

PUBLISHED EVERY WEEK. \$1.50 PER YEAR.

# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

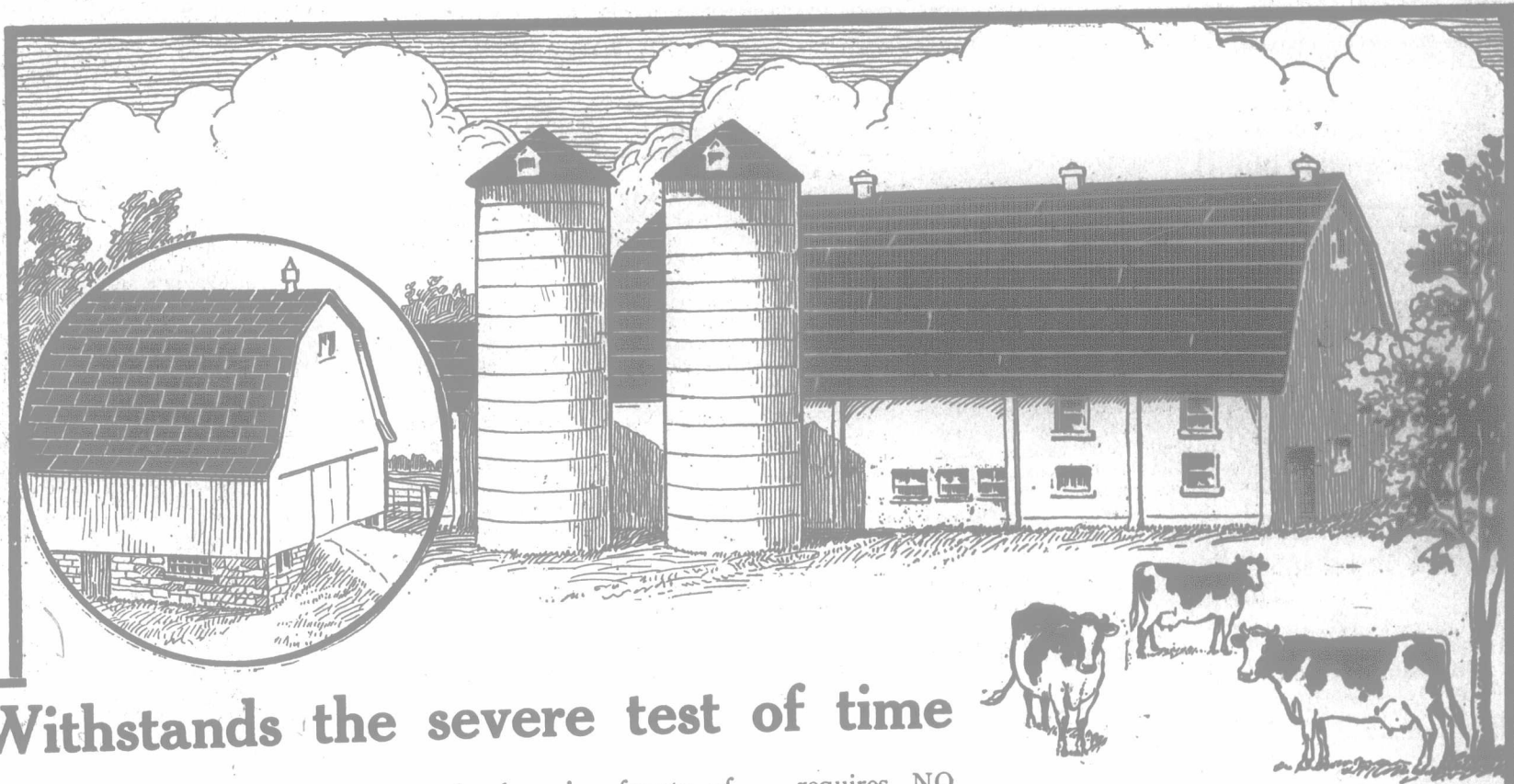
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Vol. LI.

LONDON, ONTARIO, JUNE 22, 1916.

No. 1239



## Withstands the severe test of time

THE parching summer sun; the heaving frosts of winter; the March gales and the torrential spring rains have little effect upon BRANTFORD ROOFING. It remains storm-proof for years without showing appreciable signs of wear or even buckling.

There must be a reason for this never-flinching permanency. Here it is: The foundation or "base" of

requires NO PAINTING.

It is made in heavy weight only. In red or green natural colors, which do not fade.

All three styles are thoroughly saturated—under extreme pressure—with 99 per cent. high-grade asphalt or mineral pitch. You can easily see what a wonderfully pliable, weather-resistant roofing material this makes. The frost cannot crack it nor the summer sun melt or blister it.

Then again, BRANTFORD ROOFING successfully wards

# Brantford Roofing

is pure, long-fibred felt, which is thoroughly saturated with asphaltum under great pressure. This asphaltum is an indestructible fire-resistant material, compounded with other necessary high-grade water and fire proofing ingredients.

There are three grades of BRANTFORD ROOFING:

- (1) **Brantford Asphalt**, with a non-metallic quartz and silica finish, which fortifies it against fire and weather. It is made in three thicknesses.
- (2) **Brantford Rubber**, with a smooth, rubber-like surface—from whence its name—but containing no rubber. It is also made in three thicknesses.
- (3) **Brantford Crystal**, with a quartz crystal surface, which

off live sparks, cinders, acids and chemical fumes to which they are frequently subjected in large cities.

Just pit these many superior points of BRANTFORD ROOFING against other roofing materials, remembering its long fibre-felt "base," its asphalt saturation, its rock surface, its pliability, its pure materials and its defiant weather-and-time-resisting qualities.

Then before tearing off that old leaking roof or starting to roof the new building, just send for a copy of our new Roofing Book on Brantford Roofing in rolls—House and Barn Slates in colors.

N.B.—These are the coming roof materials because of their fire-resisting and waterproofing qualities.

**BRANTFORD ROOFING CO., LIMITED, Brantford, Canada**

Branch Warehouses: Montreal, Quebec, and Toronto, Ontario



PINE TREE BRAND



TRADE MARK  
IT STANDS ALONE

**PINE TREE BRAND SEED**  
Produces heavy yields and clean crops

Ask your dealer for  
**PINE TREE BRAND**  
**Timothy - Clover - Alfalfa**

The valuable Inoculating Material  
**NOD-O-GEN is FREE**  
with  
**PINE TREE BRAND ALFALFA**  
If your dealer cannot supply you  
write:  
**THE ALBERT DICKINSON CO.**  
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**Rebuilt Portable and Traction Engines and Threshers**

All sizes for sale cheap. Complete threshing outfit, traction engine with cab, separator, wind stacker, in good operative condition. **\$875**

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

**GRAND TRUNK RAILWAY SYSTEM**

The Grand Trunk Railway System Will Run

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Every Tuesday until October 31st

Tickets valid to return within two months inclusive of date of sale.

**WINNIPEG and return \$36.50**  
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Proportionately low rates to other points in Manitoba, Saskatchewan and Alberta


Full particulars and tickets on application to agents.

**Seed Buckwheat & Millet**

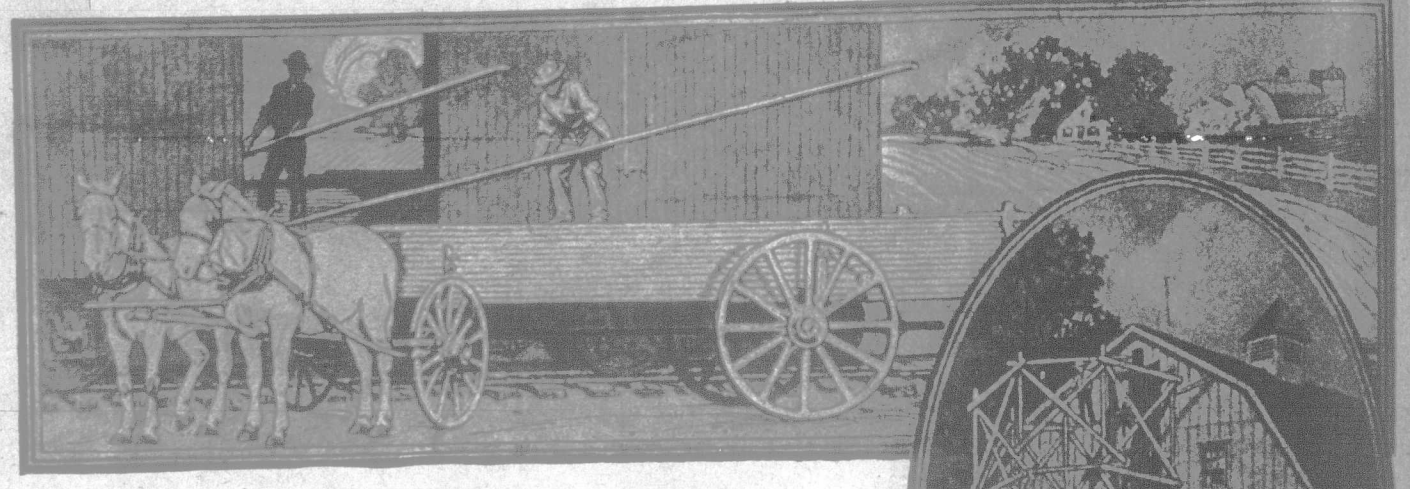
80 lbs. hull of Buckwheat ..... \$1.00 per bush.  
Canadian Millet ..... 5.00 per 100 lbs.  
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All prices for bulk quantities. Allow 25 cents extra for cotton bags. Write for catalogue.

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**WATERWASH SEPARATOR for \$5.50**



**This Year Corn is Gold  
Get a Silo NOW to Bank It**

Everything indicates that corn will be sky-high. When you feed it you will feed M-O-N-E-Y. This year, more than ever before, it will be good business to save every penny's worth of food value in your crop. There is but one way to do it. Order a silo now—more important still, order a

**HYLO SILO**

Then you will not only have a silo up and ready for business when you need it, but you will have the silo that is to corn what your Savings Bank is to money.

The Hylo Silo is sound from top to bottom and through and through. No defects in material or design—therefore no leakage, mildew or spoilage. Mortised joints all wood—nothing to corrode, rot or crumble. Doors airtight but cannot stick. Anchorage simple but sure. Automatic self-adjusting hoops.

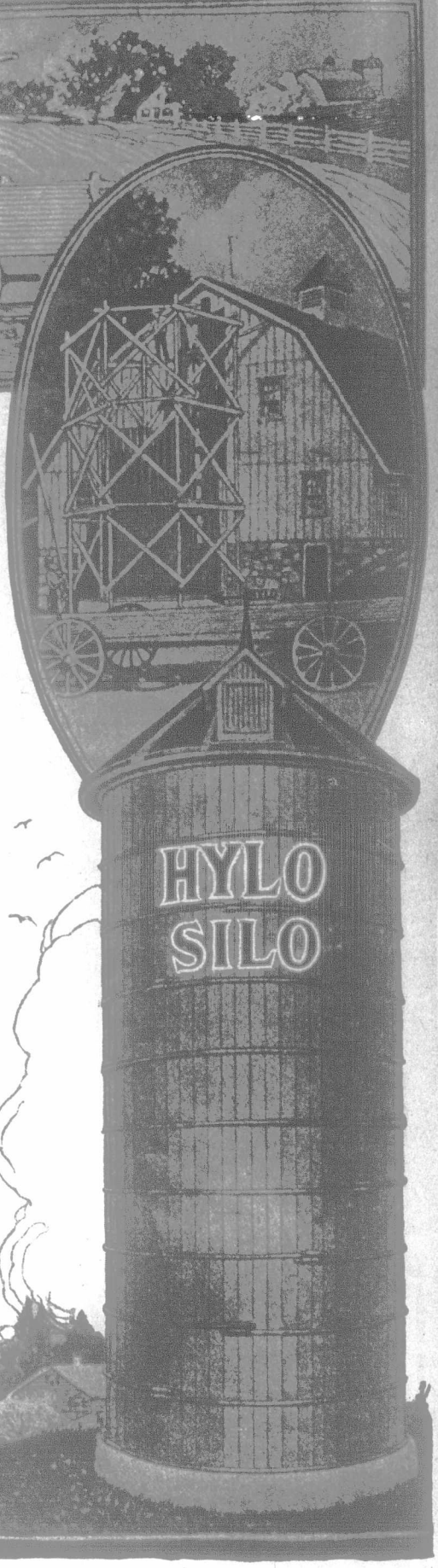
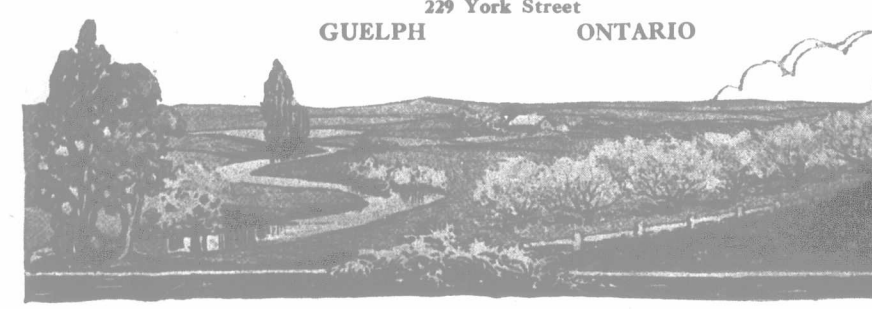
You can store your corn in the

Hylo Silo with the same confidence that you put money in the bank. You can be sure that the Hylo Silo will keep it safe and sweet and give it back when you want it with big interest in form of increased succulence and greater food value. Thousands of farmers bank upon the Hylo Silo, because it has never failed to increase their prosperity every year.

To make the most money from your crop, order now. To save the most money on your silo, order now. Choice timber is still going up. We cannot guarantee to maintain our low prices after our present supply is exhausted.

*Nothing should stop you from ordering NOW. Our easy payment plan lets the silo pay for itself. Write to-day for complete details and catalogue.*

**Gilson Manufacturing Co., Limited**



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FOR THE SETTLER IN  
**New Ontario**

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

For full information as to terms, regulations and settlers' rates, write to  
**H.A. MACDONELL, Director of Colonization**  
Parliament Buildings, TORONTO, ONT.  
**HON. G. HOWARD FERGUSON, Minister of Lands, Forests and Mines.**

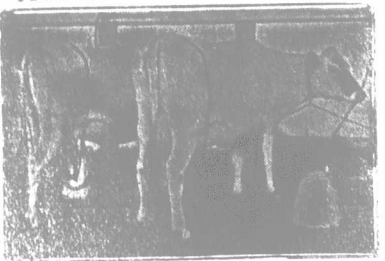
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The MILKER that is noted for its  
**Simplicity, Efficiency, Durability, Economy**

Low initial cost and LOW running cost. Ask the man who runs one. Over 2,000 in daily use.

Write to **B. H. H.**  
**H. F. Bailey & Sons**, Galt, Ont.  
SOLE MANUFACTURERS FOR CANADA  
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**"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.

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Dept. B.      London, Ont.  
World's Largest Manufacturers of Concrete Machinery.

**CLAY TILE**

SIZES 3 INCHES TO 16 INCHES

Prices and quality right. For prices on sorted car-lots, write

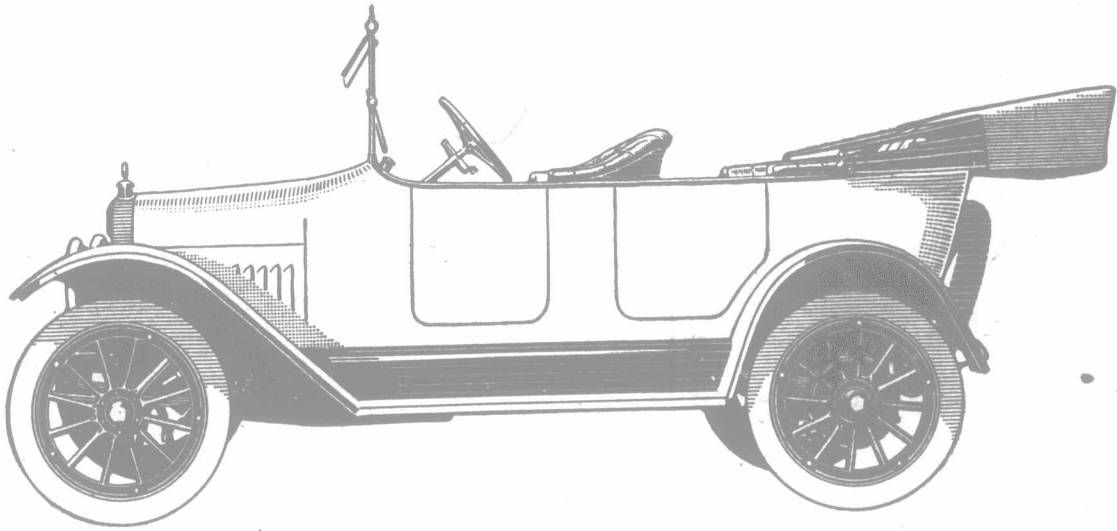
**WM. DELLER**  
R.R. No. 4  
Thorndale      Ontario

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

When Writing Advertisers, Please Mention "The Farmer's Advocate"



# Maxwell \$850



## Points to Consider

**Y**OU, like many other people in your community, will soon be driving your first automobile or a new one to replace the old one. While every buyer must analyze for himself the features embodied in various cars, we simply want to present briefly a few Maxwell facts that may aid you in reaching a wise decision.

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The Maxwell is a comfortable riding car. There is plenty of room for five people; the cushions are soft and deep; the springs are long and flexible and they are made of the best spring steel, scientifically heat-treated, accurately suspended and balanced. You will always be comfortable in a Maxwell.

### Appearance

The Maxwell is a trim, smart, good-looking car. While it is, of course, smaller than the heavy high-priced cars, its finish, its lines, its body, its general design is almost identical with cars costing two to three times as much.

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The Maxwell car, being a product of thirteen years evolution, is so designed and manufactured that it gives unflinching, consistent and satisfying service to thousands of owners. Maxwell cars are made of the best materials that money and brains can buy—and they are made right. Moreover, they are equipped with every device

for comfort and convenience. They are complete in every respect.

### Low First-Cost

You can get everything in a Maxwell that you can get in any car and you get it for less money. The reason for this is that the Maxwell is a light car and it is built in enormous quantities. The Maxwell Motor Co. is one of the three largest producers of high grade motor cars in the world.

### Low After-Cost

The Maxwell will give you more miles per dollar than any car built. We say this without hesitation or doubt. It is our honest belief and we are willing to prove it by various Maxwell World Records, by Maxwell owners, by comparison with any other car or by any other way you suggest or prefer.

If this statement of facts induces you to visit our dealer and arrange for a demonstration, we will be confident of the outcome. The Maxwell will please you. We know it will.

5-Passenger Touring Car \$850      2-Passenger Roadster, \$830

# Maxwell

Motor Company of Canada, Ltd.

Windsor, Ontario



Send for our booklet, "22,000 Thousand Miles Without Stopping"

## The Gurney-Oxford SENIOR



**\$38<sup>50</sup>** Freight paid as far West as Fort William.

Straight from the great Gurney-Oxford foundries, this splendid Gurney-Oxford "Senior" steel range with divided flues, special fire box, heat-enveloped oven, is by far the best value you can buy in Canada to-day. Six 9" covers, 20" oven, right hand reservoir, warming closet, weight 420 lbs., best blue steel body, immensely strong and durable.

Send for our new complete Catalogue with prices

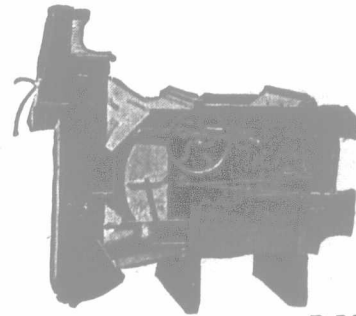
Shows everything in the stove, range and heater line of the famous Gurney-Oxford make, admittedly Canada's best since 1845. Write for a copy today.

