S SHORTHORNS
 3 choice bulls of serviceable age; also females, all of
 good Scotch breeding, for sale. Write before buying.
**Geo. D. Fletcher, R. R. 1, Erin, Ont.
 L.-D. Phone, Erin, ta. C.P.R.**

Shorthorns and Swine. Have some choice
 young bulls for sale; also cows
 and heifers of show material, some with calves at
 foot. Also choice Yorkshire sows.
ANDREW GROFF, R.R. NO 1, ELORA ONT.

Northlynd R.O.P. Shorthorns and Jerseys
 Present offering: One Shorthorn bull old enough for
 service, whose dam, his dam's full sister and his
 grandam in six yearly tests made an average of
 over 8,500 lbs. milk, testing over 4% in an average
 of 329 days. **G. A. Jackson, Downsview Ont.**

Questions and Answers.
 Miscellaneous.

Poison for Birds.

What is the law regarding the putting
 out of poison, (strychnine and Paris
 green) to kill black birds and crows that
 are running riot on corn fields? What
 is the fine if there is one? **H. R.**

Ans.—It is provided by Sec. 10 (1)
 of Chap. 49, of the Ontario Statutes of
 1900, that no person shall kill or take
 any game animal or bird by the use of
 poison, or poisonous substances, or
 expose poison, poisoned bait, or other
 poisonous substances in any place or
 locality where any game, animal or bird,
 or any dogs or cattle may usually have
 access to the same; and by Sec. 29 (1)
 of the Act, a fine of from \$5 to \$25 and
 costs is provided for any offence coming
 within such Sec. 10 (1).

Diarrhoea.

A pure-bred Shorthorn cow had scours
 before going out on grass. She appeared
 to get better, but developed the trouble
 again just after starting on silage. Veter-
 inarian drenched her. She has been
 bred 3 times.

1. Give receipt for treatment for
 scours.
 2. Will she breed in present con-
 dition?

Ans.—The trouble is possibly due to some
 irritant in the stomach or there is even
 a possibility that it may be due to a
 diseased liver, if the latter, it will not
 be possible to effect a permanent cure
 and the diarrhoea will be liable to occur
 at any time when treatment ceases. Treat-
 ment recommended is, first purge the
 animal with two pints raw linseed oil,
 follow this with good food including
 a mixture of bran and chopped oats in
 small quantities. If the cow is not on
 grass it is advisable to feed her four or
 five times a day. To the drinking
 water add one quarter of its bulk of
 lime water. If the diarrhoea continues
 give two ounces tincture of opium and
 four drams each of catechu and prepared
 chalk in a pail of cold water as a drench
 every four hours until the diarrhoea
 ceases.

Trade Topic.

Beating the Hessian Fly.

United States Farmers' Bulletin No.
 640 recommends the liberal use of a quick
 acting fertilizer on fields of fall wheat
 in the fall, to curtail the damages of the
 Hessian fly. The idea is that the fertil-
 izer will so quicken the growth of the
 wheat plant that it shall acquire powers
 of resistance and recuperation which
 will enable it to stand the attack of
 the fly and which also will send it into
 the winter season well prepared to stand
 the cold weather. The National Fertil-
 izer Association recommends, for this
 purpose, a mixture with 2 to 3 per cent.
 ammonia in order that a quick and
 vigorous growth of the plant may be
 assured. The result is that the plant
 stools or tillers more freely, and even
 after suffering some damages from the
 fly it will send up head producing stems
 in the spring. Some advice regarding
 the fall wheat seeding appears in the
 advertising columns of this issue.

Gossip.

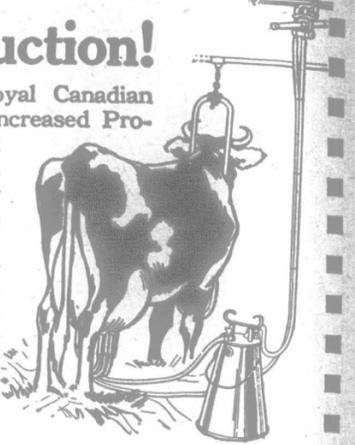
The Western Fair.

The management of the Western
 Fair, which will be held in London, Ont.,
 Sept. 8 to 16, is very busy preparing for
 same. The very generous prize list
 of 1915 has been added to very materi-
 ally this year. Several new sections have
 been added in the Horse and Cattle De-
 partment and a new class entirely for
 Duroc Jersey Swine. A new class has
 been given for a Wool exhibit and also
 one for an exhibit of eggs. The manage-
 ment realizes that the success of the Ex-
 hibition depends to a large extent on the
 Live Stock and Agricultural Departments
 and are putting forth every effort to give
 the Exhibitors in these departments all
 the consideration possible. Prize lists,
 entry forms and all information given on
 application to the Secretary, A. M. Hunt,
 London, Ont.



Increased Production!

The Government call to every loyal Canadian
 engaged in Agriculture is for "Increased Pro-
 duction"—an important factor in the
 present titanic struggle. With
 the call to arms never was labor
 so scarce. Labor-saving devices
 have saved the day in many cases.
Take Dairying: The Sharples Milker
 does the work of milking in one-
 third the time at less cost. Any
 man that owns 15 cows or more
 should get one. The fact that one
 man can milk 30 cows an hour is
 worth thinking over. But the one
 thing that places the



SHARPLES MILKER

head and shoulders above any other is the patented "Upward Squeeze,"
 which eliminates any possibility of inflamed teats and soothes the cow
 during milking. The Sharples Milker is a vital factor in the production of
 Clean Milk. The milk flows from teats to sealed silver buckets through
 rubber tubes. No stable dust, no stable air, no hands can touch it. Clean
 milk means more dairy dollars. Increased milk production follows its use
 in almost every case. Over 300,000 cows milked twice daily by the
 Sharples is abundant proof of satisfactory service. Our free booklet,
 "Dairying for Dollars Without Drudgery," contains valuable dairy hints.

"Does Its Bit" In Cream Saving

—no matter how fast or how slow you turn the crank—gets all the cream
 at any speed. You know it is not humanly possible to operate a separa-
 tor at the same speed every time. Then get a



SHARPLES
 SUCTION-FEED
CREAM SEPARATOR

It insures your dairy profits and increases production.
 Perfectly even cream every time, too—that means
 top prices. Easy to clean—no discs. Easy to turn—
 low speed. And freedom to turn at any convenient
 speed. Low supply tank means easy filling. Write
 for free book, "Velvet" for Dairymen. Address De-
 partment 78.

We make a splendid line of Double-Ignition Gasoline
 Engines, 2 1/2 to 9 horse power. Fully guaranteed.

The Sharples Separator Co.