Gurney Foundry Co. Ltd.  
Dept. 829 TORONTO  
Montreal Hamilton Winnipeg  
Calgary Vancouver S.15.B

### This Guarantee is Your

If your Gurney-Oxford stove, for any reason fails to give satisfactory results, we agree to refund the price paid us for the Stove any time within 100 days of the date of purchase. Could you be safer?

Protection



## Kline Fanning Mill

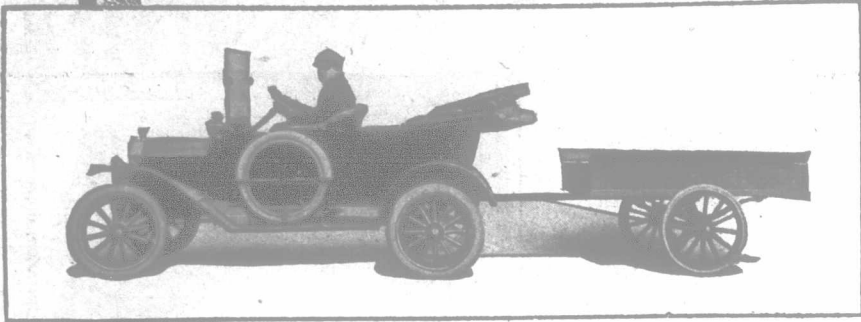
Messrs. The Kline Mfg. Co., Beeton, Ont.  
Gents: Some time ago I picked up an old Kline Mill at an Auction Sale. It had been discarded for a time and replaced by a Chatham. I spent a little time on it and got it into working order, and it turned out to be one of the finest mills I ever handled. I have used nearly everything on the map in the way of Fanning Mills. The country is flooded with that useless mill that was peddled from waggons and sold for whatever a man would offer—dear at any price.  
MR. JACKS, Stroud, Ont.

KLINE MANUFACTURING CO.  
BEETON, ONTARIO



**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."





## 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.

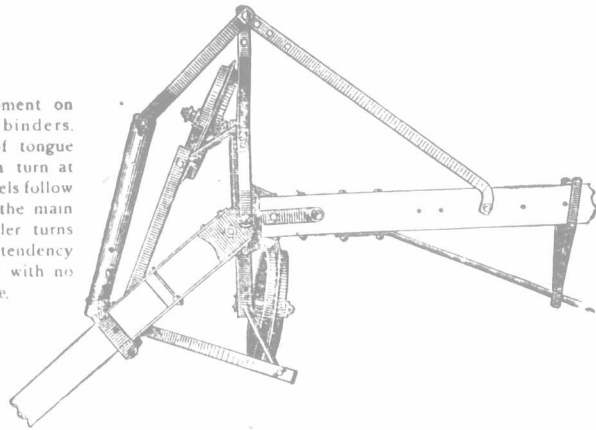
The Auto Trailer has proved so successful in the United States that thousands of them have been sold in the last few months. This splendid utility—the FOX Trailer—can be attached to any make of car. It causes no injury to the car—no inconvenience to drive. Built like an automobile, with steel chassis, 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

Auto tongue truck equipment on Deering and McCormick binders. Illustration shows position of tongue truck wheels when making a turn at end of swath. Note that wheels follow a natural circular track with the main wheel as a pivot. The binder turns squarely and easily with no tendency of wheels to drag or lift and with no twisting strain on binder pole.



## Binder Details That Count

A BINDER will work with a main wheel 8 inches wide, but a 10-inch wheel gives the machine a better motion and makes it pull easier, therefore that extra 2 inches on the face is important. Deering and McCormick binders have main wheels 10 inches wide.

An inch or so added to the depth of a main wheel lug is a small thing unless it gives the machine needed tractive power; then it is a big thing. Compare the depth of lugs on our main wheels and on others.

Deering and McCormick auto tongue truck wheels have removable bushings equipped with hard oil cups, which save throwing away the whole wheel when the bearing is worn. The canvases are loosened and tightened by the simple throwing of three levers, and are kept running true by an equalizer bar. This adds to the life of the canvases.

Buy Deering and McCormick binders—you can't do better. Your local agent will give you good service on the machines on sale. If you would like to have printed descriptions, write the nearest branch house.

**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



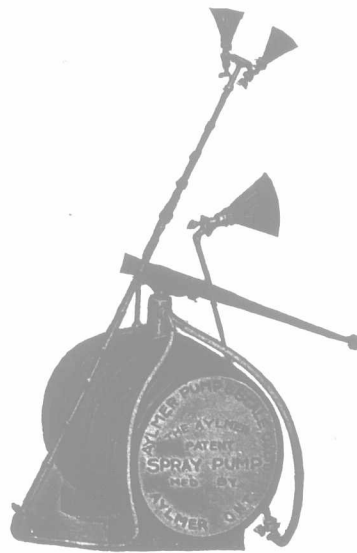
## SYDNEY BASIC SLAG

The Ideal Fertilizer for Ontario Soils  
Arrange Early for Your Supplies for Fall Wheat

We have just printed a new pamphlet giving full particulars with regard to Sydney Basic Slag. It also contains the experience of leading Ontario farmers who have been using Basic Slag since its introduction. Drop us a line and let us send you a copy of this pamphlet. We think a perusal of same will start you using Basic Slag. In any case it is worth your while getting to know something about the fertilizer which thousands of Ontario farmers say is the best value obtainable.

**The Cross Fertilizer Co., Limited**  
SYDNEY, NOVA SCOTIA

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You cannot afford to take any chances on the short-spraying season—the loss is too serious.

### OUTFITS AND PRICES.

SPRAYER OUTFIT A—Being Pump only, with Mechanical Dash Agitator and Brass Agitator Cock, without Barrel, Price, \$14.00  
SPRAYER OUTFIT D—Being Outfit A, Ten Feet Hose, with Couplings Attached, Two Friend Nozzles, One Brass Stopcock, One Y, One Long Iron Extension Rod, without Barrel. Price, \$20.00  
Extra Hose, per foot, 16  
For Lined Bamboo Extension Rod, in place of Iron Extension Rod add, 2.00  
With Barrel, 4.00  
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Extra Hose, per foot, 16  
With Bamboo Extension Rods in place of Eight-Foot Iron. Price, \$28.00  
With Barrel, 4.00  
With Two Brass Triple Heads Six Nozzles, instead of as in Outfit F—Add to list, \$2.50  
The Aylmer makes child's play of Spray Day.

You take no chances—you get results. It is the sprayer you will buy sometime. Why not now?

(Used by Seven Governments)

**The Aylmer Pump & Scale Co., Limited, Aylmer, Ontario**

**Peerless  
Guaranteed Fencing**

Strongly made and closely spaced—making it a complete barrier against large animals as well as small poultry. Top and bottom wires No. 9—intermediates No. 12 wire—made by the Open Hearth process which time and other tests have proven to be the best material made for the manufacture of wire fencing. Send for literature. Ask about our farm and ornamental fencing. Agencies nearly everywhere. Live agents wanted in unassigned territory.

**The Banwell-Hoxie Wire Fence Co., Ltd.,** Winnipeg, Man., Hamilton, Ont.

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# The Farmer's Advocate and Home Magazine

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ESTABLISHED  
1875

PRINTED IN ACCORDANCE WITH THE COPYRIGHT ACT

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LONDON, ONTARIO, JUNE 22, 1916.

1239

## EDITORIAL.

Cultivate and hoe early.

Big weeds are hard to kill.

It does not pay to take anything for granted.

A late crop of corn may be rushed along by extra cultivation.

The Canadian lines still stand between the Kaiser and Calais.

Facts and figures are what count in connection with agriculture to-day.

A few acres of buckwheat might help you out with pig feed next winter.

Keep the mower knife sharp enough to cut. Bruising off the grass is hard on the machine.

The legendary King Midas Touch is nothing compared with the way grass grows into gold on the dairy farm.

All farm boys and young farmers who do things are invited to enter the competition announced in the boy's column.

There have been a lot of spoiled plans in the world war, and the Russians have done nobly at interfering with the Austrians.

Horses, cattle, sheep, swine, poultry—these are the hope of the farmer. No one is boosting wheat in Ontario this year.

"The war will end when somebody gets licked," said the late James J. Hill, "and somebody has got to get licked before it ends."

It is ridiculous that the country districts and rural population should be made the butt of all the uncomplimentary statements regarding recruiting.

This is a year which will put to the test all the farmers' powers to overcome adverse weather conditions. Too much rain is more difficult than drouth.

It is time to consider ways and means of handling the hay crop. It is to be hoped the weather brightens up in time to save one of the best crops of this feed Ontario has had for some time.

Dairymen whose cows break records tell us that they get good results from feeding roots in conjunction with silage. Swedes sown yet will, if the year be favorable, produce good yields.

We must not get so absorbed in plans for after the war that we fail to prosecute the war to the limit, nor must we forget that the end of the war will not be the solution of all international difficulties.

In a few words, the Cause of The Allies is this: That the integrity of smaller nations be preserved, international obligations respected, and the rights of humanity regarded. This program should commend itself to the World League to preserve peace.

## Where Another "War Book" Might Do Good.

A few weeks ago the Canadian Department of Agriculture issued a 250 page war book entitled "Production and Thrift." Early in 1915 a similar book was published in connection with the "Patriotism and Production" campaign. The present issue may be had by anyone who applies for it and contains considerable information of interest and value. There are a great many facts and figures contained between its covers which it would be to the advantage of every farmer to know. While not agreeing with all phases of the campaign for patriotism, production and thrift, we cannot refrain from favorable comment on the agricultural war book. While it is never too late to talk increased production it is now getting past the season when the farmer can do very much to boost his 1916 output of cereals and general crops, outside of hoed crops. Thrift can and should be practiced at all times. There is a hint in another article in this issue that all the literature should not be directed at the farmer. We believe that, at this time, the farmer is working harder, toiling longer days and putting forth greater efforts to produce than is any other class of men in the country. Where is the greatest waste going on? Who are the people making most money out of the war? Where do they live who plan extra hours of daylight for automobiling, bowling, ball games and picture shows? Where do we find the most inconceivable mismanagement in civic affairs? Where are the war profiteers? There can be only one answer—in the cities. Some city men are grafting more, wasting more, working shorter hours, spending more time on pleasure seeking and practicing more mismanagement than could be found in any part of the country districts. If the farmer needs an agricultural war book there is certainly much more urgent need of a war book designed for and aimed at the urban dweller.

The average farmer knows more about thrift and has practiced more of it than the average city man ever dreamed of. If it had not been for his hard work, long hours and close saving he would not be in the position in which he is to-day. Whatever success he has had he lays to these. It might not do any harm for some city men to read a specially prepared book on how to eliminate waste, on the necessity of working longer hours and spending money wisely.

The statement is made on every hand that the farmer is making all kinds of money because of the war. Where and how? We are ready to admit that prices are good, but they are by no means exorbitant. The farmer has no chance at war contracts. In one Ontario city, action was threatened against dairymen if they attempted to increase the price of milk. The farmer gets what the other fellow will pay on the open market. If there should be a grave scarcity of any agricultural product, as with hay in the Old Land, the government steps in and takes it over at a price. Britain herself controls the meat markets of the world to-day, and the price of cereals is not out of the way when wheat sells at around a dollar per bushel. The farmer is just getting a fair price for what he produces. If anyone doesn't believe it let him try farming.

The farmer cannot limit his hours to ten, let alone eight. He is short handed and must use all the daylight there is in order to get work enough done to make ends meet. If some business men made as small interest on capital invested as does the average farmer, even when his goods are selling at present prices they would also have to use all the daylight hours or would change their business. There are no short hours on the farm just now.

And then for mismanagement of civic affairs,

councils of the larger centers put the township and county bodies completely in the shade. If the average farmer or businessman ran his business on the same basis as that upon which the average city business is done he would be out of business in short order. A speaker in a Western Ontario city recently called it a "fossilized system". It is strictly up-to-date in so far as getting away with the money is concerned. All the laboring man's surplus earnings must go for taxes on his little home. At least a part of this money should and could be saved for his use in later years.

And who gets away with war profits? Have you heard of real farmers being implicated in million-dollar war contract scandals? Not yet. It seems from a study of the situation that some department of government, if it is necessary to exhort farmers to put forth a greater effort for patriotic reasons, might well address a communication in book form to the business men and urban people generally. We would not have them slighted. We would not say that they do not realize there is a war on. Far from it. Thousands of their best and bravest have offered their lives on their country's altar. Other thousands have given freely of their earthly wealth. But why not show them why and how they should eliminate waste, why they should work longer hours in their own interest and in the interests of their country, why they should make nothing more than a reasonable profit on work or transactions and above all things show them how to eliminate waste in civic government. What is sauce for the goose is sauce for the gander.

## Make It Fair and Efficient.

At the same time, one day last week, that a mass meeting of the women of Toronto were passing a resolution demanding universal enrolment or national registration of all able-bodied men in Canada, a recruiting officer was asserting from the steps of the City Hall in the same place that Canada is about at the end of the tether in so far as voluntary enlistment goes. If what the officer says is true there is every reason why the resolution of the women of Toronto should be acted upon. There seems to be no good reason why enrolment should not be practiced any way. Under such a system there would be organized effort at home as well as in the army. The man who is of more service to his country at work at home would receive some badge of recognition which would protect him from the jibes of others. The man who could be spared for work in Canada would be sent where he is most needed. The man in the rural districts who is needed to work the land and produce food would not continue to be the butt of all the nasty remarks re recruiting. It is remarkable how propaganda, since the war began, has been directed at the farmer. He has been urged first to be patriotic, then to produce, and then to be thrifty. Then those who are wont to ride about in fine carriages, who work short hours and save daylight for pleasure, rise in meeting and tell their audience which knows nothing of the country or country conditions that the rural people do not realize there is a war being waged in Europe. Not long ago the writer travelled up and down the concessions and sidelines of two of the best counties of the province, one county about which the statement was recently made that several parishes therein did not really know there was such a thing as a great war on, and what was the condition of affairs? Hired men and farm boys had gone to the war or were in training. Farmers, many of whom were getting on in years were doing the best they could alone or by working together. Old men were forced to work a hundred acres or more alone and were being urged to and felt the need of producing more. And yet there are those who still say the country districts do not know there is a war. True



# 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.

- 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.
- 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.
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there are shirkers in the country districts. But so there are in cities and so there will be in both until universal enrolment is a fact. Would it not be a fine step to have such enrolment and put an end to the ridiculous statements made from city platforms and by men who do not know of what they are talking? Why not direct some of the official literature at the urban centers? Surely all the need for special pleas for patriotism, production and thrift is not to be found in the country districts. One thing is certain, universal enrolment, if properly carried out would be fair to all, which is saying a good deal more than can be said for present methods. It would organize, systematize and bring clearly before the people their obligations. It would make Canada 100 per cent efficient, an accomplishment beyond the present haphazard methods. It would not take all the men and boys away to war but would take those who could be spared while it would organize those at home. The man who is afraid of universal enrolment surely is one who is at a job that does not matter so far as the country is concerned and therefore might be spared to fight.

Let the city ministers who state that the people in the country do not know there is a war on call upon some of Canada's busy farmers whose sons and hired men have enlisted and who are trying to work from 100 to 200 acres alone, and in their platform fashion deliver themselves of such nonsense and there will be semblances of war very close by. Fortunately rural ministers know more of conditions in the country than do some city divines.

"With the causes and objects of the European War," said President Wilson at the Washington Convention of the League to Enforce Peace, "we are not concerned." Then the United States need not concern itself about the causes or objects of any war.

Prophets who prophesied wrongly all spring now tell us that a dry spell is about to set in.

## Recent Events Indicate a Bright Future for Live Stock.

Recent sales in Canada and the United States indicate that the beef breeds are entering upon a new era of popularity and prosperity on this continent. Breeders are beginning to appreciate the value of the best sire their financial standing will permit them to buy, and more farmers are purchasing pure-bred and better stock for their farms. Shorthorns have been looked upon with favor by the farmer and breeder alike, Herefords have been used to a great extent on the ranches, and the Angus for the production of young beef of the best quality. They have all experienced lean years and periods of a weakened demand, which were usually followed by more prosperous times and better sales. The season of 1916 opened with unparalleled prospects in the American history of these breeds, and two auction sales of Herefords, which enjoyed phenomenal success, awakened a great enthusiasm throughout the live-stock breeding fraternity. Following this came the great circuit of Shorthorn sales, and not to be surpassed by their contemporaries the champion of the Scotch cattle sprang to the ring-side and upheld the name and popularity of the great Shorthorn breed. It has always been a source of delight and profit to entertain United States buyers at our sales in Canada, and they have left considerable money in the Dominion this year. On the other hand, however, they got value for their money, as the class of stock they bought here could be sold at a profitable advance when they got it home. Just as our neighbors to the south have cast a ray of sunshine across the paths of the Canadian breeders, so have the men who have this year come from the far-away Argentine brightened the horizon for the breeder in the United States. They have left thousands of dollars in the Republic and have taken away many of their good home-bred cattle in exchange. By electing judges from Argentina to officiate at the coming International Fat Stock Show in Chicago, it is hoped to establish a feeling of mutual good fellowship with the live-stock interests of that country, and eventually switch to America a lucrative trade which Europe has so long enjoyed.

If we read the signs aright, there is a bright era dawning for the Canadian stockman who has been careful and industrious along the lines of constructive breeding. The Canadian-bred Shorthorn is everywhere held in high esteem, as evidenced at the recent auction sale of Thos. Stanton, of Illinois. This offering was comprised largely of Ontario-bred Shorthorns, and they made one of the highest averages of the season for any breed in America. This is a wonderful testimony for the Shorthorns of Canada, but we should not go insane over the achievement. Some people cannot stand any advanced degree of prosperity, neither can a breed of cattle. A boom is often the downfall of a breed, for it causes inflated prices and the purchase and retention in the herd of inferior individuals. High prices carry breeding stock beyond the reach of the average buyer, who is the ultimate purchaser of the great bulk of the increase in breeding herds. There is a consequent decrease in quality throughout the pure-bred and grade cattle of the country, and as prices begin to seek a more uniform and stable level someone is sure to lose money. This is when the effect of the ill-health is most keenly felt. The beef breeds with us during recent years have enjoyed a healthy and prosperous existence, and may conditions continue that have made live-stock breeding a good industry.

At the recent Shorthorn sale at Elora prices were within the reach of the average buyer for the useful kind of breeding stock, both male and female, while those desiring show animals, or something to breed prize winners from, were obliged to pay a good figure, but they got good cattle. There was no frenzied bidding or inflated prices, but the undertone of the event indicated the incoming of a period of keen demand for good Shorthorns.

Seldom do the circumstances which act as an impetus to one class of live stock fail to influence other lines, and history is repeating itself again this season. Not only are the beef breeds luxuriating in the green pastures of keen demand and good prices, but dairy cattle are getting a taste of the same herbage. In substantiation of this we need only mention the recent Jersey sale of T. S. Cooper & Sons, of Pennsylvania. There, 126 head offered made the grand average of \$641. Seventy-five cows, in milk averaged \$806, and 43 heifers averaged \$423. This is ample proof

that for the milk and butter cow there is still a place and a bright future.

Regarding sheep and swine words would be superfluous. The world is using up its supply of wool in a manner that insures a strong market for years to come, and the decreases in Canadian sheep, as told by official estimates and the Census, indicate a demand for lamb and mutton that we shall not supply in the next decade. Hogs in any country can be quickly increased or decreased in number and one cannot predict prices so far in advance, but the World War has brought about conditions at home and abroad that guarantee a reasonably profitable swine industry in Canada so long as we breed the bacon hog. Live-stock breeders should invest all the energy, ability and enthusiasm they now have in the greatest industry of our country, the breeding of high-class animals.

## Life in Germany.

A recent speech by the German socialist leader, Dr. Leibknecht, like a volcanic outbreak, discloses what must be smouldering below the surface among the masses of the people. The privileges of a German citizen, he caustically but truthfully described, as paying taxes, carrying a rifle and keeping his mouth shut. The government, he boldly charged, had transformed the army into a gigantic aggregation of thieves who were engaged in plundering other nations and forcing starvation upon the people. "About the soldier everywhere," he continued, "shells and bombs sow death and destruction. His wife and children at home are suffering want and hardship; she looks about her and finds her children crying for bread. She is desperate, but she must not appeal nor complain to any one. She must hold her tongue and suffer inwardly. But how can she silence her children? She must not share the sympathy of her husband at the front because that cripples his fighting power. Letters are censored to prevent the troops knowing the true state of affairs. Her soldier husband must 'hold on' and steal in the land of her neighbors. He must hold on and suffer because the capitalists, the hurrah patriots and the armor-plate kings have willed it so. Every one must keep his or her mouth shut, for the war profiteers must make money out of the want and misery of the wives and their husband soldiers at the front. By a lie the German working man was forced into the war, and by lies they expect to induce him to go on with the war." Officials present who had listened without interference up to this point now gave the signal and troops charged the meeting, dragging the speaker away to court martial while mounted soldiers rode down the people who fled panic stricken for safety. The day is surely hastening on when it will be beyond the prerogative of a War Lord Kaiser and his fellow conspirators to consign millions of their fellow beings to a human slaughter house.

## Nature's Diary.

A. B. KLUGH, M. A.

Fruit-growers in the south-western portion of Ontario should keep an eye open for the Cherry Leaf-beetle. This species *Galerucella cavicolis*, is about one-sixth of an inch in length, by about one half as broad, oval in shape and somewhat flattened. It is dull red with black legs and antennae (feelers).

Last year this species was very destructive in two areas in the United States bordering on Southern Ontario. One area included the greater part of the states of New York and Pennsylvania, while the other area was in Michigan.

The natural food-plant of the Cherry Leaf-beetle is the Pin Cherry, otherwise known as the Bird Cherry or Pigeon Cherry. Among cultivated fruit-trees it attacks the Cherry and the Peach. It has been reported as also attacking the Plum, but this report has been proved to be erroneous and to have been based on the observations of casual observers who took the holes caused by the shot-hole fungus for the work of this insect.

The adult Cherry Leaf-beetle feeds almost exclusively on the underside of the leaves of the plants attacked, eating small, irregular holes through the epidermis and parenchyma (green tissue of the leaf) and sometimes through the entire leaf. These holes may join one another or come so close together as to skeletonize the leaf. In a few days after feeding, the upper epidermis thus exposed dries and falls out, and in cases of severe injury, the whole leaf dries and the tree thus becomes entirely defoliated. This beetle also feeds to a certain extent on the fruit of the cherry, scarring and pitting it.

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similar to the adults, always feeding from the underneath side of the leaves.

This insect has a marked preference for the lower branches of the trees and in some cases the lower limbs have been entirely defoliated while the foliage of the upper limbs was comparatively uninjured.

The Cherry Leaf-beetle hibernates in the adult stage. The beetles emerge from their winter quarters in the late spring, and after feeding for some weeks and mating, the females go to the bases of the trees and deposit their eggs in the accumulation of rubbish. In something less than two weeks the eggs hatch. The larvae grow rapidly and in less than two weeks attain full growth, when they burrow a short distance into the ground, pass through their pupal stage, and in from two to three weeks after entering the ground, reappear as mature beetles. The beetles feed until cold weather compels them to seek shelter for the winter.

Experiments in controlling this insect made last year by Messrs. Cushman and Isley of the U. S. Bureau of Entomology showed that neither Paris green nor soap-carbolic acid solution used as sprays were effective, and the best spray was a mixture of forty per cent. nicotine sulphate applied with water at the rate of 1 to 600, with the addition of two pounds of soft soap to fifty gallons of the mixture. This spray killed all the beetles on the trees but did not prevent a new invasion of the orchard. Cushman and Isley also found that a small black and yellow Carabid beetle was a valuable predatory enemy of this insect.

June is often termed "The Month of Roses," and we have in Canada a great many species of wild roses which bloom in this month. One species which is common in Ontario belies the saying "there is no rose without a thorn" as *Rosa blanda* has no thorns or prickles of any kind. The flowers of most of our wild roses are very much alike in size, form and color, also in perfume, and the chief difference between the various species is in the number of leaflets, to a leaf, and the number, size, shape and arrangement of the prickles. Many people who love to gather these beautiful, sweet-scented flowers undoubtedly hold the opinion that in most species the number of prickles is the greatest possible, that they are of the best possible shape for getting into ones fingers and that they are arranged so that one cannot miss them. Certainly in *Rosa acicularis*, which is a very common species in Ontario, the stems are plentifully beset with straight, slender prickles.

One of the wild roses which is common along the roadside in many localities is a species introduced from Europe, the Sweet Brier, which has very fragrant leaves.

One of the prettiest roses I have come across is *Rosa gymno-carpa*, a species which is common on Vancouver Island, and in which the flowers are only about the size of a twenty-five cent piece, or of "two bits" as they would express it in its native home.

A plant which is now in full bloom in moist places along the margins of meadows is the Common Anemone, a plant with snow-white flowers and much-cut leaves. It belongs to the Ranunculaceae or Buttercup Family.

### Independent Leadership.

One of the needs of countries and communities is wise and independent leadership. By leadership is meant that which inspires to service, the pursuit of ideals and efficiency—not grabbing a few offices and peddling patronage. The city of Cleveland, Ohio, has erected a noble monument by popular subscription to the memory of the late Mayor Tom L. Johnson, the educational value of whose life and words will long survive his civic achievements. On the base of the bronze the feeling and conviction of the people is thus expressed:

"He found us groping, leaderless and blind,  
He left a city with a civic mind.

"He found us striving each his selfish part,  
He left a city with a civic heart.

"Beyond his party and beyond his class  
This man forsook the few to serve the mass."

## THE HORSE.

### Lameness in Horses—XXVII.

#### Rheumatic Lameness.

The word *rheumatism* has for a long time had a very comprehensive signification, serving to designate collectively all diseases of the organs of locomotion which are caused by cold or dampness. These diseases have in common the symptoms of more or less intense pain, which causes more or less pronounced troubles of locomotion. These pains may affect the muscles, tendons, tendonous sheaths, or the articular synovial membranes, and produce lesions upon these organs which are not easy to identify.

Rheumatic trouble causing lameness in horses is of two kinds, viz., *muscular rheumatism*, in which the muscles are involved, and *articular rheumatism*, in which the joints are the seat of trouble. These affections have in common only the pains and troubles of locomotion by which they are accompanied. In our patients their manifestations are more obscure, their forms more varied, and their diagnosis much more difficult than in man.

Muscular rheumatism is especially due to cold and dampness, cold winds and draughts, badly-kept

stables, damp pastures, sudden chilling of the overheated body, etc. A first attack appears to predispose to a return of the trouble.

**Symptoms.**—The symptoms are usually located in certain groups of muscles, in most cases those of the extremities. Generalized rheumatism is seldom seen. The patient usually assumes an abnormal, extended position; the affected region is stiff; in cases where the disease is located upon the extremities, he cannot rise without causing pain; he moves backwards with difficulty, taking very short steps, which do not compel him to move the joints; the movements are sometimes accompanied by crepitant sounds, which are produced in the articulations. The affected muscles are usually sensitive, enlarged and hard. In some cases the surrounding tissues are swollen.

The most noted phenomenon of rheumatism is the migratory character of the trouble, which frequently passes abruptly from one muscle to another. The marked tendency to a return of the disease, and a sudden improvement or complete disappearance of the symptoms after more or less prolonged exercise, are also indications of the trouble. It has been observed that the muscles of the shoulder are often involved—causing rheumatic lameness of the shoulder; and also the muscles of the lumbar region—causing rheumatismal sprain of the back—lumbago—are often affected.



Common Anemone.

In rheumatic trouble of the shoulder the movements of the part are less extended and lower—in moving backwards the feet often being dragged upon the ground. The lameness becomes more marked when the animal ascends a hill, or upon soft ground; if the extensor muscles be involved the lameness increases when the patient turns short or wheels around.

Lumbago is marked by a stiffness of position, sensitiveness and weakness of the region of the loins, a dragging walk, difficulty in rising, and sometimes by an apparent partial paralysis of the hind quarters and a tendency to fall. In cases where the muscles in the neighborhood of the hip joint are involved, the gait is slow and dragging; the limb moves with difficulty and the step is short, flexion of the limb is abrupt, and somewhat spasmodic.

While cases of generalized rheumatism in the horse are rare, if such a case be met with, it will be noticed that there is a marked increase in temperature, acceleration of the pulse and also of respiration. Localized rheumatism is not accompanied by febrile symptoms, but the pulse is sometimes somewhat frequent and hard. In some cases muscular rheumatism develops into a chronic state; it then becomes a very obstinate trouble, hard to combat, and persists for a long time. Some cases of shoulder lameness, hip lameness, partial paralysis of the hind quarters, commonly called "sprained back" are caused by this form of affection.

**Treatment.**—The first principle in treatment is to, if possible, remove the cause. Keep the patient in a thoroughly dry, comfortable stall, excluded from drafts. Give a laxative of 4 to 6 drams aloes, or 1 to 1½ pints of raw linseed oil. The affected muscles should be well bathed with hot water frequently, and after bathing well rubbed with hot camphorated oil, after which they should be well wrapped with woolen clothes to keep them warm until the next bathing. It is doubtful whether much benefit results from the administration of drugs. Salicylic acid is supposed to have a specific effect in cases of rheumatism. In general practice salicylate of soda is preferable to salicylic acid, which irritates the mucous membrane of the digestive tract and often interferes with appetite. Of the salicylate of soda 4 to 6 drams may be given 3 or 4 times daily. As one attack tends to produce a marked liability to future attacks, horses that are predisposed should be well cared for, and, as far as possible, all exciting causes avoided.

WHIP.

### Draft Horses of the Future.

According to an article recently published in the *Live Stock Journal*, Scottish farmers are breeding their Clydesdales with a little more bone, feather and substance than they once did, and English Shire breeders are endeavoring, for the foreign trade, to breed Shires with less hair and finer bone. The article will interest Canadian breeders of draft horses:

When one discusses the future of draft horse breeding there are naturally many who have differing ideas, and yet it is probable, in view of recent events, that these lines of thought will have to be changed.

Unfortunately fashion has entered into the sphere of horse-breeding just as much as in the case of other classes of stock, and oftentimes this has been detrimental to a breed. However, the present is a time when old ideas are changing rapidly, and those who put theory into practice are realising that extremes are undoubtedly bad.

To the ordinary farmer light horse breeding seems a thing of the past, because there is not so much money to be made out of them as in breeding heavy commercial animals. The premier draft horse of Britain is the Shire, a breed which is paying the rent for many a tenant-farmer, and which for many years past has been generously supported by landowners all over the country. The Shire up to the present has been able to hold its own against all comers, since it possesses size and weight, which are essential for moving big loads, but in the future other conditions may arise whereby other breeds will enter into fierce competition.

A good deal of information has been printed about the question of hair on the horse's legs, and in the breeding of draft horses perhaps nothing has been more discussed than this problem of feather. Whatever may be the advantages of a wealth of hair, whether it be a breed characteristic or not, the fact has got to be faced that it is not as popular as it used to be.

One has only to travel to certain places in the North of England, where the Shire and Clydesdale districts meet, and the reality of that fact is truly apparent. The Clydesdale has wonderfully improved as a draft horse, and those who went to extremes with regard to fineness of bone have found out that mistake. Every year the Clydesdale seems to be gradually pushing its way farther south, and this must mean that it is taking the place of the Shire.

The reason for this Clydesdale invasion is not far to seek, for farmers are coming to realize that clean-legged horses cause much less trouble, and in these days, when the scarcity of labor is so great, very hairy legs are apt to go wrong through inattention.

Another consideration to which attention will have to be paid is that of the foreign market, but the type of Shire that wins in London has an abundance of feather—in fact, they seem to have more hair than ever before, though this is not the kind the foreigner



Pedigreed Clydesdale Mare in Scotland.

This mare sold for \$970 recently.



demands. The war has caused a great depletion of heavy horses both in Europe and America, and the time will come when a big demand will arise for suitable animals. When such a demand does come, the question naturally arises as to the breed which will receive the greatest support. Of British breeds most popular abroad the Clydesdale holds the pride of place, because of its strength, activity, and clean legs, but yet it is also possible to breed the Shire to these requirements, and in several places they are being bred in that direction.

To take one example, in Westmorland the popular type of Shire is the one approaching more nearly to the Clydesdale in its limbs, yet at the same time possessing greater weight than the Scottish breed, and the active horses of this stamp are most in demand, both for town and agricultural work.

Not only in the North is the disadvantage of hairy legs seen, but also in the Eastern Counties, where we meet with another draft horse of importance—viz., the Suffolk, which stands in a class by itself; and this breed has been gaining much favor of late.

Thus, with this trend of events, one would like to inquire whether there will be any modification in Shire horse breeding type of the future, for it seems that such will have to occur if the popularity of the breed is to be maintained.

## LIVE STOCK.

### Silage in Districts not Suited for Corn.

Sometimes the corn crop is a failure in certain districts, while in others it does not mature sufficiently to make satisfactory silage. J. M. Trueman, of the Nova Scotia Agricultural College, at Truro, has solved this problem to a certain degree through the use of a crop composed of peas, oats and vetch. They were sown in the proportion of 1½ bushels of oats, ¾ bushel of peas and ½ bushel of vetch, or a total of 2¾ bushels per acre. A field of 5.7 acres produced 65 tons of green feed in the season of 1914. This is an average of 11.4 tons per acre. One part of the field was wet and decreased the total, but 3 acres yielded at the rate of 15 tons per acre. The crop was harvested just when the oats were entering the dough stage. It was put through the regular silage cutting box and blown into the silo. It cured well, and came out in excellent condition for feeding to live stock, which ate it readily. Pound for pound it contains a higher feeding value than corn.

This information is valuable where corn growing is not a success. The mixture of oats, peas and vetch is a reliable crop in almost any locality, and if it gives such a splendid yield per acre and can be ensiled satisfactorily it is worthy of serious consideration and a trial. One point in its favor is the comparative ease with which it may be grown, as it involves less labor than either roots or corn. It requires considerable sunshine to cure it for hay, but when put into the silo one is more or less independent of weather conditions. One of the great needs of live stock in winter is some succulent feed, and this applies most particularly to breeding animals. There are sections where the mortality in young and dams ranges altogether too high, simply on account of the dry character of the fodder used. Farmers should look about them for some practical means of supplying that most necessary for the thrift and well-being of their stock. In Old Ontario this problem is pretty well solved by corn and silos, which should be increased, but there are farming districts which require a little practical experimental and demonstration work in this direction.

### Rearing Calves Without Milk.

Since 1912 the Council of the Agricultural Society of Britain has been endeavoring to ascertain some cheaper method of rearing calves than on whole milk. Four years ago an experiment was commenced which demonstrated that skim-milk and crushed oats together make an economical ration for growing calves and that it would materially lessen the cost of bringing the young stock up to the age when it could subsist on pasture or fodder, grain and roots. In a further and recent test the practicability of omitting the skim-milk and introducing different kinds of grain and meal was put on trial. The results have proved interesting to the Old Country farmer and breeder for they show possibilities in a different and cheaper method of rearing calves. Cheapness is a factor, but quality, strength, size and vigor should not be sacrificed in order to obtain a financial advantage of only temporary nature. The English breeders are expert enough and sufficiently experienced to consider these results in their true light.

A lot of four calves fed on palm nut meal and water made the most economical gains of those not receiving milk in any form. Some difficulty was experienced in getting the calves to take it but it was eventually fed dry, with the addition of a little hay chaff, and in this condition the meal was consumed with avidity. It was 12 days before ¼ lb. each would be eaten but in four more days they consumed ½ lb. per day. In another four days they were getting 1 lb. each which increased to 1¼ lbs. at which quantity it remained until the end of the test, lasting over a period of 12 weeks. The calves were about 2 weeks old on the average when weighed into the trial and, consequently,

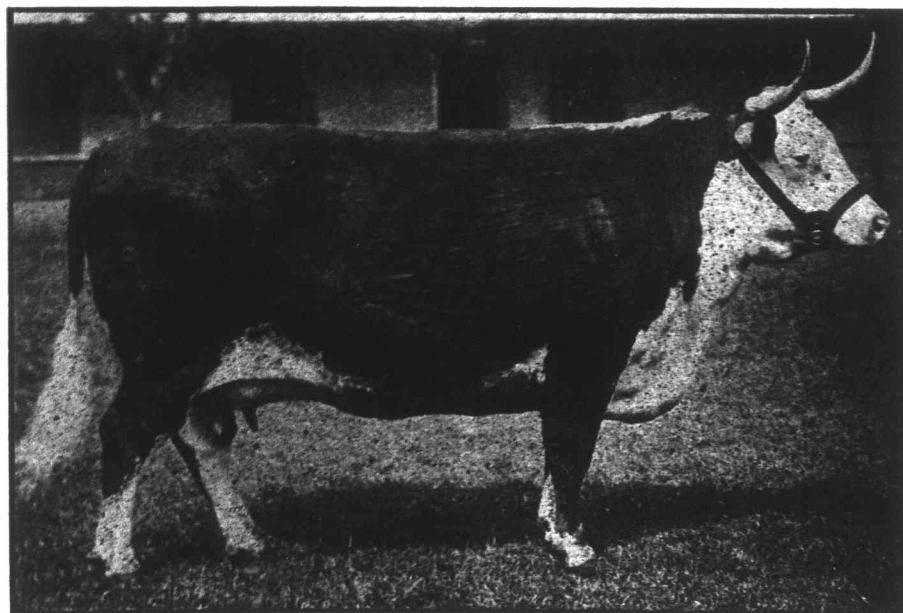
14 weeks old when the experiment concluded. Palm nut meal is practically unknown to feeders in America and little use of this information can be made here until such feed is more common and better understood.

Beans and water comprised the diet of a second lot, and maize and water of a third. The maize was scalded and it was then consumed with considerable relish. The beans were at first scalded in which condition the calves ate them fairly well but when the beans were given dry the young animals cleaned them up well and care had to be exercised that they did not eat too much. Each calf was given ½ lb. of maize or corn per day on the start, and this amount was increased to 1 lb. after 14 days and in 6 weeks it was increased to 1¼ lbs. For the first 14 days the bean-and-water fed calves received ½ lb. of beans each per day. After that period it was increased to 1 lb. but it was subsequently reduced to ¾ lb. Calves fed on palm nut meal and water gained 6 lbs. each per week; those receiving beans and water made 4.56 lbs.; those on maize and water made 4.54 lbs., and those on oats and water, 3.73 lbs. The palm-nut-meal-fed calves also made the cheapest gains.

No calf up to three or four months of age can surpass the sucking calf, but in some instances even skim-milk is not available and rather than destroy this young stock when born it would be wise to experiment with some feeds which can be procured and attempt to make cows or steers out of these young animals and thus increase or renew the herd. Up to two weeks of age a calf requires whole milk under any circumstances for the stomach is such that other feeds are practically indigestible at that time. There is a suggestion in these results even if we do not adopt them in their entirety.