Toronto - - - - - Canada

Escana Farm Shorthorns

FOR SALE: Two imported bulls, proven valuable sires; 12 bulls, 10 to 20
 months old, all by imp. sires and from high-class dams; also for sale, 20 heifers
 and young cows, several with calves at foot, all of very choicest breeding, and
 especially suitable for foundation purposes.
 Mail orders a specialty. Satisfaction guaranteed.
MITCHELL BROS.
 Jos. McCrudden, Manager. Farm 1/4 mile from Burlington Jct. **Burlington P.O., Ont.**

Dual-Purpose Shorthorns

One young bull, Weldwood Red Victor, out of Lena of Northlynd,
 with an official record of 7,501 lbs. milk and 328 lbs.
 butter-fat. This bull is sired by College Duke
 =85912=. Also a few cows and heifers.
WELDWOOD FARM, The Farmer's Advocate, London, Ontario

Robert Miller Still Pays the Freight—And he is offering in Shorthorns some of the best
 young bulls and heifers that can be produced. Young bulls fit for service,
 Scotch families, and some of them young and younger, and some in calf. They are of the best
 right, just what you want to make a proper foundation for a good herd, and suitable to improve any
 herd in the land. They will be priced so that you can afford to buy, if you will tell me what you
 want. Our business has been established 79 years, and still it grows. There is a reason.
ROBERT MILLER, Stouffville, Ontario

Shorthorns and Shropshires—**T. L. MERCER, MARKDALE, ONTARIO**—
 young cows in calf, heifers from calves up, and young bulls from 9 to 18 months of age, richly bred
 and well fleshed. In Shropshires we have a large number of ram and ewe lambs by a Toronto list-
 prize ram; high-class lot.

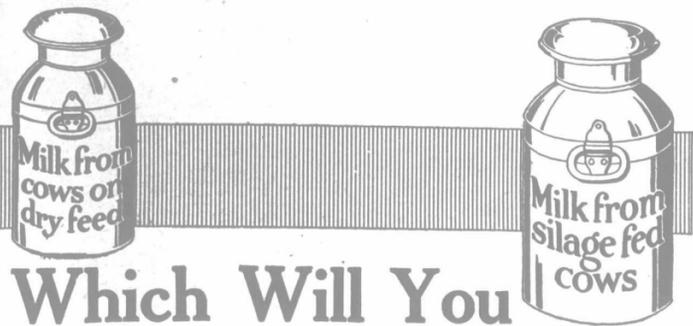
Spring Valley Shorthorns Herd headed by the two
 (imp.) 73783, and Nonpareil Ramsden 83422. Can supply a few of either sex.
Kyle Bros., Drumbo, Ont. Phone and telegraph via Ayr.

GLENGOW SHORTHORNS AND COTSWOLDS
 Pure Scotch in breeding, we have an exceptionally choice lot of bulls for this season's
 trade, ranging in age from 8 to 15 months, big mellow fellows and bred in the purple.
 Also ram and ewe lambs of first quality.
Wm. Smith & Son, Columbus, Ont. Myrtle, C.P.R., Brooklin, G.T.R., Oshawa, C.N.R.

Four Imported Bulls The above bulls are choicely bred, of good quality, and
 should make valuable sires. We have five Canadian
 bred bulls from 10 to 18 months old. We invite
 inspection of our stock and will give correspondence our most careful attention.
J.A. & H. M. Pettit, Phone Burlington, Freeman, Ont. Burlington Jct., G.T.R., half mile from farm

Willowbank Stock Farm Shorthorn Herd Established 1855.
 established herd has at the head the two great bulls: Imported Roan Chief =60865=, a Butterfly,
 and the prize-winning bull, Brown Dale =80112=, a Mina. An extra good lot of young stock to offer
 of either sex. Splendid condition. Good families of both milking strain and beef.
JAMES DOUGLAS, Caledonia, Ont.

My
 after
 all use
 with
 her fo
 ntre
 gullet,
 air, l
 now
 in gvi
 calvin
 1.
 the co
 2.
 that
 3.
 with a
 sowed
 get a
 Ans
 cow th
 had th
 to fre
 milk f
 after
 next y
 2.
 stroye
 come
 ground
 plant.
 seed t
 deat y
 3.
 seed w
 sowing
 seed w
 best g
 with f
 secured
 partne
 Guelph



Which Will You Have Next Winter?

Now is the time to decide whether you will feed your cows silage next winter and get 25 per cent more milk, or keep them on dry feed and be content with smaller, less profitable returns. In addition to the extra feeding value of silage, it is the cheapest feed you can use. When silage is fed, feed bills can be reduced 15 to 20 per cent.

To be sure of silage of the best quality for next winter's feeding,

Place Your Order NOW for an IDEAL GREEN FEED SILO

You will then have ample time to get your silo erected before the crop is ready. Delay may mean extra expense, or even failure to get the silo up in time. Decide now to have an Ideal—the silo that will give you better service, dollar for dollar invested, than any other.

The low price of some makeshift silo may seem attractive, but the man who puts his crop in such a silo takes a big chance with valuable feed. He may lose many times the small amount he thinks he saved on the first cost.

There is nothing mysterious about the superior value of the Ideal. Every feature is the result of long experience in silo manufacturing, and the superiority of this silo has been proved by actual service on thousands of Canadian farms. Every detail in the selecting of the material and the manufacturing and fitting of the parts is clearly explained and illustrated in our large silo catalogue. Ask for a copy of the catalogue and read it. Get all the facts about this silo clearly in mind. It will pay you. Better still, place your order at once for an Ideal, so that you will be sure of getting it in time for filling.

DE LAVAL DAIRY SUPPLY CO., Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA
Sole distributors in Canada of the famous De Laval Separators and Alpha Gas Engines. Catalogues of any of our lines mailed upon request.

MONTREAL PETERBORO WINNIPEG VANCOUVER

ELEVATES GREEN CORN INTO THE HIGHEST SILO

or will blow dry straw 60 feet up into and across the barn

Handles either corn or straw equally well, the only successful combination machine of this capacity made in Canada.

Wilkinson Climax "A" Mounted Pneumatic Ensilage and Straw Cutter

Capacity limited only by amount of material that can be got to the machine. Requires less power than any other machine of the same capacity. No lost power.

13-inch mouth, rolls raise 8 inches and set close to the knives, making a solid, compact cutting surface.

Direct pneumatic delivery, no worm gears or special blower attachment.

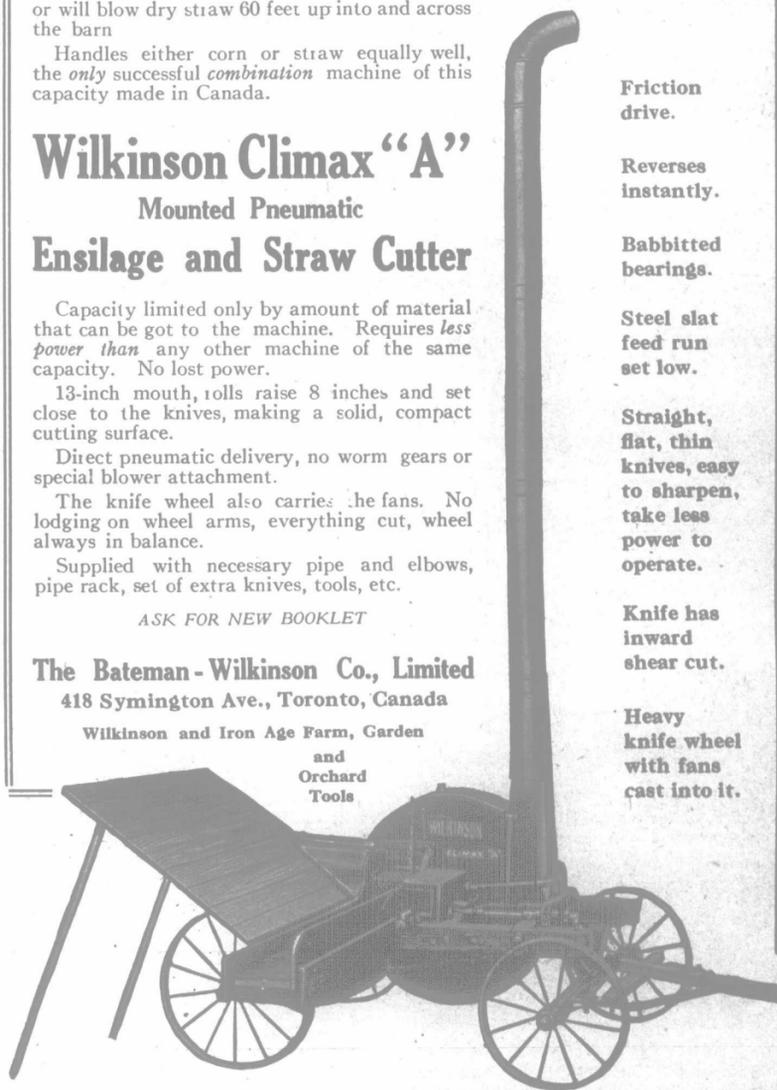
The knife wheel also carries the fans. No lodging on wheel arms, everything cut, wheel always in balance.