### Not Cheaper but Better Calves.

The general trend of experimental work relative to calves is to discover some method of rearing them without expense, or at least to reduce the cost so far as possible. These findings are valuable for the dairyman who delivers his whole milk to the cheese factory, and thus disposes entirely of that product so necessary for the development of the young bovine. These farmers have found it necessary, in many instances, to sell the calves and purchase cows and heifers to maintain their herds up to strength. Investigations have been carried on to ascertain some substitute for milk, that this young stock may be con-



A Winner at this Year's Dublin Show.

served and the herds improved by proper breeding and wise selections. Experimentalists have done excellent work in this regard, but farmers generally should think twice before they attempt to reduce too far the expense of raising their calves up to the time they may properly be weaned from milk and put upon a ration of grass, grain, roots and fodder. The agriculturist who is not selling his whole milk will have skim milk at least, and this should be fed along with grain, and grass or good hay. Whole milk should be fed for two weeks and then it may be gradually replaced by skim-milk. The young calf will soon take rolled oats, oil cake, bran and calf meal from a box if a little is put into the pail, after the milk has been drunk, in order that a taste for it may be developed. Never feed meal or grain mixed with the milk, unless it be during the early stages, and then it is best made into a porridge. Sometimes when meal is rubbed over the mouth of the calf, immediately after drinking, a taste for it is acquired at an early age, and a box placed within reach will soon be patronized in an appreciative manner. Too many farmers attempt, in many ways, to raise calves cheaply, and in the end they are extremely expensive methods. No stunted calf will make a good cow or bullock, and our beef cattle are already below the standard of excellence at which we should aim. From 50 cents to a dollar is a common range of prices on our live-stock markets between the different qualities offered. We are losing money annually by rearing our cattle in what is considered an economical manner, but what is in reality

a very costly manner. Better calves mean better feeding steers and better feeders mean better finished bullocks.

The breeding of a great proportion of our cattle is no better than the feeding methods in vogue. There should be greater efforts put forth to produce the kind the market so earnestly pleads for through a liberal advance in price over that for inferior stock. What is required at this time is an enthusiastic propaganda to encourage the good breeding and good feeding of cattle, and finishing them off at two or two-and-one-half years of age.

### The Bacon Industry from a Canadian Viewpoint.

There are certain phases of the bacon-producing industry that should be thoroughly understood at this time, and particularly by Canadian hog raisers. Inasmuch as this is a country where the bacon hog can be grown as cheaply, and in some instances more cheaply than in any other nation or part of this Empire, we should understand our relation to the great bacon markets of the world and to the producing countries with whom we must ever compete in pork and swine products. Moreover, let us constantly bear in mind that the consumers of this Dominion do not regulate the price of pork. Neither can conditions in the United States determine to the full extent what a pound of our product shall be worth so long as we produce the bacon hog. The price is governed by an European demand, and the countries especially catering to that market are Canada, United States, Ireland and Denmark. It would be well and opportune to cast a mental glance at the swine industry in these various countries, after which we shall be able to arrive at some conclusion of vital importance regarding the enterprise at home.

Before entering upon discussion regarding Denmark, the bacon from which country is a standard on the English market, we should review one phase in particular of the swine industry of Germany, for it will have a potent influence over prices until the conditions there assume a normal attitude, which may require several years. Hogs consume much the same food that men eat. Both men and hogs make use of a considerable quantity of wheat and barley in European countries, and, although a portion of ham or bacon may be more tasty than bread or barley cakes, a certain percentage of the grain is lost as it

passes through the body of the hog. Thus it was considered in Germany that the grain crop would maintain a greater population when eaten directly, than would be possible were it first fed to swine and the product consumed by the people. Consequently the German farmers were instructed to cut down the number of hogs 25 per cent., and feed themselves on what ordinarily forms a part of the ration of their pigs. This was not so humiliating as it sounds, and it indicates the wonderful organization of our enemy to reduce waste and increase the efficiency of everything within their empire. The effect of this mandate was just what any one would expect. The Germans required or desired more pork, the price rose and importations became necessary. The source of supply

was Denmark, and this is why we have considered it wise to mention the nation with which the world is at war. H. S. Arkell, Assistant Live Stock Commissioner, points out in the last Agricultural War Book that the Danes, according to good authority, were receiving 40 cents per pound for this bacon, and these sales have opened up the promise of a new market, and may result, temporarily at least, in a gradual discontinuance of shipment to the United Kingdom. Proximity to the war and inability to obtain American corn and Russian barley dealt a severe blow to the swine industry of Denmark, increasing the slaughter and curtailing breeding. In spite of the enhanced value of bacon on the English market in 1915 the Danish exports to Britain were considerably lessened even when indicated in shillings rather than pounds avoirdupois, and for December, 1915, the value of the product imported from Denmark was approximately £209,000 less than for the corresponding period of 1914. The fastidious taste of the English bacon lover has been and will be forced to put up with a product somewhat inferior to that produced by the expert and industrious Dane.

Ireland is becoming a factor in the production of bacon, but their supply is not likely to influence our prospects so much as is a country nearer home. Canada and the United States remain as the two great sources of pork to feed the English people, and the neighboring Republic has been very energetic in this regard since the outbreak of war. Since 1913 they have doubled their exports to Britain, and in 1915

supplied an amount provided by Denmark exports from 1915, but during was only exported being provided significant still to excel that Union, and the of from 10 to 1 competing productivity. The Wilts the Canadian ty United States to bear in mind opportunity to for the product the proper qual unlimited dema

It will be seen that we enjoy petitor, namely, the bacon hog it can be bred these regards we keep our feet justify a change Should we adopt once cast oursel ket with a co quality far mor Corn-belt State Canadian hog r fed an abundan from the droppi of the fields, th thing we can country. The or lard hog is r suicidal policy. smooth-shoulder our advantageo selling price w that rules the

## Patriotism

EDITOR "THE  
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supplied an amount exceeding by £3,623,987 that provided by Denmark. Canada also increased her exports from £863,139 in 1913 to £3,324,511 in 1915, but during the beginning months of this year was only exporting about one-quarter as much as was being provided by the United States. More significant still, Canadian bacon is generally reputed to excel that furnished by the hog raisers of the Union, and the fact that it was selling at an advance of from 10 to 12 shillings per hundredweight over the competing product is substantial proof of its superiority. The Wiltshire side of bacon can be taken from the Canadian types of swine, while the fat hog of the United States boasts no such qualities. The point to bear in mind at this time is, that Canada has an opportunity to develop in Britain a lucrative market for the product of our swine herds, and by supplying the proper quality we may have access to an almost unlimited demand.

It will be seen from what has already been written that we enjoy one advantage over our heavy competitor, namely, that of quality. We can also produce the bacon hog as cheaply, if not more cheaply, than it can be bred and reared in the United States. In these regards we are on firm ground, and we should keep our feet firmly planted there until circumstances justify a change either to the right or to the left. Should we adopt or lean towards the fat hog we at once cast ourselves into competition on the same market with a country that can produce pork of this quality far more cheaply than we. Farmers of the Corn-belt States have a decided advantage over the Canadian hog raiser. There, swine follow the steers, fed an abundance of corn, and with what they pick from the droppings of the cattle and from the herbage of the fields, they surpass in cheapness of gains anything we can hope to accomplish generally in this country. The folly of our leaning towards the fat or lard hog is manifest, it would be, to say the least, suicidal policy. So long as we champion the long, smooth-shouldered, deep-sided pig we shall maintain our advantageous position and enjoy the increased selling price which has been ours on the market that rules the world.

## THE FARM.

### Patriotism, Thrift, Production,—and the "Game."

EDITOR "THE FARMER'S ADVOCATE":

The great cataclysm has jolted a large section of humanity into a sense of reality. We were largely becoming mere money-makers.

Now, making money is a first rate game. No one denies that. So, also, is baseball, or ping-pong. All are equally respectable, and, equally, of no particular account. Of course, we were in no danger of getting the illusion that playing ping-pong, and "ball," was the foundation of national life, and therein lay the comparative harmlessness of these games. Had we gotten the notion that, to become a great country, we must play lots of ball, we would have reached mental and moral chaos, as absurdly as we have now.

A man may buy, or steal lots, in Bing's Hollow, and by waiting several generations, until Bing's Hollow becomes a big metropolis, he may make a bunch of

money. But sitting there, watching Bing's Hollow grow up into a metropolis, is of no account to anyone. It's perfectly respectable. But the magnate, sitting there, all those generations, is of no more consequence to the world, than if he had been sitting on a cake of ice, watching the North Pole.

A man may make money, and, incidentally, do a lot of useful things. James J. Hill made money, and a great many people respect him for that, alone. Hill did more than make money. He built railroads. He may have built the railroads, to make money, and then again, he may only have wanted the money, in order to build the railroads. I am not dealing with the motives of the magnates. I am dealing with the usefulness and importance of certain forms of human activity, and I find his financial activity important, only in so far as it supported his railroad building activities.

A livery-stable is of far more importance than a bank. More important, also, than a football field, or a poolroom, or a ping-pong dive, or a bowling-green, or a skating rink, or a movie theatre. This obvious fact is becoming more obvious since the war began. The farmer has come to the front. He has "found himself," and recognizes his vast importance in the Empire. Farmers, to-day, are not wishing that they were lawyers, and could get mighty fees from corporations, for advice. They are glad to be farmers, grow grass, and be of some account, which after all, is the desirable goal. Farmer's sons are beginning to "put it on" just a little, and are acting patronizingly, towards the bank-clerks.

And a change has taken place in our ideas of thrift. Thrift used to be "saving up the scads." Now, saving scads isn't the slightest consequence;—of less consequence, in fact, than making scads, for making scads often involves the exercise of constructive ability. The scads will be saved all right. No fear of that. I saw a man, in a burst of splendid generosity, sow scads, broadcast, upon a bar-room floor, and not one scad was lost. They were all garnered. The scads were the payment for his month's cheese, and the fortunate thing about it was that the cheese, which was important, was safe in the store-room at the factory. Had the factory went afire, that would have been a different order of things.

The war has linked together the words "Thrift," and "Production." In the dark ages preceding August the fourth, 1914, any old, idle drone might be considered thrifty. To-day the words are almost synonymous. To produce, we labor, and, by carefully preserving the product for a rainy day, we prosper,—thrive. To grow hay, harvest it, bale it,—this is production. It is also thrift. To take care of the hay, to eliminate all waste in its consumption, to feed it to the cows and the horses this is thrift. It is also production,—the production of cheese, butter, horse-power, etc. Thrift, again, cares for this last product, uses it, marshals, mobilizes, distributes it, in unwise ways, and produces defence.

And what else matters? Making money is a mere incident to these things; just a way, we have, of amusing ourselves, and each other,—a perfectly inconsequential game, were it not for the intensity of our interest in it, and our deep-rooted faith in its consequence; also, a perfectly good game, training and developing the mind, but a game, withal and a thing aside from the vital matters of production and thrift.

Given the production and thrift, a nation might, in a pinch, carry on war, without money,—the faith

and confidence of the nation, centering on organization,—for, after all, it is faith in money, and value, that makes possible the game. Indeed, it might be carried on much better, for thousands are engaged in making money out of it, and these would be free to join the army of production.

And civilization may be forced to abandon the game,—at least for a time. Games of all kinds are out of harmony with the serious problems of the time. In periods of intense earnestness, we put them away. One would not want to play even ping-pong, at a funeral. The roar of "bank-clearings", stock markets, buying, selling, and making money generally, loses its interest in the roar of siege-guns attacking the foundations of our present order. A complete mobilization of all the resources, may be the ultimate outcome of the war. All previous wars have been carried on between governments, using such resources as they could muster at the time. The present one may demand the mobilization of the last unit of strength. It is a struggle of resources,—an unprecedented war. The games may have to go.

Rumblings of food-riots in Germany, reach us at times, giving rise to hopes that the end is in sight. But food shortage is not the sole reason for food-riots. Price may be the greater factor. Germany compared, sometimes, to a beleaguered garrison. The comparison is well applied, only, if Germany is really short of food. The making-money game is not played in a beleaguered garrison. Beleaguered garrisons do not tolerate a class of quartermasters, holding rations for high prices. Famine appears, in the most piping times, if the purchasing-power does not balance the productive. Beleaguered garrisons put away such things as "purchasing-power," and Germany may round out the simile by doing just that.

Can Germany supply her population, and carry on war? Are the present food-supplies of Germany sufficient for the present needs? If not, then Germany must go hungry, and the end of the war is in sight. If so, reasonably sufficient, Germany will strive to solve the problem of distribution, just as a beleaguered garrison would do. If successful, the allies would, probably, be forced to adopt the same methods.

My friend, Elihu, who knows a lot more than he can hold, tells me that this is Socialism. I am not concerned about what it is called. It has been in operation before. It was quite fashionable, among beleaguered garrisons, long before the time of Karl Marks, and Brother Bellamy,—even before the days of Bernard Shaw. It doesn't make a bit of difference if you call it "Jim Johnson," or Macaroni. Whatever it is, it is not the issue of the present war, but a weapon,—a method of organization that might be adopted by either an autocracy, or a democracy. The issue is between these two. Socialism inheres in both. Triumphant Germany might be a social-autocracy,—the most concentrated and absolute of despotisms. Triumphant England might be a social-democracy,—which, certainly could be no worse than the other "social-thing."

And the present order may be sustained,—and the "game" that has amused us so long. It rests with the money-Barons, and the nations of money-Barons. Do they see it, clearly? Will they rise to the occasion? Or are they fascinated,—hopelessly fascinated with the game? Will they continue the play, till the chess-board vanishes?

There are rumblings from Sinai. The day may not be distant when the heavens will thunder the commandment,—"Clean out your idlers, or die."

Elgin Co., Ont.

ANGUS MCKEY.

## Cutting, Curing and Storing Different Kinds of Hay.

It is doubtful if there is any feed grown on the farm that is either made or spoiled in curing and harvesting to such an extent as is hay. If it is allowed to become over-ripe before cutting, the palatability, digestibility and nutritive value are more or less injured. If cut too green it lacks substance. Too much hot sun makes it brittle and causes loss of leaves. If put in the mow a little fresh it heats and becomes musty. Rain or dew takes from the legumes their natural aroma, which is essential to good hay and renders them less palatable, makes them dark colored and lessens the weight. The kind of weather during hay harvest largely determines the quality of the product and the labor involved in gathering it. At the best, handling hay is heavy work, although labor-saving machinery has done much during recent years to render it less arduous, both in the field and barn.

From present indications this year's crop promises to be a bumper one, but, on many farms labor will be none too plentiful to handle it properly. However, with good hay weather and modern hay machinery it does not take long to harvest a good many tons of this important feed. True, one man can do very little at hauling in alone, but he can cut and prepare for hauling, then co-operate with his neighbor in getting the hay into the barn. Two neighbors might work together to the advantage of both.

### Stage to Cut.

The date on which to commence haying depends on the stage of growth of the plant as well as on weather conditions. There is a right and a wrong time to cut all the grasses and legumes in order to secure the highest feeding value from the cured hay. If the various hay crops are being grown, haying may commence by the middle of June and continue, off and on, until September. If sweet clover is grown, for hay it is usually the first crop to require attention. When conditions are unfavorable for harvesting this legume at the proper time,

the value of the hay may be greatly decreased. As it reaches maturity it becomes woody and unpalatable. According to analysis the proper time to cut sweet clover is from the time of bud formation until the plant is one-third in bloom. As the blossoms develop, the percentage of ash, protein and fat gradually decreases and soluble carbohydrates and fibre increase. Having to cut so early makes it difficult to properly cure it for hay unless the weather is ideal. The stems are full of sap, and if hay is made in the swath the leaves become brittle and fall off before the stems are dry enough to store in a mow. Leaves of legume plants have a high feeding value, consequently the value of the feed is decreased in proportion to the loss of leaves. While it takes longer to make hay in the coil this method is generally practiced with sweet clover and alfalfa.

The alfalfa plant is similar in many ways to sweet clover, except that it does not grow so rank. However, care must be taken to cut it at the proper stage in order to ensure the highest feeding value and at the same time not injure the growth for the next crop. Some cut when the blossoms are from one-tenth to one-half out, but there are seasons when the plants do not bloom as profusely as they do others, and relying solely on the blossoms may lead one astray. If new growth from the crowns attains sufficient height to be injured when cutting the first crop, the second crop will be materially decreased. Successful growers of alfalfa watch for the appearance of this new growth, and as soon as there are signs of it starting, cutting is commenced. The time may vary with the season, so that the grower must rely on his own judgment in determining the time to cut rather than depend on a set date. Analysis of alfalfa hay cut before the plant blooms shows it to be higher in percentage of ash, crude protein, carbohydrates and fat than when cut at any other time of its growth. The digestibility of the fodder is also highest when cut at this stage.

Red clover is a crop more generally grown for hay

than the two legume crops previously mentioned. It usually gives a good yield of nutritious fodder, is easily cured and there is less risk of a failure than with alfalfa. While the hay from the plants cut before they come in bloom may contain a higher feeding value than hay from plants cut at any other stage of their growth, the yield would probably be lighter and the hay much harder to make. As a rule, if the weather is favorable clover cutting should commence when the plants are about half in bloom in order that the entire crop may be harvested before too many of the blossoms die. The nearer the plant is to maturity the quicker it will cure, but there will be a decrease in its value as a fodder.

It is customary to cut timothy after the second bloom, and there is seldom much difficulty in making good quality hay. Care should be taken not to cut when the bloom is on if clean hay is to be obtained. Dusty timothy hay is frequently caused by cutting at the wrong time.

Orchard grass is frequently grown for pasture and occasionally there is a small acreage for hay. It is one of the earliest grasses and soon becomes very coarse and woody. It should be cut before it commences to bloom. When any of the cereal grains are intended for hay they should be cut when the grain is in the milk or soft-dough stage. It is best to cut millet for hay as soon as it is fully headed and before any bloom forms. The hay is less woody and more palatable than is hay made from more mature plants. Owing to local circumstances or bad weather it may not be possible to harvest the hay crop at the time when it is known the greatest feed value will be obtained from it. The aim should be to cut and cure the legumes with as little loss of leaves as possible, as they are the richest part of the plant. With sweet clover and alfalfa the second crop is ready to cut about six weeks after the first. With these crops care should be taken not to run the cutting bar too close to the ground else



the plant will be destroyed and there will be no second crop. Red clover produces a good after-growth which furnishes fresh pasture for the stock at a time when the regular pasture is generally short and dry. If the field is free from weeds the second crop might profitably be left to produce seed. However, if the intention is to save seed it is advisable to cut the first crop the latter part of June whether it is in blossom or not. This gives the crop for seed a better chance. If there are frequent showers a timothy stubble furnishes a fair amount of picking, but if the weather is dry or the field is dirty many find it pays to plow the sod and cultivate it during the fall rather than count on it producing much feed.

#### Making Hay.

An important factor in making good hay is favorable weather. Rain and dew are not the only elements that injure the quality and feeding value. Hay that is exposed too long in the sun becomes bleached and not only loses leaves but becomes less palatable. It is generally claimed that the best hay is made in coil rather than by leaving it spread over the ground in swath or windrow. Coiling hay entails a considerable amount of extra labor but tends to ensure quality. However, where there is a large amount of hay to handle with little help a man is compelled to do the work the quickest and most economical way. The wide mower and two-horse rake are replacing the narrow machines and implements. Where heavy crops of clover or alfalfa have to be handled a tedder is essential to the easiest and most rapid curing of the hay whether it is to be coiled or loaded from the windrow. The side-delivery rake and hay loader go together, and while some farmers have discarded them on the ground that better hay can be made without them, many would not be able to handle their crops without the assistance of these two implements, and claim that what is lost in quality is made up in having the hay cured quickly with less risk of being exposed to rain.