Supplied with necessary pipe and elbows, pipe rack, set of extra knives, tools, etc.

ASK FOR NEW BOOKLET

The Bateman-Wilkinson Co., Limited
418 Symington Ave., Toronto, Canada

Wilkinson and Iron Age Farm, Garden and Orchard Tools



Friction drive.

Reverses instantly.

Babbitted bearings.

Steel slat feed run set low.

Straight, flat, thin knives, easy to sharpen, take less power to operate.

Knife has inward shear cut.

Heavy knife wheel with fans cast into it.

Questions and Answers, Miscellaneous.

Treating Alfalfa Seed—Killing Burdocks.

My cow took sick a day and a half after she calved and seemed to lose all use of her body. She lay in a stupor with her head on her flank. I treated her for milk fever, giving her salts and nitre through a hose inserted in the gullet, and also filled her udder with air. In three days she got better and now appears healthy. The cow was in good condition and had no trouble calving.

1. Would you advise me to beef the cow in the fall?
2. How can I get rid of burdock that grows in my garden and yard?
3. Does alfalfa seed need to be treated with any liquid before sowing? I have sowed like ordinary clover, but did not get a catch.

Ans.—It is not necessary to beef the cow on account of the trouble she had this year. Careful feeding previous to freshening and not taking all the milk from the udder for a day or two after freshening may avert any trouble next year.

2. Burdocks are most easily destroyed if attacked at the time they come into blossom. Cutting below the ground at that time will destroy the old plant. New plants may come from seed that has matured, but they can be dealt with next year.

3. It is advisable to treat alfalfa seed with nitro culture just previous to sowing it. This material inoculates the seed with bacteria, which is essential to best growth of the plant. The culture with full directions for using can be secured from the Bacteriology Department Ontario Agricultural College, Guelph.



Bulls to Head the Best Shorthorn Herds

His Majesty = 106890 =, Royal Favorite = 106891 =, Campaigner = 106892 =, Royal Triumph = 106893 =, Commander's Heir = 106131 =, Ambassador = 16894 =, etc. The best lot we ever bred, our bulls have made good—bulls bred identically to these. Keep these bulls in Canada. See them in the leading exhibitions. In themselves they are desirable, big, sappy, and characteristic of the breed. Their breeding is faultless. They are attractive reds and roans, and will keep on improving. We have Princess Royals, Wimples, Rosebuds, Scouts, Kiblean Beauties, Mysies, Cecilians, Victorias and Orange Blossoms.

"Puslinch Plains", at Arkell, C.P.R. Station, 3 miles from Guelph.

The New Home of the Auld Herd
The Land of the Big Beves
A. F. & G. Auld, R. No. 2, Guelph, Ont.

FIELD MARSHALL = 100215 = the calf of 1915, sold June 7, 1916, for \$3,775.

Maple Grange Shorthorns Pure Scotch and Scotch-topped. Breeding unsurpassed. A nice selection in young bulls, and a limited number of thick, mossy heifers.
R. J. DOYLE, Owen Sound, Ontario

Walnut-Grove Shorthorns Sired by the great sire Trout Creek Wonder and out of imp. cows and their daughters of pure Scotch and a few heifers. Let us know your wants.
DUNCAN BROWN & SONS, R.M.D. Sheddon, Ont., P.M., & M.C.R.

SHORTHORNS SHROPSHIRE CLYDESDALES
Have still on hand one bull fit for service by Newton Sort = 93019 =. Some good young things coming along. A few young cows and heifers. Come and see them. R. R. No. 3, OSHAWA, ONTARIO
2½ miles from Brooklin, G.T.R. 4 miles from Myrtle, C.P.R.

Shorthorns Pure Scotch and Scotch topped—Booth. Also five (5) young bulls from ten to twenty months old, of the low down, thick kind, good colors—reds and roans. Prices reasonable.
G. E. MORDEN & SON, Oakville, Ontario

Meadow Lawn Shorthorns We are offering a choice lot of bulls at very reasonable prices. An exceptionally good one sired by Clan Alpine 2nd, No. 88387, G. D. Donside Alexandra (imp.) No. 59513, and any one wanting a right good herd header would do well to secure this bull, as he is a smooth, well proportioned fellow that attracts attention at first sight.
F. W. EWING, G. T. R. and C. P. R. R. R. No. 1, Elora, Ontario

Females-SHORTHORNS-Females
I can supply females of the most popular Scotch families, Crimson Flowers, Minas, Lady Fannys, Nonpareils, Butterflys, Amines, Athas, Miss Ramsdens, Marr Emmas, Marr Missies and Clarets. A few bulls Myrtle, C. P. R. and G. T. R.; Oshawa, C. N. R.

Wood Preservative—Lightning Protection.

1. I have a new silo which I lined with matched hemlock lumber. I have on hand a quantity of coal tar and propose to give the silo a coat of it on the inside. What effect would the tar have on the silage?

2. My barn is roofed with galvanized steel shingles, can I connect the roof with the ground in such a way as to give satisfactory lightning protection?

3. If so, please describe the best method of making connection. At how many places should the connection be made?
O. E.

Ans.—Coal tar would no doubt aid in preserving the wood and if it is thoroughly dry before the silo is filled we do not see how it could have any harmful effect on the silage. It would have a tendency to fill the pores of the wood thus making the silo more air tight, which is a factor in making good silage.

2 and 3. If the metallic roof is connected to the ground by a wire the current follows the wire. It is advisable to connect at least two and better the four corners with the earth. It is necessary to have the wire extend several feet into the earth so it will be kept damp. It is claimed that the round metal form frequently put on the ridge of a metal roof is dangerous unless points of some kind are provided from which electricity leaks off. Authorities state that if instead of the round a sharp edged form or one with teeth were used, it would be almost impossible for a metallic roofed building to be struck by lightning, if the four corners of the roof were connected with the earth by ground wires. The wire should be firmly fastened to the corner of the metal roof and then extended down the corner of the barn. Special staples must be used to hold the wire from coming in contact with the wood.

DO YOU REALIZE THE DANGERS OF GASOLINE?



A Farmer's Policy in The London Mutual Fire Insurance Company protects you in case of a fire caused by your gasoline stove in the kitchen, or by your automobile. That's real protection. Most policies exclude this source of danger. The London Mutual policy is the most liberal in every way. Write for particulars at once—you need the protection at the exceptionally low rates we offer.

LONDON MUTUAL FIRE INSURANCE COMPANY
 F. D. WILLIAMS, MANAGING DIRECTOR
 HEAD OFFICE - 33 SCOTT ST. TORONTO.



Inseparable!

Windsor Cheese Salt
 Made in Canada
 THE CANADIAN SALT CO., LIMITED

Scratches and Stocking

—Are prevalent in cold weather irregular work and overfeeding induces both. A system tonic and blood purifier, such as **FLEMING'S TONIC HEAVE REMEDY** will prevent these troubles and when developed, with Fleming's Veterinary Heaving Oil will quickly cure them. Per box, \$1.
 Fuller Information in Fleming's Vest Pocket Veterinary Adviser Write us for a Free Copy
FLEMING BROS., Chemists
 75 Church St., Toronto

3 Holstein Bulls

ready for service. 1 black dam 16.3 lbs. butter 7 days, 63 lbs. milk 1 day. At 2 years her dam 1,007 lbs. butter, and 25,000 lbs. milk in 1 year; 3 bull calves 4 to 6 mos.

R. M. Holtby, Port Perry, Ont.

Walnut Grove Holsteins

Herd headed by May Echo Champion, full brother of May Echo Sylvia, who made 36 lbs. butter in seven days. Females for sale from one year old upwards. Prices right for quick sale.

C. R. JAMES, Langstaff P. O., Ontario
 Phone Thornhill

Bulls, Bulls—We have several young Holstein bulls for sale, just ready for service. Sired by the great bull, King Segis Pontiac Duplicate, and our junior herd bull, Pontiac Hengerveld Pieterje, and from high-testing dams. Price low for the quality. Write and get them. Mr. J. J. G. T. R., and Myrtle, C.P.R. stations. Bell Phone.
 R. W. Walker & Sons, R.R.4, Port Perry, Ont.

Dates of Fall Fairs, 1916.

This list is issued by the Agricultural Societies Branch of the Department of Agriculture, Toronto. J. Lockie Wilson, Superintendent.

Aberfoyle.....	Oct. 3
Abingdon.....	Oct. 13 and 14
Acton.....	Sept. 20 and 21
Ailsa Craig.....	Oct. 2 and 3
Alexandria.....	Sept. 12 and 13
Allred.....	
Alliston.....	Oct. 5 and 6
Almonte.....	Sept. 19—21
Alvinston.....	Oct. 2 and 3
Amherstburg.....	Oct. 2 and 3
Ancaster.....	Sept. 26 and 27
Arden.....	Oct. 3
Arnprior.....	Sept. 6—8
Arthur.....	Oct. 3 and 4
Ashworth.....	Sept. 29
Astorville.....	Sept. 16
Atwood.....	Sept. 19 and 20
Avonmore.....	Sept. 20
Ayton.....	Sept. 12 and 13
Bancroft.....	Oct. 5 and 6
Barrie.....	Sept. 18—20
Bar River.....	
Bayfield.....	
Baysville.....	
Beachburg.....	Oct. 4—6
Beamsville.....	Sept. 19 and 20
Beaverton.....	Sept. 25—27
Beeton.....	Oct. 5 and 6
Belleville.....	Sept. 14 and 15
Berwick.....	Sept. 21 and 22
Binbrook.....	Oct. 10 and 11
Blackstock.....	Sept. 28 and 29
Blenheim.....	Oct. 5 and 6
Blyth.....	Oct. 3 and 4
Bobcaygeon.....	Oct. 5 and 6
Bolton.....	Oct. 2 and 3
Bothwell's Corners.....	Sept. 21 and 22
Bowmanville.....	Sept. 19 and 20
Bradford.....	Sept. 25—27
Bracebridge.....	Sept. 22 and 23
Brampton.....	Sept. 28 and 29
Brigden.....	Oct. 3
Brighton.....	Sept. 7 and 8
Brockville.....	Sept. 4—6
Bruce Mines.....	Sept. 27
Brussels.....	Oct. 5 and 6
Burk's Falls.....	Sept. 28 and 29
Burford.....	Oct. 4 and 5
Burlington.....	Thanks'g Day
Caledon.....	Oct. 11 and 12
Caledonia.....	Oct. 12 and 13
Campbellford.....	Sept. 26 and 27
Carp.....	Oct. 4 and 5
Casselton.....	Sept. 6
Castleton.....	Sept. 28 and 29
Cayuga.....	Sept. 28 and 29
Centreville.....	Sept. 16
Charlton.....	Sept. 14 and 15
Chatham.....	Sept. 19—21
Chatsworth.....	Sept. 28 and 29
Chesley.....	Sept. 19 and 20
Clarence Creek.....	Sept. 21
Clarksburg.....	Sept. 19 and 20
Cobden.....	Sept. 26 and 27
Cobourg.....	Aug. 23 and 24
Cochrane.....	Sept. 28 and 29
Colborne.....	Sept. 18 and 19
Coldwater.....	Sept. 28 and 29
Collingwood.....	Sept. 20—23
Comber.....	Sept. 25 and 26
Cookstown.....	Oct. 3 and 4
Cookville.....	Oct. 4
Cornwall.....	Sept. 7—9
Courtland.....	Oct. 5
Delaware.....	Oct. 11
Delta.....	Sept. 18—20
Demorestville.....	Oct. 14
Deshoro.....	Sept. 21 and 22
Dorchester Station.....	Oct. 4
Drayton.....	Sept. 12 and 13
Dresden.....	Sept. 28 and 29
Drumbo.....	Sept. 26 and 27
Dunchurch.....	Sept. 29
Dundalk.....	Oct. 12 and 13
Dungannon.....	Oct. 5 and 6
Dunnville.....	Sept. 14 and 15
Durham.....	Sept. 28 and 29
Elmira.....	Sept. 14 and 15
Elmvale.....	Sept. 25—27
Embree.....	Oct. 5
Emo.....	Sept. 14 and 15
Emsdale.....	Sept. 26 and 27
Englehart.....	Sept. 19 and 20
Erin.....	Oct. 12 and 13
Essex.....	Sept. 27—29
Exeter.....	Sept. 18 and 19
Fairground.....	Oct. 3
Fenelon Falls.....	Sept. 15 and 16
Fenwick.....	Sept. 26 and 27
Fergus.....	Sept. 26 and 27
Feversham.....	Oct. 3 and 4
Flesherton.....	Sept. 28 and 29
Florence.....	Oct. 5 and 6
Forest.....	Sept. 26 and 27
Fort Erie.....	Sept. 27 and 28
Frankford.....	Sept. 21 and 22
Frankville.....	Sept. 28 and 29

Win Against the Hessian Fly

TO Escape the Main Attack of the Fly—sow your wheat late. The early brood is most destructive to young wheat, and provides for future broods. Your own Experiment Station will tell you this.

THE Best Wheat Yields come from plants that enter the winter strong and vigorous. Your own experience will tell you this.

TO Win Against the Fly, seed late, feed the crop with available fertilizers which will hasten growth to overcome the late start, and secure vigor with consequent resistance to later broods. Use 200 to 400 pounds per acre containing at least 2 per cent. of ammonia. Acid phosphate alone does not give the necessary quick growth and resistance to the fly.