Many find that they lose time by cutting clovers when a heavy dew is on, as the wet clover falling in a pile takes a long time to dry out. It dries more quickly when standing and then wilts soon after cutting. If the crop is heavy the tedder should follow the mower to loosen the hay and permit free circulation of air through it. When the leaves begin to get brittle the hay can be raked into windrows and then coiled. As a rule it should be left in the coil two or three days or until the first sweating is over. On the day of hauling the coils should be turned over. No more should be cut than can be handled that day. In catchy weather one cannot always wait for the sun to shine before

starting to cut. A certain amount of risk must be run or else haying would not be finished in time for harvest. Coiling the same day the clover is cut avoids any discoloring of the hay by dew. As freshly cut clover is not affected by the dew or a shower, the mower may be started in the afternoon and tedding, raking and coiling done the following day. Cutting in the morning after the dew is off is considered to be the preferable method. One man can soon cut and put a lot of hay in coil and then endeavor to secure assistance for a few days to haul it to the barn. Well coiled hay turns a good deal of rain and very little injury is done by bleaching. On some farms hay caps are used for covering coils. They afford a certain amount of protection but are rather expensive when labor is considered, although, if they are the means of saving a crop from spoiling, they may pay for themselves in one season. The method followed by one farmer at least is to use a rake that is wide enough to take two swaths then make only small windrows. After the hay has aired in the windrow he turns three swaths into one by use of a fork. This makes small coils and is more quickly done than making large ones. The idea is that, if there should be a heavy rain which goes right through the coil it can easily be turned and will dry out quickly. There is less loss of leaves than by pulling a large coil to pieces or by curing the hay in the swath. When it comes to loading there is just a good-sized forkful in each coil and pitching is easier than from the bigger coils.

Good hay has been made by curing it in the swath and windrow. Mixed clover and timothy that yielded over two tons per acre have been cut one morning, tedded about noon and left in the swath until the next morning, then gathered in windrows with the side-delivery rake before the leaves become brittle and hauled that afternoon. The dew caused a slight discoloration but there was very little loss of leaves and the hay came out of the mow during the winter in splendid condition.



Tedding a Heavy Crop of Clover.

The side-delivery rake leaves the windrow loose so that the hay is dried by the air as much as by the sun. Hay can be put in the mow fairly green if there is no moisture from dew or rain on it. It is injured by the moisture on it more than by the moisture in it. After a rain the tedder will shake the moisture off the hay and leave it in good condition for drying.

Grasses cure much more quickly than do clovers. The length of time required for curing depends upon the degree of maturity and weather conditions, but in good weather there is no trouble having the grass hay ready to store the day after it is cut. Frequently it can be cut in the morning and stored towards evening.

#### Storing the Crop.

When the hay is in coils, or a loader is used, it does not take long to clear a field of the crop provided there is sufficient help. Two men can manage but three are better—two to pitch from the coil and one to load. In the barn, one mows, another runs the fork or slings while the third drives the horses. With the loader two men are required on the load and one to drive the horses, although, if the horses are steady, the man on the front of the load can guide them. In June 8 issue was given the detail construction of a sliding hay-rack. By its use one man can do the loading practically as easily as two on the ordinary rack. Whether the hay is to be unloaded by hayfork or slings it is well to build the load in sections.

On most farms the barns are commodious enough to house the hay crop, and unloading by hand has given place to power contrivances. For long hay the hayfork is satisfactory but for clover the slings make a neater job of removing the load. In some barns there are three tracks, so that a mow can be filled with the minimum of forking by the man in the mow. Horse power is generally used for drawing up the bundles or sling loads, but some men of a mechanical turn fasten a drum, to their gasoline engine, on which the rope is run for drawing up the hay as well as returning the car to the stop-block on the track. The drum is controlled from the load by means of two ropes. It is advisable to keep the hay evenly spread in the mow. It frequently happens that hay that is left where it drops has a tendency to heat and mold if it should be a little too sappy or moist. Some sprinkle salt over the hay which tends to bring back the freshness if it should be dried out too much. Clover hay has been stored when only partially cured and while it heated considerably in the mow it came out in good condition. Several loads are frequently dropped in the centre of the mow and never moved. Bundles are allowed to roll down to the farthest end of the mow, which saves hard work, but, as a rule it is safer to keep the hay spread over the mow as it is hauled in. Hay is an important crop which enters largely into the ration of horses, cattle and sheep, during the winter. In order that the greatest returns be secured from feeding hay, it should be cut at the right time and then cured and stored in a way that there will be least loss of valuable feed constituents.

The essential consideration with the development of hoed crops planted late this year will be frequent cultivation. Keep the horses going in the corn and mangels. Every five days will not be too often to cultivate the corn to hasten maturity. Start early and keep it up as long as possible.

## Canada's Young Farmers and Future Leaders.

### Young Farmers, Win These Good Prizes!

Following the announcement and inauguration in last week's issue of a new department in "The Farmer's Advocate," devoted especially to the boys and young men of the farms, readers will be interested to know that we are offering three special money prizes for essays written by these boys and young farmers. For a subject we limit the writers only to something they have done. Suppose we say: What was your most profitable farming experience last year, either in money or in lessons learned? This gives ample opportunity for all. Some may have had experience in pig feeding. Others may have fed calves or cattle, or managed dairy cows, or conducted experiments with grain, roots, potatoes, or vegetables.

The field is not limited. Choose your own subject but remember that it is facts and figures in connection with your work that we want. Pleasing generalities, will not win the money. The contest is open to all farmer's boys and young farmers. First prize will be \$10; second \$8; third, \$5. Essays must not be over 800 words in length. The contest closes one month from the date of this issue, so that letters must be mailed on or before July 22. Furthermore, all essays deemed worthy of publication will be published and paid for at our usual rates. Every boy has a chance of winning the best prizes, and all writers whose essays are published will get a fair amount for their work. We hope to get a large number of

letters and feel sure that nearly all will be worthy of a place in our columns. In case of a tie in totalling up the score on any two or more essays, the essay in our hands first will receive the preference, so that it is important that you write at once. Publication of essays will commence as soon as they come to hand. Prizes will be awarded August 15th. All essays which are published previous to that date but which do not receive the special prize money will be paid for then, and those published later, at the end of the month in which they appear. Every boy and young farmer had some experience last year. Describe it and get these prizes. Get your letters in early. Contest closes July 22. Write now.

### Get Ready for the Fair.

Every farm boy who is interested in and an admirer of good stock should plan to show something at his local or county fair this fall. There is no prouder moment in a lad's life than when he leads out of the ring a calf or colt bearing the red or blue ribbon on the halter. One of the most inspiring sights we remember was at a big fair when a lad of twelve marched away with first prize on a Jersey calf in strong competition. The value of the winning cannot be estimated. The money prize is only a small part of it. The effect on the boy is the real value. And it is not necessary to win to get inspiration. The very fact that you have something good and have fitted it yourself will increase your interest in and understanding of live stock. What better start could you get than to feed and fit a calf, a colt, a pen of pigs or a pair of lambs for the fall fair? And it would be a good thing for the fall fair too. Boys,

persuade your fathers to let you have some stock to fit and show, and start the fitting early.

### How Young Farmers Can Improve Our Live Stock.

Live stock is essential to a permanent agriculture. Without it the farms under cultivation soon lose their producing power. Selling grain and hay year after year without returning anything to the soil saps it of its very life. There are instances of it everywhere to-day. The grain farmer mines his farm and leaves it poorer than when he got it, but the farm where the products of the soil have been marketed on foot or by way of the dairy is proof of the value of stock in maintaining the natural fertility. An observant person driving along the road can tell by the appearance of crops and conditions whether or not the farm is being gradually disposed of in bags of grain and bales of hay or walked away. From the standpoint of consuming these products on the farm and returning fertility in the form of manure, stock is stock. Poorly-bred animals are probably as valuable as richly-bred ones, but when it comes to the cash returns there is a vast difference. This fact is known to practically everyone, and yet in this age of advanced agriculture the majority of the live stock in this country is of nondescript breeding. In every class of animals there is not sufficient attention paid to the quality and breeding of the sires used in the herds and flocks. The offspring inherit the weak as well as the strong points of their ancestors. A sire lacking in quality and conformation transmits those deficiencies to his progeny. True, the good and bad qualities of the dam are also transmitted, but she affects only one individual animal, while the head of the herd leaves his mark on many. For this reason

particular attention to which the female. It is a regrettable sires of all classes course, pedigree is at least that some selection and mating. The individuality as well as the line grade herds and meat or milk products. Without exception to the high state pure-bred, high-quality females for breeding allow the first good animal. In money had been years ago many better than they are. It

During the past been attending Sh held in their county type and conformation where well-bred stock that very little after stock that common stock which could not be made of these young men tion to improve the farm. Others have were not such could be made, a from purchasing recently with a business for himself neighbors kept a his herd, and he out the money for he should use. animal the neighbor service fee of an make bad friends districts, but it is like turn of mine purchase of male ity and use the or accommodate breeding as a me stock. In most stallion can be can agree on keeping cost of a bull, heavy on any one stock started in agree to allow or ing and looking turns in keeping were being gradually added. With cattle it is females would sized herd in ten not deter anyone well-bred stock something about and there is always from each generation opportunity of improvement work more intense

### More Esse

Having gone you are now pre into play the m of any good ma pressed steel. S supports running ample depth a strain. The spr elliptic or cantile thorough inspe the cantilever s quality. Stand by bouncing th elasticity and can be ascertain use your sense They should co ing frames is a metal and fault away. You sho firmness. The beams, the lette sectional beam, are three-quarte the weight of t the axle, in or work than the before going



particular attention should be paid to the kind of sires to which the female animals on the farm are bred. It is a regrettable fact that in some sections grade sires of all classes of stock are still being used. Of course, pedigree is not everything, but it indicates at least that some attention has been given to the selection and mating of animals for several generations. The individuality of the animal should be considered as well as the line of breeding. True, there are many grade herds and flocks that from the standpoint of meat or milk production are as valuable as pure-breds. Without exception these animals were brought to the high state of productivity by continued use of pure-bred, high-quality sires and saving the best females for breeding purposes. Too many breeders allow the first cost to stand between them and a good animal. In the end this is false economy. If money had been invested in good herd headers a few years ago many herds would be more valuable to-day than they are. It is not too late to start now.

During the past few winters many young men have been attending Short Courses and special meetings held in their county, and have made a study of breed type and conformation. They have visited farms where well-bred stock was kept, and have discovered that very little more work was involved in looking after stock that showed quality and character than for common stock which, with any amount of feed or care, could not be made to look like show animals. Many of these young men have gone home with a determination to improve the quality of live stock on the home farm. Others have felt discouraged because conditions were not such in their district that improvement could be made, and lack of finances prevented them from purchasing foundation stock. In conversation recently with a young man who had just started business for himself, he remarked that none of the neighbors kept a sire that would tend to improve his herd, and he felt that he could not afford to lay out the money for the quality of animal he thought he should use. Besides, if he did purchase a good animal the neighbors would want to use him at the service fee of an ordinary sire. To refuse them would make bad friends. Similar conditions exist in many districts, but it is believed that several farmers of a like turn of mind could profitably co-operate in the purchase of male animals of the desired breed and quality and use them exclusively on their own herds, or accommodate only those who know the value of breeding as a means to obtaining more profitable live stock. In most neighborhoods the services of a good stallion can be secured. Where several stockmen can agree on keeping the same breed of animals the cost of a bull, boar and ram would not come very heavy on any one. This is one way of getting good stock started in a neighborhood. The owners could agree to allow one of their number so much for feeding and looking after the sires, or they could take turns in keeping them. While the herds and flocks were being graded up pure-bred females could be gradually added. Sheep and hogs multiply rapidly. With cattle it is different, but barring mishaps two females would be the ancestors of a fairly good-sized herd in ten years' time. Time necessary should not deter anyone from making a start. Not only is well-bred stock more profitable to feed, but there is something about it that commands better attention and there is always something better to be expected from each generation. There is always the opportunity of improving on the original which makes work more interesting to the average man. High-

quality, well-bred stock always has commanded and always will command good prices on the market. The stockman that can produce the goods does not need to worry about markets. Whether male animals are purchased by the individual or co-operatively do not stick for a few dollars in order to secure the type of animal you want. Ten dollars now may mean one hundred dollars or more in a year's time if any of the progeny are for sale. More stock and better stock is needed in this country, and the young men must be depended upon to supply the future demand. Commence now to lay the foundation for better live stock on the farm. Organized young farmers could do much by co-operating in the purchase of sires as suggested.

### How a Boy Feels.

EDITOR "THE FARMER'S ADVOCATE":

I sometimes think that Dad forgets how it feels to be a boy. I hope the new department in "The Farmer's Advocate" will remind him of the time when he was one. If not exactly crowded off the farm, a good many of us lose interest in its work and affairs because father keeps the whole thing to himself. I don't mean the money, for we are used well enough and likely get far more than we earn, but he does not take time to explain the meaning of what is going on, or why we are told to do things. Sometimes we must obey quick, I know, without reasons, but I often felt it very keenly as a lad, that what I thought did not count. I might be wrong, of course, but I always wanted to know why. Then we boys used to be set at such everlasting and disagreeable jobs, like hauling brush forty rods by hand away from the old orchard that had been trimmed to the road or lane fence, when a horse and boat and chain would have done it like fun in half the time; or lifting roots out of a deep, damp cellar into the feed passage when the "neeps" might just as well have been stored on the level; or pitching manure out of a little cubby-hole window behind the cattle, or wheeling it out to the pile in a clumsy, old barrow that skinned our knuckles against the posts of the door or slipped off the wet plank on the pile until hands and clothes were about the same color as the stuff we were handling. Manure carriers were not dreamed of then, but was there any good reason why the manure passage had to be only three feet wide, or the barrow itself as heavy as the load? Then think of setting a boy alone to spread the manure piles on a hot Saturday afternoon in a six-acre field intended for fall wheat! If any one thing more than another tended to drive me off the land I think it was manure, and nobody ever thought it worth while to explain what it was all about. "Can't grow crops without it" was all the satisfaction I got on the subject. Then on school holidays we would almost have had a fit to hear the head of the place call out "Hurrah, boys, drop books and work and we'll have a day's fishing" and take mother and the girls to the river. If Dad went away jobs enough were invented to keep us busy till he returned, jobs like those described, or picking over the apple bins or potato piles in a dark cellar with a smoky lantern, picking stones off the fields or pulling weeds, shocking thistly oats by hand, singling rows of turnips nearly an eighth of a mile long or hoeing corn till the back ached, and too often without company or any interesting chat about the why and the where-

fore of it all. Nor were there any school fairs in those days nor home plots for the youngsters. The hens and the hogs would have made short work of them any how, for nobody had time to fence the garden. To ride the horse all day while Dad held the single cultivator between the tasseled rows of corn was not so bad, and driving the flock of sheep to the washing place on a warm, spring day was one of the delightful events of the boy's year. Naturally I am fond of work if it interests me and I see "something to it," but meaningless monotony with never a hint about the beauties of the wood and the field and the sky—that is the way I felt about the farm and why my thoughts turned to other pursuits. He was a good and true man, my father, and succeeded, but for some unaccountable reason he forgot how it feels to be a boy, and I suspect some others are dropping into the same groove and it will lead the boy to the same old end. It is a satisfaction to see that "The Farmer's Advocate" does not forget those who are growing up on the farm, and gives us a generous corner where we can "speak our mind" and tell what we are doing. JAMIE.

### Encouraging the Young Men.

Many agricultural associations leave the young men of the district entirely out of consideration when making out their prize-lists and arranging for their annual fall fair. They wonder why the young men do not take more interest. The fault is in themselves. They do not give these future leaders a place on their board, or offer any inducements to them. That the young men are willing and anxious to take an interest in and assist in making the annual event of greatest educational value to the public if given an opportunity is in evidence in the Strathroy district. Three years ago four prizes were offered by the fair board for a stock-judging competition. Over a dozen young men took part. They placed and gave reasons for their placing two classes of stock, after which there was a general discussion. A large crowd was present, and the general opinion was that the competition was profitable not only to the contestants but to all present. To be able to tell why one animal was superior to another should be expected of every judge in the ring. The competition has been encouraged each year by the board of directors. Not only do they give prizes but make allowance for it in arranging their program. Last year a young farmer was chosen as a director and served on several committees. A new departure was inaugurated. Twenty dollars were set aside for a competition in a display of farm products put up by young men of four townships. Great interest was shown and attractive exhibits were put up which drew many to the fair and showed them the variety of products their respective townships were capable of producing. This year three young men are on the fair board, and prizes for competitions have been increased. The young men of this district are organized. They first requested that they have representation on the fair board; they got it, and the value of their co-operation in making the fair a success is amply proved. Not only do they take an interest in competitions, but each one endeavors to fit something to show in the various classes so as to increase the number of exhibits and make competition keener. Every young man should take an interest in his local fair, and every fair board should encourage him. It will benefit both.

## Automobiles, Farm Machinery and Farm Motors.

### More Essential Points in Buying a Car.

Having gone through the first process of car buying, you are now prepared for the secondary ones that call into play the most careful consideration. The frame of any good machine should be made of re-inforced pressed steel. See that the side members, the long supports running from the front to the rear, are of ample depth and width to stand every reasonable strain. The springs may be semi-elliptic, three-quarter elliptic or cantilever and give good service, but make a thorough inspection of their strength. Of course the cantilever suspension possesses the easiest riding quality. Stand on the running board of the auto, and by bouncing the body, a fairly accurate idea of the elasticity and jolt-resisting power of the machine can be ascertained. Now get right under the car and use your sense of proportion. Grip the rods firmly. They should convey an impression of solidity. Building frames is an exact science, the day of weak, brittle metal and faulty connections having long since faded away. You should find no indication of anything but firmness. The best front axles are drop-forged I beams, the letter I being derived from the appearance of a sectional beam, and the only type of serviceable rear axles are three-quarter or full floating models which allow all the weight of the car to rest upon the housing around the axle, in order that the latter may have no other work than the driving of the wheels. Let me insist, before going farther, that the reader concentrate

upon these details, as the care of a car depends as much upon the knowledge of the functions it is supposed to carry out as upon the constant use of oil, water, gasoline or tools. The wheels should be of the artillery type with heavy spokes, large hub flanges, and great rigidity, and as for tires, you can almost accept any well advertised brand but do not trifle with nameless "seconds" or shop-worn goods if you wish entire satisfaction. You can determine the length of the machine you desire by placing your family and friends in different models, but as a matter of information, the wheel base indicates the distance between the dead centers of the axles.

The running gear having been inspected, let us examine the body, which in the early manufacturing stages was constructed of wood but is now entirely made of pressed steel. The first idea of painting called for numerous coats piled persistently one upon another until a smooth, lustrous finish had been attained. Now-a-days the rough coat is rubbed off and the finishing covers put on, for the most part, with sprays. If the body throws a continuous even reflection and is free from dull spots, you can rest assured of its quality. The seats call for minute examination, for leather can be made extremely deceptive. Hides are cut into three parts, called the grain, the moose and the split. Pinch and crush the product. If it cracks, the material can be set down as inferior, but if it remains soft, pliable and resilient, then you are sure that it is a grain or outside cut and the best available. Beware of patented, painted upholstery,—good wine needs no bush. If the filling is made of mohair and the springs are in firmly set coils, you can depend upon maximum comfort, although some good mechanical cars of low price still use excelsior padding and loose wiring. The appearance of the top will be apparent to even an unpracticed eye. Strength in the bows and thickness of material are easy standards to determine.

You are now ready to sit behind the wheel. Ask for the service brake and then press it down to find if it is easily accessible. Also test the emergency brake for the same purpose. The former contracts externally upon the drums of the rear wheel and the latter expands internally. Later on in a demonstration, the action of these safeguards should be carefully watched as much depends upon the feeling of certainty they justify and inspire. Switches will be found upon the instrument board, and dim as well as strong headlights should constitute a part of the forward equipment. The first named are insisted upon by the traffic squads of large cities, and the last mentioned cannot be easily dispensed with in country driving. In the tool equipment of the car you should find a tire pump, auto jack, tire repair outfit, complete assortment of wrenches, oil can, oil funnel, oil gun and cotter keys. Motoring from home unprepared for an emergency, is unfair to your guests and inconsiderate of your own comfort.