In Farmers' Bulletin, No. 640, U. S. Department of Agriculture, fertilizers are recommended to give vigor to late sown crops and resistance to the Hessian Fly.

Write for our map showing best dates for sowing wheat in your locality; also our Bulletin, "WHEAT PRODUCTION," both mailed free.

Soil Improvement Committee
 OF THE
National Fertilizer Association
 CHICAGO Dept. 146 BALTIMORE

King Segis Pontiac Paul 15940

WE have for sale a few sons of the above bull, ready for service, and whose dams are large heavy-producing cows. Here is an opportunity to get the blood of KING SEGIS and KING OF THE PONTIACS at reasonable prices. Correspondence solicited.
 Also Berkshire and Yorkshire Swine
Larkin Farms Queenston, Ontario

HOLSTEIN CATTLE

The only herd in America that has two sires in service whose dams average 119 lbs. milk a day and over 35 lbs. butter a week. Cows that will give 100 lbs. milk a day are what we are trying to breed. At present we have more of them than any other herd in Canada. We can supply foundation stock of this breeding. Visitors always welcome. Long-distance Phone.

D. C. FLATT & SON, R. R. 2, HAMILTON, ONT.

Clover Bar Holsteins A splendid 14-mos-old son of Minnie Paladin Wayne, who has just completed a record of 26.87 lbs. butter, 545 lbs. milk in 7 days. Her 2-year-old record was 22.33 lbs. For type and color he is second to none. Also her 3-weeks old bull calf and a few others from good R.O.M. dams.
 PETER SMITH, R. R. No. 3, STRATFORD, ONT.

Pioneer Farm Holstein Herd Has only one ready for service son of Canary Hartog, averaged 30 lbs. butter in 7 days and 108 lbs. milk in one day. This fellow, 3/4 white is a handsome son of Calamity Snow Meechthilde 2nd, a 22.86 lb. jr. 3-yr-old daughter of Prince Aaggie Meechthilde, who has 7 jr. 2-yr-old daughters averaging 14,800 lbs milk in R.O.P.
 Walburn Rivers, R.R. No. 5, Ingersoll, Ont. Phone 343 L, Ingersoll Independent.

FAIRVIEW HOLSTEINS

Anything in herd for sale, which consists of 22 cows, 6 two-year-old heifers bred to freshen next fall and early winter, nine yearling heifers not bred and nine heifer calves. All bred in the purple and priced right.
FRED ABBOTT, R. R. 1, Mossley, Ont

Hospital for Insane, Hamilton, Ontario—Holstein bulls only for sale, four fit for service, one being a son of Lakeview Duteland Lestrage, and the others from one of the best grandsons of Pontiac Korndyke, and large producing, high testing R. of P. cows.
APPLY TO SUPERINTENDENT

Dumfries Farm Holsteins—Think this over—we have 175 head of Holsteins, 50 cows milking, 25 heifers due to calve in the fall, and 60 heifers, from calves up to 2 years, as well as a dozen yearling bulls, and anything you may select is for sale. Breeding and individuality the very best.
S. G. & ERLE KITCHEN, St. George, Ont.

Evergreen Stock Farm Registered Holsteins—The kind that tests 4% and wins in the show ring. Could spare a few yearling heifers, or if you want a white as black. The records of his dam, sire's dam, and grand-sire's dam average over 30 lbs. butter in 7 days and nearly 100 lbs. of milk per day. For quick sale we have priced him within your reach—\$150
A. E. HULET BELL PHONE NORWICH, ONTARIO

For Sale---Sons of King Segis Walker
 From high-testing daughters of Pontiac Korndyke. Photo and pedigree sent on application.
A. A. FAREWELL, OSHAWA, ONT.

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



Make that Stump Lot Earn a Profit.

Blast out the boulders, blow up the stumps—and you have a fertile field where waste land existed before.

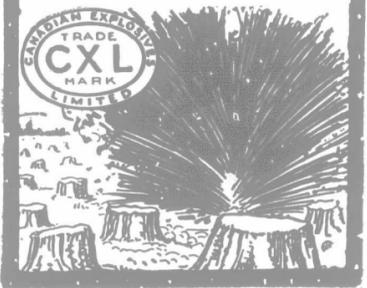
Use C.X.L. Stumping Powder

the most effective and economical means of blasting out stumps, digging ditches and tree holes and doing excavating work on the farm.

There is big money in agricultural blasting. Write for proposition. Send for our Free Booklet "Farming with Dynamite".

Canadian Explosives, Limited

808 Transportation Bldg., Montreal. Western Office, Victoria, B.C. 5



THRESHERMEN, READ THIS!

The Improved Veteran Endless Canvas Drive Belts will give you better service than any other. You want the best. Order now. Sold only by

WINDSOR SUPPLY CO., Windsor, Ont. Headquarters for Suction Hose and all other Thresher Supplies. Write for catalogue, "Engineers' Bargains."

Let This Hydraulic Cider Press Make Big Profits For You

Windfall apples and culls cost as much to grow as good apples. Then why lose them? They can be made into good marketable cider on

Mt. Gilead Hydraulic Cider Presses

Any size up to 400 bbls. per day. Also cider evaporators, apple butter cookers, vinegar generators, filters, etc. Write for catalogue.

HYDRAULIC PRESS MFG. CO.

10 Lincoln Ave., Mt. Gilead, O., U. S. A. Canadian Agents, write: The Brown, Boggs Co., Ltd., Dept. C, Hamilton, Can.

THE DAIRY COW FOR PROFIT

THE AYRSHIRE



On rugged hills, in cold climates, they make record productions of milk on scanty feed. On good pastures and high feed they are unequalled.

If you are in dairying for profit, write us for names of nearest breeders.

Canadian Ayrshire Breeders' Association

W. F. STEPHEN, Secretary Huntingdon, Que.

Pedigreed Jersey Cattle for immediate sale. Eight cows, one bull; also three pedigreed Holstein bulls. DONALD STRATH "EE", Strathrobin Farm York Mills P.O., Ontario

Dates of Fall Fairs—Continued.

Table listing dates of fall fairs for various locations including Freelon, Fordwich, Galetta, Galt, Georgetown, Glencoe, Goderich, Gordon Lake, Gore Bay, Grand Valley, Gravenhurst, Haliburton, Hamilton, Hanover, Harrow, Harrowsmith, Hepworth, Highgate, Holstein, Huntsville, Hymers, Ingersoll, Inverary, Iron Bridge, Jarvis, Kagawong, Keene, Kemble, Kemptville, Kenora, Kilsyth, Kincardine, Kingston, Kinmount, Kirkton, Lakefield, Lakeside, Lambeth, Lanark, Langton, Lansdowne, Leamington, Lindsay, Lion's Head, Lombardy, London (Western Fair), Loring, Lucknow, Lyndhurst, Listowel, Maberly, Madoc, Magnetawan, Manitowaning, Markdale, Markham, Marmora, Marshville, Massey, Matheson, Mattawa, Maxville, Maynooth, McDonald's Corners, McKellar, Meaford, Merlin, Merrickville, Melbourne, Metcalfe, Middleville, Midland, Millbrook, Milton, Milverton, Minden, Mitchell, Moorefield, Morrisburg, Mount Forest, Muncey, Murillo, Napance, Newboro, New Hamburg, Newington, New Liskeard, Newmarket, Niagara-on-the-Lake, Noelville, Norwich, Norwood, Oakville, Odessa, Ohswekin, Onondaga, Orangeville, Oro, Orono, Orrville, Oshawa, Ottawa (Central Canada), Otterville, Owen Sound, Paisley, Pakenham, Palmerston, Paris, Parham, Parkhill, Parry Sound, Perth, Peterboro.

Barrett Money Savers for Farmers

MADE IN CANADA

It's the Little Things that Count

A TINY acorn makes the mighty oak with its numerous uses for man. Noble buildings result from placing small stones or bricks one on top of another. It's the little things that count in life. It's attention to details that means success.

Right now, around your home and farm, there are little things that you would be too wise to neglect if they were called to your attention. Read the seven short paragraphs on this page. They may mean the difference between profit and loss.



CREONOID—Real economy consists of getting a product that is cheap to start with and lasts a long time. Such is Creonoid, the famous lice destroyer and cow spray. With this wonderful product you have care-free live stock.

And you know the importance of this. A little on the woodwork of the henry will drive away mites. Use it in the piggery and stable. It means healthy live stock; more eggs from your hens; more milk from your cows; more flesh from your porkers. You need Creonoid. It's animal insurance.

EVERLASTIC ROOFING

—You don't know the real value of a good ready roofing until you've seen Everlastic. No better "rubber roofing" made at anything like the price. It means insurance against leaks and protection against the weather. Everlastic presents to the weather a tough well built surface that wears wonderfully. And it's easily laid without skilled labor. Before you pay more and get less, try Everlastic on your next roofing job. You will find it a great comfort.



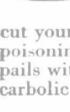
AMATITE—Just think of a ready roofing that greatly improves a building's appearance and doesn't need painting. That's Amatite. Then consider that Amatite is not high priced in spite of its fame and fitness. Once you have seen this roofing you will want it for all your steep roofs and sidings. Each roll of Amatite covers 100 square feet allowing a 3 inch lap. Send for sample.



EVERJET—Everjet Elastic Paint is the best carbon paint ever made. It will add to the life of any felt or metal roof. And its glossy, permanent black surface adds beauty. It will keep your roofs watertight and wear-proof. Your farm implements will also last longer if you keep them painted. You need Everjet. To "keep things up".



ELASTIGUM—Get a can of Elastigum and watch the annoyance and expense of little repairs vanish. Elastigum is a tough, adhesive, elastic cement. It seals leaks, joins or relines gutters, fixes imperfect joints, stuffs cornices, refashes chimneys. And it makes all these things permanently sound. Adheres to wood or metal and is waterproof. It is cheap and easy to use, being applied with a trowel. Handy in a hundred different places.



CARBONOL—Chemistry cannot make a more widely useful or more effective disinfectant than Carbonol. It has a thousand uses in every home and is invaluable to farmers. When you clean house, a little Carbonol in the water will kill germs and odors. If you cut yourself, Carbonol solution will heal the cut and prevent blood poisoning. Use it in the sick room to prevent contagion. Sprinkle garbage pails with it. Disagreeable odors as well as flies will disappear. Carbonol is carbolic acid minus the danger. You can't afford to be without it.



WOOD PRESERVATIVE—Here's the first chance for you to use the wonderful preservative qualities of Creosote without the difficult, expensive closed-cylinder method of applying it. Grade-One Creosote Oil is a boon to the average landowner because it can be applied by spraying, brushing or dipping. It penetrates deeper than any other. It is permanent. It destroys fungi, keeps out moisture and prevents rot. You can make cheap fence posts and woodwork last 20 years. Let us tell you how.

Sold by good dealers everywhere. Send for new "Money Saver" Booklet.

THE PATERSON MANUFACTURING COMPANY, LIMITED MONTREAL TORONTO WINNIPEG VANCOUVER

THE CARRITTE-PATERSON MANUFACTURING CO., LIMITED ST. JOHN, N. B. HALIFAX, N. S. SYDNEY, N. S.



Glenhurst Ayrshires

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

Stonehouse Ayrshires

Hector Gordon, Howick, Que.

Are a combination of show-yard and utility types seldom seen in any one herd. A few choice young males and females for sale. Write or phone your wants to Stonehouse before purchasing elsewhere.

GLADDEN HILL AYRSHIRES

Herd headed by Fairview Milkman. Some choice bull calves for sale, from dams with good records, and a few females. LAURIE BROS. Agincourt, Ontario

THE WOODVIEW FARM JERSEYS

LONDON, ONTARIO John Pringle, Proprietor

Canada's Most Beautiful Jersey Herd—Half the herd imported from the Island of Jersey. Several cows in the Record of Merit and others now under official test. Some very choice stock for sale. When writing, state distinctly what you desire, or, better still come and see them. Farm just outside city limits. We work our show cows and show our work cows.

Ploughs—Wilkinson
 TRADE MARK REGISTERED
 U.S.S. Soft Centre Steel Moldboards, highly tempered and guaranteed to clean in any soil. Steel beams, steel landsides and high carbon steel coulters. Clevises can be used either stiff or swing. Each plough is fitted especially with its own pair of handles—rock elm, long and heavy and thoroughly braced. The long body makes it a very steady running plough. Shares of all widths—specials for stony or clay land. The plough shows a beautiful furrow, with minimum draft and narrow furrow at finish. Ask for catalogue.

The Bateman-Wilkinson Co., Limited
 411 Symington Ave., Toronto, Canada.

No. 3
 Sod or General Purpose Plough.
 15 styles to choose from.



Good Luck
 COTTON SEED MEAL
 CALF MEAL OIL CAKE MEAL
 FLAXSEED GLUTEN MEAL
 POULTRY FEEDS

Write for prices

CRAMPSEY & KELLY
 Dovercourt Rd., Toronto, Ont.

HIGHEST PRICES PAID FOR
WOOL
 HIDES, SKINS, HORSEHAIR,
 WRITE FOR OUR PRICES BEFORE SELLING
 FREE SPORTSMEN'S CATALOG
 OF GUNS, TRAPS, NETS,
 FISHING TACKLE, &c.
JOHN HALLAM, LIMITED
 No. 3 HALLAM BUILDING TORONTO

Choice Tamworths
 Boars and sows of all ages,
 bred from best prize stock.
 Prices right. Write:

HEROLD'S FARMS, Beamsville, Ont.
YORKSHIRES
 Young sow pigs recently weaned for sale.
WELDWOOD FARM
 Farmer's Advocate London, Ont.

TAMWORTHS
 Young sows bred for September farrow and some nice young boars. Write—
John W. Todd, R. R. No. 1, Corinth, Ont.
Swine for Sale—Am offering choice stock in Poland-China and Chester White swine of either sex; most any age. First-prize Poland-China herd London and Toronto, 1915. Prices easy.
GEO. G. GOULD R.R. 4, Essex, Ont.

CLEARVIEW CHESTER WHITES
 For many years my herd has won the highest honors at Toronto, London, Ottawa and Guelph. For sale are both sexes of any desired age, bred from winners and champions.
D. DeCoursey, R. R. No. 5, Mitchell, Ont.

Alderley Edge Yorkshires
 Young pigs both sexes for sale.
J. R. KENNEDY, Knowlton, Que.

Pine Grove Bred from prize-winning stock of England and Canada. Have a choice lot of young pigs of both sexes, pairs not akin, to offer at reasonable prices. Guaranteed satisfaction.
Joseph Featherston & Son, Streetsville, Ont.