And so we come to the engine which is placed in an automobile to deliver power to the rear axles. There are three types, the valve-in-head, L head, and T head. The names constitute accurate descriptions. The first has a gas chamber directly over the piston and consequently the entire force of each explosion goes to the development of power. In the L-head type the chamber at the side allows for a certain waste of energy, and in the T-head type, the two side chambers prevent the complete use upon the piston of all the force coming from the exploded gas. But there are many arguments in favor of each model, and some people find fault in each one. Speaking generally, it may be said that siege guns and aeronautical engines are based upon the valve-in-head style. The type of motor is a large factor in the construction of any car, but it must be thrown into the aggregate of good and find its ultimate basis in its relations to the rest of the machine. AUTO.



### An Engine to Consider.

Last year, owing to the continued heavy rains throughout the period from the first week of July on to the after-harvest season, many found difficulty in getting their grain cut. The ground got so soft that the main drive wheel of the binder, loaded with the weight of the machine and the work of driving all its mechanism, would clog in the wet places and skid, stopping the cutting, the elevating and the tying. Many, to overcome the difficulty, purchased a small, light, gasoline engine and attached it to the frame in the rear of the binder and utilized its power to drive the machinery. These engines weigh less than 200 lbs., and some of them supply four horse-power. Relieved of the work of running the machinery necessary to cut, elevate and tie the grain the big wheel of the binder had only the weight of the machine to carry, and a great load was also taken off the horses. Many wet fields were cut which otherwise would have been a loss. The binder engine is in more common use in the West. By having an engine attached two horses will handle the binder quite easily in an ordinary season in place of three or four. All they have to do is draw the weight of the machine, the engine cuts and ties. These engines are now made so that they may be quickly detached for other use around the farm, and a three or four-horse engine is a handy helper on the farm. Where the engine is attached to the binder cutting goes on even though the big wheel does skid, but, without the work of the machinery, the big wheel is not so likely to skid. These engines may come into quite general use in ordinary years as well as in wet seasons, for it is much easier to handle two horses than three or four on a binder. The engine is a saving in horse-power, and should prove an all-round handy and profitable device.

### Cheap Power.

While travelling through York County, Ontario, a few days ago we called on a progressive farmer who makes use of a cheap form of power. He has a big Holstein bull which he exercises by placing on a treadmill by which he is able to operate root pulper etc. This is a class of power which many farmers could put to good use. Properly connected up, the treadmill could be used to cut hay, straw and corn stalks, to pulp roots, to pump water and to grind grain. The power is cheap and the exercise is a fine thing for the bull.

## THE DAIRY.

### Dairying in Dundas County.

Of the many branches of agriculture, dairying is predominant in Dundas County, Ontario. The county over, there are probably more cows kept per square mile of territory than in any other part of the Province. It is said that there is not a single herd of beef cattle in the county. The soil is fertile, and the climate permits of growing any or all of the rough fodder and cereal concentrates which make valuable raw material for feeding that living manufacturing plant, the dairy cow. Summer dairying is generally followed, but as markets are opening up for winter milk many dairymen are gradually departing from the prevailing custom and are aiming at having a number of cows freshen in the fall and winter months. In the county, which is 25 miles square, there are at present 65 cheese factories. This averages a local market to every 10 square miles. Large quantities of whole milk are also shipped to Montreal. The dairymen are well supplied with a home market. The by-product from the factories is utilized as hog feed. The prevailing high price of cheese makes milk worth close to \$1.50 per hundredweight, and to this must be added the value of whey, which is around 20 cents per hundredweight, although some are inclined to place a higher value on this by-product when it is sweet, clean and pasteurized.

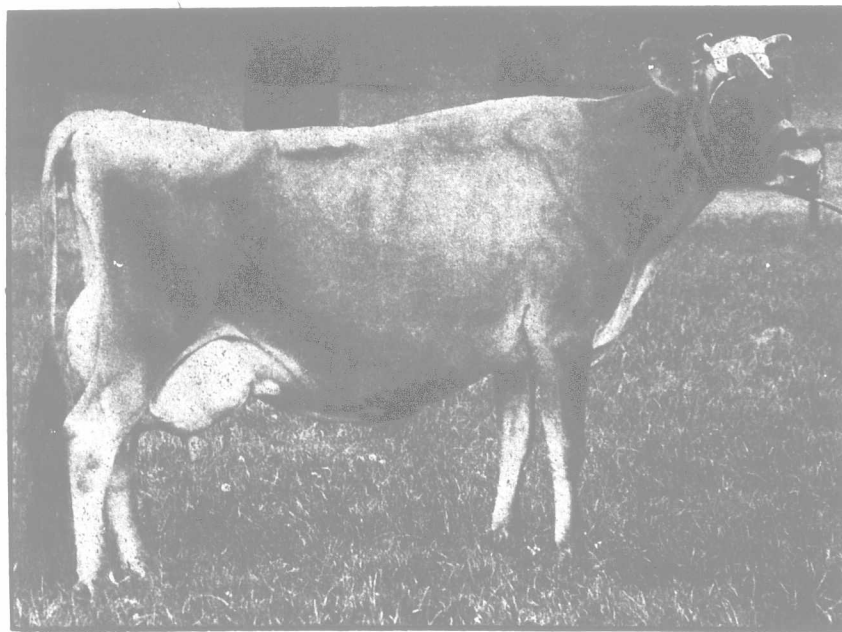
There are many pure-bred herds in the county, some of which are making noted records. While the average milk yield per cow may be above that for the province, the maximum is by no means reached. By continued selection and careful breeding the herds are being gradually improved. Many dairymen in the district do not consider they are farming unless they have from 20 to 25 cows on a 100-acre farm. On some farms there are as many as 35 cows besides the young stock that is being raised. In order to produce roughage to winter this large stock and supply feed for the summer, crops that produce the largest yield in the district are grown. From 12 to 15 acres of corn are planted on almost every farm. Although the season is comparatively short there is seldom a failure of the corn crop. It may not mature but it makes excellent silage for dairy cows. Silos are common. On many farms there are two and on some three, as the aim is to have silage the year round. The herds would have to be materially decreased were it not for the abundant yields of corn and the silo to preserve it for use at all seasons of the year. In the average season red clover does well, consequently there is usually a supply of clover hay, which, in combination with silage, comprises the roughage part of the ration. On some farms alfalfa has been tried, but it proves to be an uncertain crop. Oats and mixed grain are the only cereals grown. Even with silage to furnish succulency to the winter ration



On An Ontario Road.

the winter supply of fodder is not complete unless two or three thousand bushels of roots are in storage. For producing a heavy flow of milk or when cows are on test the dairymen like to feed quite heavily on roots. Large quantities of millfeed are fed. No attempt is made to get along without it. It is claimed that it pays well to feed a certain amount of shorts, bran, linseed meal, cotton-seed meal or gluten meal in conjunction with ground oats and the rough fodder previously mentioned. If they depended on growing sufficient concentrates to properly feed the stock on the farm the acreage of corn and clover would necessarily have to be reduced, consequently fewer cattle could be kept. By growing what the farms will produce most profitably and balancing the ration with purchased concentrates, the net returns are greater than if only such feeds as could be grown on the farm were fed. One organization with 120 members purchases on an average two carloads of millfeed per week during the entire year. This will give an idea of the amount of feed purchased.

W. McElroy, of Dundas County, keeps about 30 head of cows, besides his young stock, on his 100-acre farm, which is of clay loam soil. Starting with run-down land it has been brought to its present productive state principally by growing plenty of clover or alfalfa. One-quarter of the farm is seeded



Augerez's Golden Maid—First at Dublin, 1916.

to clover each year, and a field is left in alfalfa as long as it will stay. However, the past winter proved too severe for this valuable plant, and the stand is poor this spring. From 2,500 to 3,000 bushels of grain are produced annually, and sufficient corn to fill one silo 20 by 26 feet and another 18 by 24 feet. Besides this, four or five acres of roots are grown which yield about 1,000 bushels per acre. This leaves a portion of the farm to supply summer pasture. After bringing the large herd through the winter in prime condition there are about 10 tons of alfalfa still in the barn. A considerable quantity of bran, oil cake and gluten meal was purchased to supplement the home-grown feeds.

Cows giving an ordinary quantity of milk are fed about 30 pounds of silage, a bushel of roots, 12 to 15 pounds of concentrates, and what hay they will eat.

The amount of concentrates is governed largely by the milk flow. Some cows may get as high as 20 pounds per day. There are a number of cows freshening at different seasons, which tends to keep the amount of milk for sale fairly uniform throughout the year. Milk is produced more cheaply when the cows are stable fed than when they depend entirely upon grass. Although the cows are turned out all summer they are also fed heavily in the stable. There appears to be no trouble to get them to take a feed of silage and hay night and morning when they come direct from the pasture. Some grain is also fed. When the cows get a feed in the stable they rest a good portion of the day in a shady place. Under this system a small acreage of pasture suffices to supply the needs, and there is always good picking. All through the county the pasture is supplemented by hay, silage and grain. This accounts for the large number of cows kept per farm. Mr. McElroy believes that with sufficient help to increase the acreage of roots and corn, and with a good stand of alfalfa from which two or three cuttings per season could be made, that it is possible for a farm to supply all the roughage and some of the concentrates to carry one cattle beast to the acre. This would be intensive farming. A little more planning of the crops so that the maximum returns might be secured from each

acre would tend to increase the returns of many farms.

The present herd was started 6 years ago by buying several head, and at present there are 5 cows which give around 20,000 pounds of milk each in a year. A sire of high quality and with good breeding has always been used, and the heifers raised are proving even more productive than their dams. Whole milk is sold from this farm, but the calves do not suffer. They are given first consideration for a month or two in order to give them a start, then the milk is gradually reduced as the calf learns to eat.

There are many richly-bred and record-making herds in the county. These herds have been brought to their high state of efficiency by their owners realizing the value of selection in breeding and by paying attention to details in feeding and caring for the animals from the time they are dropped.

Knowing how to feed is a big step on the road to successful dairying. The writer was surprised to learn the amount of feed some cows were capable of consuming and turning into milk day after day. In one herd where cows were giving over 100 pounds of milk each per day, they were consuming as high as 24 pounds of concentrates and 150 pounds of roots, besides silage and hay. While silage is an excellent feed for dairy cows, many dairymen who are endeavoring to get the most out of their herds like to have mangels or turnips to feed in conjunction with silage and other feeds. There appears to be something about roots that has a beneficial effect on the animal system.

Practically all the milk produced in the county finds its way to cheese factories, which are handy to nearly all patrons. Each patron draws his own milk to the factory and secures his share of whey.

Where hogs are raised high value, but some and many hundred no patron is far from to deliver his milk as if one man was route. A year ago the fact that about produced per year town of Chesterville manufactured into gradually working this spring about shipped daily. That the farmers as cars. As the train 9 o'clock in the morning work on the farm. Three men can start. This works so that need not lose the condensary\* is un which will open an cheese factory season months, which are being bred to fresh milk are gradually which will, no doubt require a uniform s year. Only enough herd to keep it up for veal when thro

The stock are pr Only two or three the county. It is drier and more hea The stables are for the comfort o choring. Many st carriers, and water mometer drops low Ontario, but the f portable.

Dundas is trul opportunities. Ma crops are produce stock can be secur mate of the averag to increase the yie one-half. Using a behind him and cows would soon in many other sec and tester more g

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Prof. Dean, of Guelph, was the s mistic address he the dairy cow oc humanity, and in The yearly value about \$150,000,000 cows and the sa practically double ing and intellige three enterprising on the quality o order to be a goo man must be abl breeds of stock, bu lar breed. The ou for all dairy prod weather condition hay and grass, wh of milk, promise are opening up for fancy cheese proving that sp made with milk. slogan, "Drink tained that at 10 cheapest kind of quart was equal i Milk has a high used.

Prof. Dean e ing, claiming tha he has in the s As yet less than using scales and although both s Only a few yo produce 2 pounds be the exception, as high as 115 average cow doe in a year. Good speaker advised business and to on their farms.

A good deal o class conducted discussing type a ture cows was placings.



Where hogs are raised this by-product is given a fairly high value, but some patrons cannot use their supply, and many hundredweight of this feed is wasted. As no patron is far from a factory it does not take long to deliver his milk, and he is probably as far ahead as if one man was paid for drawing all the milk on a route. A year ago a census was taken which revealed the fact that about 50,000,000 pounds of milk was produced per year within a radius of 8 miles of the town of Chesterville. About 90 per cent. of this was manufactured into cheese. A whole-milk trade is gradually working up with firms in Montreal, and this spring about 300 eighty-pound cans of milk are shipped daily. The shipping company demands that the farmers assist in loading these cans on to the cars. As the train does not go through until after 9 o'clock in the morning it breaks into the forenoon's work on the farm. By a little co-operation two or three men can stay one day and others the next. This works so that all who are shipping their milk need not lose the whole morning of every day. A condensary\* is under construction in the county, which will open another market for whole milk. The cheese factory season is principally during the summer months, which accounts for the majority of cows being bred to freshen in the spring. Those who ship milk are gradually working into winter dairying, which will, no doubt, become more general if markets require a uniform supply of milk throughout the entire year. Only enough calves are raised in the ordinary herd to keep it up to strength. Many calves are sold for veal when three or four weeks old.

The stock are practically all housed in frame stables. Only two or three bank barns are to be found in the county. It is claimed that frame walls are much drier and more healthful than stone or cement walls. The stables are equipped with up-to-date fixtures for the comfort of the animals and convenience of choring. Many stables have concrete floors, litter carriers, and water in front of the cows. The thermometer drops lower in winter than it does in Western Ontario, but the frame stables keep the stock comfortable.

Dundas is truly a dairy county that has great opportunities. Markets are close at hand. Good crops are produced, and much well-bred breeding stock can be secured in the county. From an estimate of the average milk production it is quite possible to increase the yield of the average cow by more than one-half. Using a sire that has producing qualities behind him and saving the heifers from the best cows would soon tend to improve the average. As in many other sections, it will pay to use the scales and tester more generally and work on their findings.

### Holstein Breeders' Picnic.

It would be difficult to find a more suitable place to hold a picnic than that afforded by Oak Park Stock Farm, where members of Brant County Holstein Breeders' Club met and spent an enjoyable and profitable day, June 16. After spending a social two hours those present had the opportunity of seeing good stock and of listening to instructive addresses.

Prof. Dean, of the Ontario Agricultural College, Guelph, was the speaker of the day, and in an optimistic address he pointed out the important place the dairy cow occupied in supplying cheap food for humanity, and in increasing the wealth of this country. The yearly value of dairy products in Canada is about \$150,000,000, but with the same number of cows and the same amount of labor this could be practically doubled by practicing more careful breeding and intelligent feeding. The work of two or three enterprising breeders has a leavening effect on the quality of stock kept in a community. In order to be a good breeder, Prof. Dean claims that a man must be able to see the good points in other breeds of stock, but must have faith in his own particular breed. The outlook for dairymen is bright. Prices for all dairy products are on a high level, and while weather conditions are unfavorable for many crops, hay and grass, which figure largely in the production of milk, promise to yield heavily. New markets are opening up for dairy products. The demand for fancy cheese is increasing and experiments are proving that specially-prepared beverages can be made with milk. Dairymen might well adopt the slogan, "Drink more milk." The speaker maintained that at 10 cents a quart whole milk was the cheapest kind of food on the market to-day. One quart was equal in food value to one pound of meat. Milk has a high nutritive value in every form it is used.

Prof. Dean emphasized the importance of testing, claiming that no man knows the kind of cow he has in the stable until he commences testing. As yet less than 10 per cent. of the dairymen are using scales and tester. The yearly test is favored, although both short and long tests are valuable. Only a few years ago the cow that would produce 2 pounds of butter a day was considered to be the exception, but now there are cows producing as high as 115 pounds of butter in 30 days. The average cow does not make much more than this in a year. Good cows are revenue producers. The speaker advised dairymen to make a study of their business and to endeavor to systematize the work on their farms.

A good deal of interest was taken in the judging class conducted by H. Nixon, of St. George. After discussing type and conformation a class of four mature cows was judged and reasons given for the placings.

### Ayrshire Breeders Hold a Field Day.

Ayrshire breeders and their families, to the number of about 150 people, attended the Southern Counties Ayrshire Breeders' Association field day, held in Norwich on June 15. Through exchange of ideas, hearing the Ayrshire breed and dairying in general discussed by authorities on the subjects, and seeing several large classes of animals judged with reasons given for the placings, the breeders were unanimous in saying that it was a day well spent. This particular Club has about 50 members, and there are six other similar clubs in the Dominion. This get-together movement, of men with a common interest, to study breed type, dairy conformation and feeding problems is making more intelligent breeders.

W. F. Stephen, Secretary of the Ayrshire Breeders' Association, in his opening remarks stated that he believed the time was ripe for the Ayrshire breed to forge ahead. The Association was endeavoring to bring the strong points in favor of the breed before the public, and considered that this should be followed up by community breeding and individual advertising. The speaker gave a resume of the history of the breed, and pointed out that the climatic conditions and environment in which it originated made it a very hardy breed. It has typical dairy form, and there is a uniformity of conformation among all animals of the breed. Ayrshires are found doing well in all parts of the world, thus showing their adaptability to their surroundings. As a breed Ayrshires are economical producers of milk and butter-fat. Under test, individual cows have made remarkable records, although they do not give as much milk as one breed, nor test as high as another, they are an all-round good commercial cow.

Prof. H. Barton, of Macdonald College, Quebec, in a well-thought-out address gave his hearers much food for thought. While part of the address was directed particularly to breeders of Ayrshires there was something for everyone interested in live stock to think about. The speaker's opening remarks showed that the Ayrshire breed as a whole had many things to commend it, and there was proof that it was gaining in favor over the country. Records have demonstrated its commercial value, the demand is keen for good animals, and registration shows an increase in number of breeders as well as in number of animals. Therefore, the logical conclusion is that the breed is destined to occupy a more prominent place in the dairy world than it does at present. Prof. Barton emphasized the importance of the grade cow, and claimed that an inferior sire was not good enough to head a grade herd. That is where many breeders make a grave mistake. They use a bull that is not only cheap in price but off in type and conformation, thinking it does not matter so much as they have no pure-breds. The grade will continue for many years to be the commercial cow, but her value as a producer can be materially increased by using the right kind of sire. Every breed has its defects, but the most of them are surmountable by judicious breeding. During recent years the size of the Ayrshire and length of teats as a whole have been materially improved, and this was cited as an example of the possibilities of breeding and selection. There is a co-relation of parts of the animal system, and in order to get the best results it is necessary to have a balanced animal. With a medium-sized animal it is easier to get other things to correspond. Too much importance has been laid on isolated points, and where breeders have bred to intensify one thing in particular they have generally sacrificed some other equally important point. The speaker criticized judges at fairs for too frequently laying stress on one thing rather than balancing up the whole. Many breeders are influenced by what they see done in the show-ring. Both breeders and judges must constantly study type. Type and production are inseparable with the dairy cow. There are too few ideal animals of any breed, and also too few real breeders. The ideal breeder is a student of his breed and of his herd, but the more he knows about other breeds than his own the more intelligent breeder of a particular breed he will be.

Prof. Barton maintains that there is not sufficient available information about the breeds to enable young men in starting to know definitely the animals they purchase for foundation stock. While pedigrees show that breeding and records are important, it would be of great value if all breeders kept a detailed account of every individual in the herd. By using a loose-leaf system or an ordinary book, and recording the cow's breeding, production, offspring and points of general information and following up with the record of the offspring, the line of breeding and quality of stock for production purposes could be seen at a glance. The power of transmitting those qualities back of any individual would be apparent. If the great families and individuals were analyzed and the information given out it would be of great assistance, especially to the young breeder.