ELMFIELD YORKSHIRES
 Choice ones—ranging from 2½ to 5 months. Will be ready for fall service. Prices right.
G. B. Muma, R.R. 3, Ayr, Ont. Paris, G.T.R. Ayr, C. P. R., Telephone 55 R 2, Ayr Rural.

Lakeview Yorkshires—If you want a stock boar of the greatest strain of the breed (Cinderella), bred from prizewinners for generations back, write me. Young pigs of all ages.
JOHN DUCK, Port Credit, Ontario

Townline Tamworths We can supply Youg Tamworths of both sexes and any desired age of superior quality. Also Leicester ram and ewe lambs, Pekin ducks, Langshan cockerels and pullets. Write your wants. **T. Readman & Son, Streetsville, Ont. R.M.D.**

Morrison Tamworths and Shorthorns—Bred from the prize-winning herds of England. Tamworths, both sexes. 12 young boars fit for service. 12 young sows to farrow in August. Choice Shorthorns of the deep-milking strain.
CHAS. CURRIE, Morrison, Ont.

Duroc Jerseys For 13 years our breeding stock has been choice selections from the champion herds of the U.S. We have both sexes, all ages, over 100 to select from. Bred from champions. **L. A. Pardo & Sons, R. R. 1, Charing Cross, Ont.**

Meadow Brook Yorkshires. Sows bred, others ready to breed. 20 sows, 3 to 4 months old and a few choice young boars. All bred from prizewinning stock. Also 1 Shorthorn bull, 18 months old.
G. W. MINERS, R. R. 3, EXETER, ONT.

Dates of Fall Fairs—Continued.

Petrolia.....	Sept. 21 and 22
Picton.....	Sept. 19—21
Pinkerton.....	Sept. 22
Port Carling.....	Sept. 19
Port Elgin.....	
Port Hope.....	Oct. 10 and 11
Powassan.....	Sept. 27 and 28
Prescott.....	Sept. 5 and 6
Priceville.....	Oct. 5 and 6
Providence Bay.....	Oct. 4 and 5
Queensville.....	Oct. 10 and 11
Rainham Centre.....	Sept. 19 and 20
Renfrew.....	Sept. 20—22
Riceville.....	Sept. 28
Richards Landing.....	
Richmond.....	Sept. 21—23
Ridgetown.....	Oct. 9—11
Ripley.....	Sept. 26 and 27
Roblins Mills.....	Oct. 6 and 7
Rocklyn.....	Oct. 5 and 6
Rockton.....	Oct. 10 and 11
Rockwood.....	Oct. 5 and 6
Rodney.....	Oct. 2 and 3
Roseneath.....	Sept. 21 and 22
Rosseau.....	Sept. 26 and 27
Sarnia.....	Sept. 28 and 29
Sault Ste. Marie.....	
Scarboro (Agincourt).....	Sept. 26 and 27
Schomberg.....	Oct. 12 and 13
Seaforth.....	Sept. 21 and 22
Shannonville.....	Sept. 16
Shequindah.....	Oct. 3 and 4
Shelburne.....	Sept. 21 and 22
Simcoe.....	Oct. 17—19
Smithville.....	Sept. 21 and 22
South Mountain.....	Sept. 7 and 8
South River.....	Oct. 3 and 4
Spencerville.....	Sept. 26 and 27
Springfield.....	Sept. 21 and 22
Sprucedale.....	Sept. 21 and 22
Stella.....	Sept. 26
Stirling.....	Sept. 23 and 29
Stratfordville.....	Sept. 20
Strathroy.....	Sept. 18—20
Streetsville.....	Sept. 27
Sunderland.....	Sept. 19 and 20
Sundridge.....	Oct. 5 and 6
Sutton.....	Sept. 14 and 15
Tamworth.....	Sept. 14
Tara.....	Oct. 3 and 4
Tavistock.....	Oct. 2 and 3
Teeswater.....	Oct. 2 and 3
Thamesville.....	Oct. 3 and 4
Thedford.....	Sept. 21 and 22
Thessalon.....	Oct. 2 and 3
Thorndale.....	Sept. 25 and 26
Thorold.....	Thanks'g Day
Tiverton.....	Oct. 3
Toronto (C. N. E.).....	Aug. 26—Sept. 11
Tweed.....	Oct. 4 and 5
Udora.....	Oct. 10
Underwood.....	Oct. 10
Utterson.....	Sept. 23 and 29
Vankleek Hill.....	Sept. 20—22
Verner.....	Sept. 20
Walkerton.....	Sept. 12 and 13
Wallaceburg.....	Sept. 26 and 27
Wallacetown.....	Sept. 28 and 29
Walter's Falls.....	Sept. 26 and 27
Warkworth.....	Oct. 5 and 6
Warren.....	Oct. 5 and 6
Warren.....	Sept. 20 and 21
Waterdown.....	Oct. 3
Waterford.....	Sept. 28
Watford.....	Oct. 10 and 11
Welland.....	Oct. 3—5
Wellandport.....	Sept. 23 and 29
Wellesley.....	Sept. 12 and 13
Weston.....	Sept. 22 and 23
Wheatley.....	Oct. 2 and 3
Wiaraton.....	Sept. 26 and 27
Wilkesport.....	Sept. 26
Williamstown.....	Sept. 21 and 22
Winchester.....	
Windsor.....	Aug. 29, Sept. 1
Wingham.....	Sept. 28 and 29
Wolfe Island.....	Sept. 19 and 20
Woodbridge.....	
Woodstock.....	
Woodville.....	Sept. 14 and 15
Wooler.....	Sept. 1
Wyoming.....	Sept. 29 and 30
Zurich.....	Sept. 20 and 21

A political speaker, warning the public against the imposition of heavier tariffs on imports, said, "If you don't stop shearing the wool off the sheep that lays the golden egg, you'll pump it dry."

As an example of Mr. Lloyd George's gift as a master of repartee, a correspondent tells the following: It was in the Minister of Munitions' younger days, and he had been preaching Home Rule All Round—Home Rule for Ireland, Home Rule for Scotland, Home Rule for England, Home Rule for Wales. "And Home Rule for Hell, too!" yelled a persistent inter-rupter. "Quite right," returned Mr. Lloyd George, "I always like to hear a man stick up for his own country."—To-day.

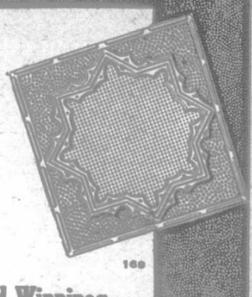
For fire-safety, inside the home use 'Metallic' Ceiling Plates

YOU can make your home fireproof and more attractive at small cost by using Metallic Ceiling and Wall Plates. Many beautiful designs with cornices and mouldings for any style of room. You can put them on old walls as easily as new. Wash them or brighten up with paint whenever desired.

"Metallic" Ceiling Plates are sanitary, fireproof, inexpensive and good for a life time.

Write for booklet and prices. We manufacture all kinds of "Metallic" building materials and sell direct at lowest prices.

Metallic Roofing Co. Limited, Toronto and Winnipeg



H. ARKELL W. J. ARKELL F. S. ARKELL
Summer Hill Stock Farm
 Largest and oldest importers and breeders of
OXFORDS
 in Canada. Look up our show record, it will give you an idea of the kind of Oxfords we have for sale.
PETER ARKELL & SONS, Proprietors, Teeswater, Ont.
 Customers, beware of imitations of this advertisement.