Good, commercial foundation stock is essential in starting with any breed, and the future success depends a good deal on the bull. He either makes or breaks the herd. A good one has great earning power, while a poor one will soon throw the business into chaos. It is necessary to have the proper breeding, but with that must go individuality. A bull's real value as a producer of the desired type of stock is not known until his progeny enter the producing ranks, and at that time too many are disposed of for beef. Prof. Barton maintains that it is a crime to sacrifice good bulls. There are not sufficient of them in the country to permit of the great waste

that has been going on. There should be some arrangement whereby these animals might remain in the community as long as they were capable of reproducing.

The speaker advised young men starting into breeding to choose a good strain or family and continue along one definite line. This does not necessitate close in-breeding, as bulls of the same family yet not closely related can be procured. The breeder who chooses a bull from one strain this time and another strain the next seldom gets anywhere. This policy results in a conglomeration of individuals and families in a herd which is a drawback when type and uniformity are sought after as well as pedigree. In conclusion Prof. Barton advised the young breeder, in particular, to get the best females possible, and adopt a definite policy in breeding. If a family proves good keep in that channel. Have an ideal, and build for the future rather than look too much at present profits. Men with a vision are needed in the live-stock business.

Over 50 head of Ayrshires were on exhibition. These were brought out in their respective classes and judged by Prof. Barton and Mr. Stephens. Reasons were given for all placings, and general discussion followed. A notable feature of the event was the large number of young men present. Occasions of this kind afford a splendid opportunity for studying the breed, and for getting pointers which may be of future value to the breeder.

## HORTICULTURE.

"Quality, not alone quantity, is what we want."

Study the markets and get in touch with prospective buyers.

It is claimed that summer pruning will check wood growth and force a tardy apple tree into bearing. It is worth a trial.

So much weather favorable for the production of scab has led fruitgrowers to expect a heavy "June drop" in the apple orchards.

July 1st is usually the period up to which cuttings of asparagus are made. After this apply a good top-dressing of manure and cultivate the land. In the fall cut the tops off a couple of inches above the ground and carry them off the field and burn. This will destroy insects and diseases that might attack the next season's crop.

A strawberry patch can often be rejuvenated by plowing between the rows and harrowing with a levelling harrow. Prior to this the foliage should be mowed, raked off and burned. Some growers burn this dried foliage on the ground, but there is a danger of injuring the crowns. If such is attempted select a time when a brisk breeze is blowing.

After the raspberry crop is harvested, clean out the old wood and diseased canes and burn them. Cutting back may be done either in the autumn or following spring. When done in the summer laterals are forced out giving the new cane somewhat of a bush form and this practice is still followed by some growers. However, fall and spring cutting back are most in favor.

The fruit grower who neglects his orchard when the prospects for high prices are not the best is in a similar position to the live-stock farmer who allows his herd to decrease in numbers and depreciate in quality when the demand for his product is not at highwater mark. They both sacrifice any advantage they have gained and are not in a position to enjoy the profits of the favorable seasons when they come around.

United States authorities assert that the number of bearing apple trees in the Union is constantly declining. At the Convention at Rochester, January 26, 27 and 28, 1916, Geo. T. Powell, Ghent, said: "Though to a somewhat less degree, the same conditions of the decline of apple orchards exist over sections of our Eastern States, where blights of many kinds, with canker leading, are clearing acres of eastern orchards. There were 4,000,000 fewer trees bearing apples in 1910 than in 1900 in New York State."

### Pessimism and Fruit Growers.

EDITOR "THE FARMER'S ADVOCATE":

To say that all fruit growers are pessimists would be an extreme statement but my association of several years with the fruit business has led me to the conclusion that too many growers are pessimists for the general good of the industry. Whoever heard of a manufacturer or a business man, in the ordinary sense of the term, burning up his time and energy in depreciating the value of his own product, and yet the spectacle of fruit growers, not only talking down their own product but rushing into print to depreciate its value has been painfully common during the past few years. We are producing commodities which should be and are among the staple articles of diet in most households. The fact that all fruits are more or less perishable introduces many problems which it is up to the producer to solve. Would it not be more rational to devote our energy,



as business men as well as fruit growers, to the proper solution of these difficulties rather than singing "blue ruin from the housetops" into the ears of the very people who are reaching out every year for a supply of our products?

#### 'Not Too Much Good Fruit.

The approaching season should be a good one for the growers but the stage has been prepared in the minds of the public for a session of over production and low prices—very good medicine for the consumer but mighty poor solace for the grower who is depending upon the proceeds of his fruit to buy shoes for the children and pay some of the other sundry expenses which must be met in the course of life's journey. From present appearances we will be blessed this year with a good crop of fruit from strawberries clear through to winter apples but there is no reason to believe that the crop will be phenomenally large in any line as "Nature's thinning" has already been very much in evidence with at least several of our standard fruits. The weather during the time of fertilization has been anything but favorable to this most necessary process so that "setting" has not been at all in proportion to the amount of blossom. In the case of apples the weather has provided the most favorable possible conditions for the growth of fungous diseases so that the grower who has clean apples this year will be the one who has been on the job persistently and often with the spraying outfit, working hard to produce marketable fruit. I mention these factors simply to offset the idea that has already become too prevalent, that every old tree, in everybody's backyard is going to be loaded to the breaking point with high-class fruit. I am fully satisfied that the producer of apples, who is properly caring for his orchard this season and who is wise enough to have a proper selling connection, will make some money, but I am not so sanguine about what will happen the grower who has been neglecting his trees.

#### The Science of Selling.

The large producer of fruit is usually a pretty fair business man and in my experience, most of them in Ontario have done well and are continuing to make money. The salvation of the smaller grower is undoubtedly to join with a number of his neighbors and form an association so that the combined out-put will permit of the employment of a business manager to run the association and market the fruit. Let me emphasize right here the importance of a business manager in every sense of the term. Many of our associations are falling down right now because of the fact that the manager is either not a thorough business man who knows the trade and has selling connections, or is handicapped by the petty interference of members at every turn until his usefulness as a manager is utterly destroyed. Of course it follows that a capable manager, who can make a success of the business, must be paid well for his services and here is another stumbling block in many of our associations; members fail to realize the fact that a good man cannot and will not work for a mere pittance and the fellow who is willing to do it will usually prove to be incapable. This is common logic which applies to business in every path of life. As growers, we have a great deal to learn about the art of selling. To refer once more to the successful manufacturer or wholesaler I might say that the strongest element in the success of his business is his ability to satisfy his customers and keep them coming. This is his constant aim and commands most of his attention. An article might be constructed of the best material, in the best possible way and yet if it did not meet the demands of an exacting public the energy and cost of production would be lost. It must be a "good seller". How much time do we fruit growers consume in studying and acquainting ourselves with the likes and dislikes of the consuming public? How much thought do we give to the manner in which he likes his fruit brought to his door? How seriously do we consider the impression which our package of fruit is going to make upon the consumer after he has paid some real money for it? These are the questions which should be the burning ones in the minds of fruit growers who are anxious to establish permanent trade connections and thereby a sure outlet at fair prices. People are becoming more discriminating all the time. Quality at fair prices is in constant demand. Inferior fruit is a menace to any market, the people don't want it and the interests of the grower would be much better served if such stuff were never put up and nothing but first class goods offered. Let us continually have the consumer before us and endeavor to make the impression so favorable that he will want more of the same brand of fruit.

In spite of the fact that our country is at war, we are enjoying a great period of prosperity; thousands of people in our cities and towns are living better than they ever lived before; there is an abundance of money in circulation and many people will consume large quantities of fruit this year who have heretofore not been in a position to do so. This element in itself will enormously increase the home consumption of fruits of all kinds and should more than compensate for the restricted export facilities which promise to face the apple trade. Many industries have been waxing fat upon the outflow of money which is bound to go on as a result of the war. Let the fruit grower take some comfort in the fact that the tide will turn his way when he puts his luscious berries and fruits on the market. Nothing is more appetizing or tempting than good fruit—let us see to it that nothing but the real good fruit gets on the market.

#### Satisfy the Consumer.

As fruit growers we discuss the improvement of our marketing facilities, transportation evils and methods of distribution—and these are vital questions which will stand a great deal of improvement but the ghastly fact remains that none of us are trying hard enough to satisfy the consumer and make him come back for more. We can increase the home consumption of fruits enormously if we strive to please the eye as well as "tickle the palate" never forgetting that the consumer must have a square deal in every particular and full value for his money. The tendency to "just put a few nice ones on top" is one of the frailties of human nature and is not by any means limited to fruit growers. "Put a few nice ones in the bottom" is a safer maxim and should be preached to every berry picker and fruit packer in the country. I have frequently watched packers, especially of apples and peaches, who had no financial interest in the fruit and yet would over-face deliberately, in order to finish off a nice looking package; never thinking of what the impression of the purchaser would be when he opened the package.

For the coming season—market only choice fruit, carefully graded and packed, using every possible care to get it to your market in good condition. Use good reliable trade connections in selling, and you should show a substantial balance on the right side. The demand for good fruit will be very large.

A. J. GRANT.

Pres., Ont. Fruit Growers' Ass'n.

#### Expense of Overseas Fruit Shipments

It cost the apple growers of Nova Scotia 65 cents per barrel more in 1915-16 than in 1912-13 to land their fruit in the hands of the wholesale trade in England. The President of the N. S. Fruit Growers' Association has itemized the cost of exporting via Halifax to London as follows:

Charges Per Barrel.	1912-13		1915-16	
Inland rail.....	\$0.16		\$0.17	
Ocean freight.....	.60		1.25	
Primage.....	.03			
Dock dues and P. L. A.....	.08		.09	
Cartage.....	.08		.10	
Insurance.....	.02		.05	
Commission.....	.18		.18	
Handling charges.....	.10		.06	
		\$1.25		\$1.90

It will thus be seen from the table that during the last three years the ocean freight rate has risen 65 cents, while the remaining charges as a whole remain the same. In 1913-14 the ocean freight amounted to 66 cents per barrel, and in 1914-15 to 78 cents. According to the same authority it would cost the Ontario shipper from 67 cents to 80 cents more per barrel.

#### The Cost of Growing a Barrel of Apples.

The price of a manufactured article is largely governed by the cost of producing it. This item, together with selling expenses and desired profits go to make up the wholesale quotation. The price of apples is not influenced in the least by the cost of production, except in so far as growers allow some fruit to go ungarnered on account of unsatisfactory returns, and this part of the crop withheld from consumption alleviates the congested condition of the market. This is a phase of production, but only in a roundabout way does it influence the price of the commodity. Fruit growing for the careful, industrious man is still a good business. One cannot arrive at profits and losses, however, by figuring expenses and returns over one season only. The results for a period of ten years should be considered, and from the profits or losses of a decade one can arrive at his standing in the field of production and whether it is satisfactory.

The cost of producing apples varies according to the district and the markets to which the fruit is delivered. Value of the land, price of labor, cost of packages, kind of fertilizer used and the yield all regulate the cost per barrel or box. The North-western States and British Columbia probably have the highest producing cost. In the first-named district authorities place the average at \$1.06 $\frac{2}{3}$  per box, while in British Columbia it will range about 25 per cent. higher at \$1.20 to \$1.28 per box. This was the amount announced by the Provincial Horticulturist for that Province, R. M. Winslow, to the Ontario fruit growers at their last convention at Toronto, and the same amount was attested to by a body of B. C. fruit growers before the Government. When we consider that one barrel represents three boxes the producing cost appears exceedingly high. Ontario growers, especially in the Burlington District, declare that it costs them \$1.00 to produce and mature a barrel of apples on the tree, and another dollar to pick, pack and deliver it to their shipping point.

In the Annapolis Valley, Nova Scotia, charges range somewhat lower, but their package is slightly smaller than the Ontario barrel. Manning Ells, a prominent grower there, speaking at the last Fruit Growers' Convention said: "On our farm we can

produce apples at a cost, laid down in the warehouse, of \$1.25. That means on this cost we are paying practically 60 cents a barrel interest on money invested, valuing the orchard at \$500 per acre, outside of interest and charges for equipment. The cost of growing the apples on my farm outside of interest and charges for equipment was 69 cents this year and 67 cents last year. That means laid down on the warehouse floor, everything paid for, men and horses and all charges." This is one grower's figures for a particular section of the country.

A Maryland orchardist, speaking to the Western New York Horticultural Society Convention last January, declared the cost of production to be \$1.56 per barrel in the orchards under his charge. The plantation was a commercial proposition, and accurate records were kept of every detail.

It can thus be seen that the cost of producing a barrel of apples varies considerably in different states and provinces on this continent, and there would probably be a great difference even in the same district. There are so many details in the management of an orchard that if each and every one is not considered from the viewpoint of economy and efficiency unnecessary expense will creep in. The mixed farmer should consider his orchard one of the departments of the farm and put every bit of wisdom and energy he can husband into his efforts to produce number one fruit at the least possible cost. The exclusive fruit grower relies entirely on his orchards for revenue, and for him it is folly to neglect any detail that will make for efficiency and reduced cost, provided the quality is not impaired.

## POULTRY.

### A Satisfactory Henhouse.

EDITOR "THE FARMER'S ADVOCATE":

As some of your readers may be planning to build a new hen-house, which we found a very profitable investment, we would like to tell how ours is constructed, and how satisfactory it has proven. Our hens laid steadier all last winter than they ever did before when they were in among the other stock, or even had a box stall fixed off for their roosts and so on, but were not confined in it. We have gathered eggs every day except about three since early last fall, and the year before, when the hens were all through the stables, they laid very few eggs from the first of October until February. With a hen-house there is some encouragement to clean it and keep it free of vermin. In the stables you've the whole thing to go over; sometimes the stock too, and it looks and is such a big job that it is generally let go. With a hen-house it is not half the job, and it can be kept clean quite easily, at least we find it so with ours. As yet we have discovered no vermin and are striving to keep it so. The last thing in the fall, we treated the roosts, nests and walls near them with a good mite killer and again in April, and intend to do so every month, as "prevention is better than cure." We are keeping the sitters away from the others, and hope, by so doing, to keep down the vermin which the sitters are often guilty of bringing. We intend having an incubator another season. Incubators may be unsatisfactory in some ways, but we believe they would be just as satisfactory and less trouble than the hens. Anyway they would not break or eat about half of the setting of eggs as our hens seem to be doing this year without the least excuse, as they didn't eat eggs at all before and have a supply of everything before them. Having given reasons for having a hen-house and how ours suited, we must proceed to its construction.

Some may think it is built too warmly, with too many thicknesses of lumber, and, therefore, would be too expensive, but we have found it very satisfactory indeed and better than one from which, during a very cold snap, the hens must be driven into the other stables or else freeze feet or combs or both. It is large for the number of hens, as it is 12 feet by 24 feet and 8 feet high, and we keep about fifty hens. However, it is better too large than too small. We do not confine the hens in it, but have a hole cut at the bottom of the door so that they may go out or in as they choose. The hole was open all winter, and on fine days they enjoyed themselves immensely on the straw stack and around the yard. We built and painted the house ourselves, at times when there was nothing else to do, and so the cost of construction was greatly reduced.

The foundation is of stones covered on sides and top with cement, the plank sill being laid in the cement while it was yet soft. The corner posts are 4 inches by 6 inches, the studding 2 inches by 4 inches, about 2 feet centres. The plates are two 2 by 4-inch scantlings forming a 4 inch by 4 inch. The rafters are 2-inch by 4-inch scantling, forming a roof with a square pitch. It is sided with matched spruce lumber, two ply outside with tar-paper between, and one ply inside with tar-paper on the north and east on the studding. It is roofed with cedar shingles and ceiled on top of the joists, which are 7 feet from the floor, with matched lumber. There are three large windows on south side and a smaller one in the west end, and all being covered inside and out with poultry wire to prevent breakages. The three south windows are arranged so that they may be pushed up when needed open. There is also one entrance door, and a small door on a level with the dropping board to clean out, on the south side. This small door saves a

lot of time and trouble and quickly scraps of strong planed for vermin to finish hung by wires from an inch or so of of inch lumber projecting out far from the roosts, hens from scratch are made of plan box fastened to the forming the back that it may easily are holes cut, one sides (half out of We find these g and they are easily overhead makes a or such material, house was built h painted inside do inside painting f any application f and is more effe with the top of grain bin in one and feed hopper winter is kept fill another hopper i of gravel and a d during winter. A floor in which to trouble whatever hens look and se active and product building. A good investment. Northumberland

## THE FARM BEEKEEPER

EDITOR "THE FARMER'S ADVOCATE":

Beekeeping is the country. There has been widely d that the country bees. There is, h the farmer should At the present in Ontario are k in size from five who understand s of the honey bee many—the greater beekeeping indust off if this side-li The equipmen beekeeping are sm other branches of smoker, foundatio more than fifty these five coloni and given about (The average yic season was 55 pou in one season o Lured by the im small amounts i chickens before t As a side-line keeping will com of farming, but If neglected the p ment deteriorat finally either sw moths, succumb winter. Such far are not only kee but may also b A neglected apia centre for many neighboring apia from the neglec robbing when th there, but, excite stive to overpow yard, and thus The neglected neighborhood of bors are anxious making from bee and start in the about their bee often give them borhood is ove producing flora number of bees, is small. Disap thusiasm is lost are neglected, an increased. Some pressure of othe to the bees, an All such beekee ducing industry. one with the t be kept profitabl The bees will p



lot of time and trouble, as the droppings may be easily and quickly scraped out of it. The roosts, which are of strong planed material so there are no cracks for vermin to find shelter in, are in the east end, hung by wires from the ceiling and reaching to within an inch or so of each wall. The dropping board is of inch lumber about 3 feet from the floor, and projecting out far enough to catch all the droppings from the roosts, and having a raised edge to prevent hens from scratching the droppings off. The nests are made of planed lumber in the form of a long box fastened to the north and south walls, the walls forming the back of the box. The top is hinged so that it may easily be raised in getting eggs out. There are holes cut, one for two nests, in the top and front sides (half out of each) of the box to admit the hens. We find these good nests to prevent egg eating, and they are easily cleaned and disinfected. The loft overhead makes a fine place for storing corn stalks or such material, and it was for this purpose the house was built higher than necessary. The house is painted inside down-stairs and outside all over. The inside painting filled up cracks and crevices, and so any application for vermin is applied more easily and is more effective. The floor is of earth, level with the top of foundation. There is a covered grain bin in one corner, also a drinking fountain and feed hopper of three compartments, which in winter is kept filled with bran, shell and meat scraps; another hopper is filled with oat chop. A supply of gravel and a dust bath were also kept for the fowl during winter. A litter of straw was kept on the floor in which to feed the hens. We have had no trouble whatever with the house as yet, and the hens look and seem to feel healthier and are more active and productive than before being housed in this building. A good hen-house is certainly a profitable investment.

Northumberland Co., Ont.

H. E. C.

## THE APIARY.

### Farm Beekeeping and Notes on the Apiary.

EDITOR "THE FARMER'S ADVOCATE":

Beekeeping is practiced both in the cities and in the country. That it is suitable for a city occupation has been widely debated, but there can be no question that the country offers suitable surroundings for the bees. There is, however, much to be said on whether the farmer should keep bees or not.

At the present time the greater number of bees in Ontario are kept by farmers. The apiaries vary in size from five to possibly fifty hives. With some, who understand something about the peculiar habits of the honey bee a fair revenue is obtained; but with many—the greater number of farmer beekeepers—the beekeeping industry and the farms would be better off if this side-line were dropped.

The equipment and stock required to commence beekeeping are small and inexpensive compared with the other branches of farming. Five hives, bees, supers, smoker, foundation, veil and hive tool will barely cost more than fifty dollars. Given average attention these five colonies would have increased to eight, and given about 275 lbs. of honey this past season. (The average yield of white honey in Ontario last season was 55 pounds per colony.) This gives a return in one season of practically the whole investment. Lured by the immense returns, many farmers invest small amounts in bees and oftentimes count their chickens before they are hatched.