Summer Hill Farm
 THE HOME OF THE FAMOUS OXFORD
 We breed and import Registered Oxfords. Rams and ewes in any quantity for sale. All recorded. Positively no grades registered as pure-breds. Also no grades handled except by order.
PETER ARKELL & CO., Props. Box 454, Teeswater, Ontario

Oxford and Hampshire Down Sheep
Farnham Farm The oldest established flock in America
 Having quit the show ring we hold nothing back. Our present offering is a number of superior yearling and two-shear rams for flock headers, a carload of yearling range rams, a hundred first-class yearling ewes; also a fine lot of ram and ewe lambs of 1916.
 ALL REGISTERED PRICE REASONABLE
HENRY ARKELL & SON, ROUTE 2, GUELPH, ONTARIO

BLAIRGOWRIE SHROPSHIRE AND SHORTHORNS
 PRESENT OFFERING:
 100 Imported Shearling Ewes 75 Canadian-bred Shearling Rams
 25 Imported Shearling Rams 20 Cows and Heifers in Calf
 75 Canadian-bred Shearling Ewes 5 Bulls of serviceable age
JOHN MILLER, Ashburn, Ont. Myrtle Sta., C.P.R. & G.T.R.

Choice Yorkshires
 We have at present several Yorkshires both sexes, all ages, for sale. Prices on application. Correspondence solicited.
Bell Phone Brantford 1102 W. G. BAILEY, Prop. Oak Park Stock Farm, R. R. No. 4, Paris, Ontario

Duroc Jersey Swine, Jersey Cattle—In Duroc Jerseys we have either sex of any desired age, bred from winners and champions high in producing blood.
Mac. Campbell & Sons, Northwood, Ont.

OAK LODGE YORKSHIRES
 We are in a position to supply boars and sows of different ages. We have an established type of Yorkshires that has been produced through many years of careful breeding and selection.
J. E. Brethour & Nephews, Burford, Brant County, Ont.

YORKSHIRES Our offering never better. "Champion hog winner of 12 firsts, 5 championships, 2 years showing, still at the head. Boars and sows, all ages, same breeding as winners of export bacon in keen competition at Toronto in 1915."
Wm. Manning & Sons, Woodville, Ontario

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

CLOVERDALE LARGE ENGLISH BERKSHIRES
 Sows bred, others ready to breed; boars ready for service; younger stock, both sexes, pairs not akin. All breeding stock imp. or from imp. stock. Prices reasonable.
C. J. Lang, Burketon, Ont. R. R. 3

Cherry Lane Berkshires and Tamworths In 1915 we made a clean sweep at all the western shows in Berkshires third prize Berkshire boars at Guelph, first and champion Tamworth boar at Guelph.
S. DOLSON & SON, NORVAL STATION, ONT

Newcastle Herd of Tamworths and Shorthorns—Stock boar and 2 aged sows for sale; fit for any show ring; also boars ready for service, and a number of sows bred for Aug. and Sept. farrow; others ready to breed, both sexes ready to wean; all descendants of imported and prize champion stock. A few choice bull calves, from 2 weeks up to a year old, from great dual-purpose cows; several extra good cows, with or without their calves; also heifers in calf to Broadlands, my present stock bull. Show stock a specialty. Prices reasonable. Long-distance phone.
A. A. COLWILL, R.M.D. No. 1, Newcastle, Ont.

PROPER OILING SAVES MONEY

THE right oil in the right place means less money for lubrication and a longer life for your machine.

The Imperial Oil Company makes a large number of farm lubricants---each exactly suited for its special use. Here are some of them:

STANDARD GAS ENGINE OIL

Recommended by leading builders for all types of internal combustion engines, whether tractor or stationary, gasoline or kerosene. It keeps its body at high temperature, is practically free from carbon, and is absolutely uniform in quality.

PRAIRIE HARVESTER OIL

An excellent all-round lubricant for exposed bearings of harvesters and other farm machinery. Stays on the bearings; will not gum or corrode.

CAPITOL CYLINDER OIL

The most effective and economical lubricant for steam engine cylinders; proven superior in practical competition with other cylinder oils.

ELDORADO CASTOR OIL

A high-grade, thick-bodied oil for lubricating the loose bearings of farm machinery, sawmills and factory shafting.

THRESHER HARD OIL

Keeps the cool bearing *cool*. Does not depend on heat or friction to cause it to lubricate.

STEEL BARRELS—All our oils can be obtained in 28-gallon and 45-gallon steel barrels. These barrels save their cost by eliminating leakage. You use every drop you pay for. Clean and convenient.

If your lubricating problem gives you trouble, let us help you. Tell us the machine, the make, the part—and we will gladly give you the benefit of our experience in selecting the proper lubricant.

THE IMPERIAL OIL COMPANY

Limited

BRANCHES IN ALL CITIES



me
es
ELL
of the
Ont.
quantity for
s.
r, Ontario
sheep
superior year-
ed first-class
NABLE
ONTARIO
HORNS
LER,
Ont.
R. & G.T.R.
res
Prices on
Y, Prop.
sex of any
d champions
quality and
wood, Ont.
shed type of
ction.
nty, Ont.
g winner of
ving, still at
me breeding
le, Ontario
RES
on Torredor,
guaranteed,
rd, Ontario
HIRES
rs not akin.
R. R. 3
an sweep at
n Berkshires
First and
ION, ONT
for sale; fit
red for Aug.
ported and
at dual-pur-
Broadlands,
castle, Ont.

REMINGTON
UMC



Don't miss your days of sport—they give you something that money cannot buy—good health. And to make sure of GOOD sport, rely on Remington U M C.

This is the big complete line that outfits you with anything you need in fire-arms and in ammunition, from little .22's to big game rifles and cartridges.

There are over 100 years of skill and practical experience with all sorts of shooting conditions behind Remington U M C.

We're the kind of folk who take time to do things right. Our reputation demands it. There are over 1,200 inspection points in every Remington U M C Shot Gun, for instance, and every one is a severe test.

Every rifle, every shot gun we sell is tested again and again at the targets by our experts, who demand perfection, or the arm is rejected.

We make shells and cartridges to suit any fire-arm now in use, and even for some rifles that have been off the market for 50 years, so you can always get Remington U M C high quality load-

ing and materials for your ammunition. Moreover, we guarantee your fire-arm to the full extent of the maker's guarantee when Remington U M C is used.

Remington
UMC

For Shells—choose Arrow, or Nitro Club, the steel-lined beauties that keep all the drive of the powder right behind the shot. The "Remington" is a very popular all-round useful shell. Standard loads, smokeless powder, The "New Club" (black powder) is a favorite of 30 years' standing.

For Ammunition—choose Remington U M C, all calibres and loads from .22's to .45-70's.

For Fire-Arms—Remington U M C .22 and big game rifles and Shot Guns have masterly quality, improvements and safety devices.

For Advice—see the dealer who shows the Red Ball of Remington U M C. He's posted—he's up-to-date.

Remington Arms
Union Metallic
Cartridge Co.

(Contractors to the British Imperial and Colonial Governments)

WINDSOR, ONT.
London, Eng.
New York, U.S.A.



SPORTSMEN'S
HEADQUARTERS
REMINGTON
UMC
FIREARMS &
AMMUNITION

REMINGTON
UMC