As a side-line, when given proper attention, beekeeping will compare favorably with any other line of farming, but they must have proper attention. If neglected the profits soon turn to losses, the equipment deteriorates and the bees dwindle away, and finally either swarm out, are destroyed by the wax moths, succumb to disease, or do not survive the winter. Such farmer beekeepers who neglect the bees are not only keeping bees at a loss to themselves, but may also be a menace to their neighborhood. A neglected apiary may serve as a disease-spreading centre for many years. The strong colonies from a neighboring apiary start robbing the weaker ones from the neglected apiary, and they do not stop robbing when their work of destruction is completed there, but, excited by the easily-obtained stores they strive to overpower some of the colonies in the stronger yard, and thus cause heavy losses.

The neglected apiaries are frequently found in the neighborhood of a beekeeping specialist. His neighbors are anxious to secure some of the returns he is making from beekeeping, and they buy a few colonies and start in the business. At first they are very keen about their bees. They watch them carefully and often give them "mistaken kindness"; but the neighborhood is overstocked, the pasturage of nectar-producing flora is not sufficient for the increased number of bees, and hence the honey crop per colony is small. Disappointed by their returns their enthusiasm is lost, the bees, once so kindly tended, are neglected, and the list of undesirable beekeepers increased. Some farmers do not lose interest, but the pressure of other farm work limits the time given to the bees, and again the neglected apiary appears. All such beekeepers are a menace to the honey-producing industry. If bees are kept by a specialist—one with the necessary experience—more bees will be kept profitably within a given area than otherwise. The bees will pollinate the fruit blossoms and the

clovers, resulting in a heavier setting of fruit and an increased yield of seed. Quieter bees are usually kept by the specialist, because he pays attention to his stock. He selects his quieter queens and introduces blood of new, industrious strains. Diseases are kept in check, and the specialist cannot afford to neglect his bees.

For many reasons the farmer should seriously consider everything before starting to keep bees, and the losses he may cause if he neglects them. It is necessary to become acquainted with the natural laws governing bees, and although great improvements have been made in apiculture many more are coming into use, and unless we subscribe for and read a good live bee journal we will soon be left behind. In a word, use all available means of getting information—reading matter, local and provincial conventions and demonstrations, the O. A. C. Short Course, and by visiting or working for successful beekeepers.

For profitable beekeeping the best strains of Italian bees should be kept, because of their resistance to the bee moth, European foul brood, and because they start brood rearing earlier in the spring. (It is the early bees that store the surplus honey.) In most localities better results are probably obtained by wintering outdoors. The labor is reduced and the bees build up better in the spring. Bees wintered in the cellar have been found, when they are put out in the spring without protection, to suffer heavy loss from spring dwindling. The warm sun causes the bees to fly out when the air is so cold that they become chilled and they never return. The bee hive needs protection from the rays of the sun, and the cold storms and winds of early spring, as much as it does in the winter months when there is no brood to chill.

As soon as the weather will admit in spring, each colony should be examined so that their condition may be known. No. 1 may be queenless, No. 2 short of stores, No. 3 may be weak in numbers and need a frame of ripe brood or to be united with a strong colony. The uncapping of the old honey should be regulated so that it will be all used up in stimulating brood rearing before the honey flow is on.

A register of the apiary should be kept so that, at a mere glance, the age, race, strain, and quality of the queen can be ascertained also the character of her progeny, the amount of honey stored, and the increase obtained from that particular colony.

Everything needed in the apiary should be ready for use at the commencement of the season, and the wants of the bees should be supplied at the proper time.

Carleton Co., Ont.

W. F. GEDDES.

## FARM BULLETIN.

### Prose and Rhyme.

BY PETER MCARTHUR.

Driven out of the corn field by a shower but we got the last hills punched into the ground that was ready, just as the first big drops were beginning to splash down. Five days without rain made it possible to get all the higher part of the field plowed, disced, harrowed, marked and planted and even though it is late in the season we may have chicken feed. The best field of corn we have had since returning to the land was put in just as late as this one—between the eleventh and fifteenth of June and we are hopeful that we may have the same kind of luck this year. In any case we have nothing to reproach ourselves with this year for we got in the corn as soon as the land was fit to work. If the rain that is now in progress does not last too long we may be able to work the rest of the field and get it in during the next few days. It will not be too late for fodder anyway. Right here I might relieve my mind by moralizing about the trials of a farmer when the weather is wet and catchy, but what is the use? People who have no experience of it would not understand—and, anyway, I want to lift up my voice and grumble about something else this week.

#### A Ballad of Bugs.

My Dooley potatoes have bugs on their tops,  
Hard ones and soft ones that eat day and night,  
There is something the matter with all of my crops—  
A bug or a worm or a pest or a blight.  
My orchard of apples, in which I delight,  
Is a codling moth heaven—my cherries have slugs—  
O pity the farmer who worked with his might—  
Chanting a ballad whose burden is bugs.  
The tomato worm crawls, the grasshopper hops,  
The aphid sucks juice, the rose chafer bites,  
The curculio stings till the little plum drops  
And the damage they do on the farm is a fright.  
In vain we seek help from the fellows who write  
Of "Production and Thrift"—intellectual mugs—  
The farmer must hustle and keep up the fight—  
Chanting a ballad whose burden is bugs.  
The bug on the farm with his appetite stops,  
When his "tummy" is filled he is ready for flight,  
But the Big Bugs who work in the law-making shops  
Are grabbing for all that is lying in sight.  
They have tariffs and tricks like good old "vested right"  
And the voter they lead by his long hairy legs.  
They are the pests that I want to indict—  
Chanting a ballad whose burden is bugs.

#### ENVOY.

Prince, our exploiters, with insolent spite,  
Picture the farmers as mossbacks and thugs,  
But you, if you knew them, would pity their plight,  
Chanting a ballad whose burden is bugs.

## Middlesex Notes.

EDITOR "THE FARMER'S ADVOCATE":

The fruit bloom has come and gone at last. It was later than usual, but abundant and the almost constant mild weather at the time allowed the bees to gather a plentiful supply of honey and incidentally fertilize the blossoms so that where bees are kept the yield of fruit should be large. But unfortunately bees are now kept mostly in large apiaries miles apart, so that especially if the weather be a little cold or wet some orchards are not visited by them at all. Of course there are other agencies for pollination but none so important as the bee, and experiments have proven that where the bee is excluded the yield of fruit is less and of poorer quality. Farmers should encourage beekeepers to put colonies in their orchards, especially those who produce clover seed, alsike in particular. Neither beekeeping nor fruit growing is practiced extensively in East Middlesex though we are probably well up or a little beyond the average for the province. There are a few up-to-date, but mostly these two industries are allowed the minimum of care. Dairying and hog raising are the chief industries and next to these come beef cattle and horse-breeding. Poultry products are common and a company has a large public cold-storage warehouse in St. Mary's, and keeps wagons and motor trucks on the road all summer collecting the eggs in crates from the country stores. Some farmers ship direct to the cities. Also some of the merchants. Since March the average hundred-acre farm has been producing about thirty dozen a week. The maximum is usually reached in May and keeps gradually falling till November when it ceases altogether. Country merchants just now are paying twenty-two cents a dozen cash and come to the door for them. About half the farms carry flocks of turkeys averaging maybe ten or a dozen in size, but the ravages of roup and black head have abated the enthusiasm somewhat. Farmers here are rather pessimistic over the weather. The rain comes about every third day and keeps the soil so wet that grain seeding was not at all done June 7, and practically no preparation made for corn or roots. Some early sown grain is up and growing nicely but some is turning yellow. Wheat and clover are excellent and the hay crop will likely be large. Cheese factory patrons are doing well as there is lots of milk, although this supply is not abnormally large. The test system of buying is not used at least in this neighborhood and Holsteins and their grades are mostly kept, as they give larger quantities but poorer in quality. We think the test system will be an improvement when it comes, as patrons will send richer milk and there will be less expense handling so much water from the cow as milked till it returns to the hog trough as whey. The whey is pasteurized and every man with hogs wants his full share returned and some of them bargain for the share of the one who has just sold his hogs. This season emphasizes the importance of drainage and a lot of tile is going in. Next winter there will be a big demand for tile. Both the clay and concrete kinds are used and each has its advocates. We hear of some concrete tile breaking down after ten years use but probably it depends on the per cent. of cement, but this is a quality not easily determined.

Middlesex Co., Ont.

J. H. BURNS.

## Prospects for Banner Crop in Prince Edward Island.

EDITOR "THE FARMER'S ADVOCATE":

Seeding was about completed in Prince Edward Island on June 10th, with the exception of some turnips. The season has been exceptionally fine so that notwithstanding the scarcity of labor the spring work is done earlier than usual. The prospects for a big crop were seldom, if ever, better at this time of year. The clover came through the winter fairly well and the meadows and grass lands seldom looked better. Seeding was general on May 8th, which is a few days earlier than usual, and the weather was fine but somewhat cool, making it good for the teams. The driest lands are not suffering from lack of rainfall, and the low fields that are not usually seeded till about the middle of June and sometimes not seeded at all, were in good condition for seeding the last week in May. It is generally considered that there is a larger area seeded to grain this year than ever before in the history of the Province. On June 11th a warm rain fell the greater part of the day. It was not heavy at any time and practically all soaked into the ground. The fruit trees are now, June 12th, in bloom. It is too early to make a forecast of the crop, but the bloom is abundant and the weather warm, but cloudy and threatening more rain. Spraying has not been as general as usual, on account of the scarcity of labor.

The cheese factories are opening for the season, and the high price of cheese and the prospects of plenty of pasture are likely to make a good year in this business.

Horses are the only "drug on the market" agriculturally in this Province. A great many are being offered for sale, but no one is buying. A very big crop will however provide more work for them than usual and make it easier to carry them over another winter when it is hoped prices will be better.

P. E. I.

FARMER.



Some Observations on Seed-inspection Work for 1916.

EDITOR "THE FARMER'S ADVOCATE":

It has been quite a common remark by retailers of seed in Eastern Ontario, that "I never had such a good season in selling clover and grass seeds."

When we consider the high prices asked and paid for red clover this year the foregoing statement is somewhat remarkable, for the best grades of red clover retailed at 30c. per lb. and more. Even timothy seed brought from 11c. to 15c. per lb. retail. There must be some reasons for these conditions. They couldn't be found altogether in the better quality of the seeds, although the Nos. 1 and 2 grades of red clover were quite uniformly good this year in both vitality and purity. A great deal of the red clover was imported from other countries. A lot came from the Western States. Some from England and elsewhere. The Dominion Seed Law would only make it profitable for bringing in the best grades and these were the ones purchased and put upon the market. Much of the Ontario-grown seed of last year, except the Northern Ontario seed which was also chiefly, was inferior stuff. It was not only bad in weed seed content, mostly foxtail, but it had a poor appearance owing to the uneven and variable growth of last summer induced by the late summer rains and prolonged growth in the autumn.

What, then, were some of the reasons for its increased use? It seems to me one reason is that as stock can be handled with less labor and is strikingly remunerative now that land seeded down can be handled with less labor. Labor-saving machinery in harvesting the hay crop is an important factor. Then, heretofore, many farmers have been discouraged in seeding down because of the uncertainty of securing a crop. It was either summer-killed with drouth, winter-killed with ice or the spring heaving frosts or white frosts finished it.

This spring there was great encouragement because the new seeding nearly everywhere came through winter conditions so well. It seems to me that these are the chief factors in the change. Farmers are not slow in adjusting their methods of late years to meet the ever changing conditions. Usually the line of least resistance is followed too.

In working out plans this spring farmers nearly everywhere, have been greatly handicapped owing to the extremely wet condition of the soil. Never has the value of good surface drainage, and better still, good underdrainage of the soil shown to better advantage. On poorly drained land even where seeded the crop is suffering extremely and even the new seeding will suffer on the heavy soils. Where the working of the land has been delayed until so late in the season the grass and weeds have made surprising progress. Quack or couch grass, especially, has been taking advantage of the favorable conditions for its growth. However, on heavy land, it should be dealt with quite satisfactorily yet this season. It is beginning to shoot the head and if it is plowed down deeply, the surface well cultivated and rape is sown in drills and cultivated it should make a good finish of it. Even buckwheat

sown on it after thorough cultivation will hit it hard and so will corn and millet.

It is fortunate again this year that seed corn is so good. There are very few bad lots in evidence in the trade where it is really seed corn. Some fodder corn that a few farmers are trying will be very disappointing. Last season the sowing of fodder corn did well because of its maturity in the fall of 1914. But last year's corn wasn't so well matured and with the muggy weather it is hard to keep it fit for grinding, let alone keeping it for seed this year. The corn of the seed merchants this year consists to some extent of the 1914 crop or they are securing kiln-dried stuff. In some places too they are not buying so much corn on the cob as last year. The shelled corn often did as well last season as the corn on the cob and in a few cases, owing I believe to a better chance and better cultivation it even excelled it. Consequently some cob corn experimenters of last year are reverting to the use of shelled corn this year. Some of them may find it was a big mistake.

We shouldn't be discouraged though much of the land this year is yet to seed in some parts as we can fall back on buckwheat, emmer and millets. It isn't too late for them at all. These are cleaning crops too. It may not be a bad policy to summer-fallow some and where convenient fall wheat may be sown on it when the seeding down can yet be done with security. There is always compensation if we look in the right place for it.



The Wet Spring.

Crops suitable for Late Sowing in Ontario and Quebec.

EDITOR "THE FARMER'S ADVOCATE":

In some parts of Ontario the continued wet weather that has characterized this season up to the present has prevented the sowing of some of the usual crops at the usual time, and has had a tendency to discourage the farmer. Such, however, should not be the feeling, since the possibilities of producing crops on land not yet sown are practically as good as ever, provided the weather improves a bit and the right crops be sown in the right way and properly looked after.

Among crops sure of proving satisfactory, even at this late date, are barley for grain, peas and oats for forage, buckwheat, millet, Hungarian grass, corn for forage or ensilage, Swedes, white or flat turnips and rape.

Barley would likely do well even yet on fairly well-drained land. Sow about 2 bushels per acre.

Peas and oats sown 3 bushels oats and 1 bushel peas per acre, to be cut green for hay, may be expected to give profitable returns if sown anywhere before June 25.

Millets and Hungarian grass have wonderful possibilities as forage producers, and even for seed for poultry or swine if sown before July 10.

Buckwheat may be sown up to July 10 with cer-

tainty of profitable returns on almost any kind of land where water does not stand.

Corn for forage. Early or flint varieties (Long-fellow, Compton's Early, etc.) should be chosen. Sow thinly up to June 25.

Swedes thrive in such a season as we are having, and may be expected to give good returns if sown anywhere before the end of June.

Flat turnips or white turnips, while not so satisfactory as Swedes for most purposes, do well if sown even as late as the end of July and are most excellent cattle feed, being particularly suitable for dairy cows. They do not keep as well as Swedes.

Rape for pasturage is of great value for swine, sheep or beef cattle.

With late seeding most thorough preparation of the seed bed is absolutely necessary if success is to be hoped for. If land has to be ploughed, turn a shallow furrow, and in case land is grassy it will be much better to plough again even if already ploughed last fall or early this spring. After ploughing roll, disc two or three times and harrow before seeding. After seeding roll again if surface is very dry. In any case get the seed in well, and what is quite as important in the case of hood crops above mentioned, see to it that they are kept absolutely free from weeds for the next two months. Neglect in this important detail means failure when crops are sown late.

If a choice of crops is possible, sow corn, buckwheat, turnips and Hungarian grass on the lighter soils, and other crops on other kinds of soil, that is, clays, clay loams, peaty or mucky soils, etc., but any one of these crops will do quite well on almost any kind of land.

J. H. GRIDDALE, Director of Experimental Farms.

The Passing of Senator Derbyshire.

Senator Daniel Derbyshire, the "Eastern Ontario Cheese King," passed away at the General Hospital, Brockville, last Sunday evening at 7 o'clock. Senator Derbyshire was 69 years of age, and had enjoyed good health up to about 10 days before his death from apoplexy. He was for many years President of the Eastern Ontario Dairymen's Association, and was a dominant figure at each and every meeting. He was instrumental in the introduction of factory instruction work in Eastern Ontario, and was always an advocate of better cows and more feed for them. The "Cheese King" was born in Leeds County, Ontario, in the center of the dairy country of that part of the province. Senator Derbyshire entered business in Athens in 1874. In 1879 he removed to Brockville. He was mayor of the town in 1889 and 1890, and in 1904 was elected to Parliament. He was three years later made a Senator.

Eastern Ontario will miss its big man of the dairy industry. The Eastern Ontario Dairymen's Convention will scarcely be the same with the "Old Guard" so broken into, and all Canada will join with the dairymen of that portion of the province in sorrow at the loss of another leader in agricultural welfare.

Toronto, Montreal, Buffalo, and Other Leading Markets.

Toronto.

Receipts at the Union Stock Yards, West Toronto, from June 17 to June 19, numbered 2,178 cattle, 642 hogs, 331 sheep, 335 calves, and 982 horses. Good butcher cattle sold at \$9.40 to \$9.85, one choice lot bringing \$10.75; cows and bulls firm; choice, light, butcher sheep, \$9.75 to \$10.50; heavy sheep, \$5 to \$6.50; lambs, 16 cents; hogs and calves unchanged. The total receipts of live stock at the City and Union Stock Yards were:

Table with 3 columns: City, Union, Total. Rows include Cattle, Hogs, Sheep, Calves, Horses.

The total receipts for the corresponding week of 1915 were:

Table with 3 columns: City, Union, Total. Rows include Cattle, Hogs, Sheep, Calves, Horses.

The combined receipts of live stock at the two markets show an increase of 1,229 cattle, 515 hogs, 625 sheep, 257 calves and a decrease of 181 cars and 4,555 horses.

Last week was, exclusive of Easter and Christmas offerings, a week of record prices on Toronto market. Receipts of live stock were fairly large, and there was a strong tone to the market throughout. Market was active on all grades. Finished, dry-fed steers are pretty well out of the country. Prices were firm on grassed lots.

Supplies were cleared up at the weekend.

Heavy Cattle.—Very few offered, and prices ran up to \$10.35.

Butchers' Cattle.—Offerings light on choice stuff. Bulk of sales were made \$9.60 to \$10.00. A few at \$10.15 and \$10.25.

Stockers and Feeders.—Market was relatively firm all week, and prices ranged up to \$8.25 for stockers, and \$9 for feeders.

Milkers and Springers.—Trade was better for all milk cows, orders being numerous from outside points.

Veal Calves.—Calf market held strong, there being little change to report.

Sheep and Lambs.—Sheep and lambs were all taken readily at prices quoted.

Hogs.—Hogs advanced, and the week closed with the market strong and firm. Feeling was strong to steady.

Quotations: Heavy Steers.—Choice, \$9.75 to \$10.35; good, \$9.25 to \$9.75.

Butchers' Cattle.—Handy, \$9.60 to \$10; medium, \$9.25 to \$9.60; common, \$8 to \$8.75.

Cows and Heifers.—Choice, \$7.85 to \$8.75; good, \$7.25 to \$7.75; medium, \$6.50 to \$7.25.

Bulls.—Best heavy, \$8 to \$8.85; medium, \$7 to \$8; light, \$6.15 to \$6.75.

Stockers and Feeders.—Best feeders, \$8 to \$9; best stockers, \$7.75 to \$8.50; good, \$7.50 to \$8; medium, \$6.75 to \$7.50; common, \$5.50 to \$6.50.

Cutters.—Best, \$5 to \$5.75.

Milkers and Springers.—Cows in milk, choice, \$80 to \$105; medium and common, \$50 to \$80; springers, \$60 to \$115.

Veal Calves.—Best, \$10 to \$12.50; medium, \$7.50 to \$9.50; common, \$6.50 to \$7; grass, \$4.75 to \$6.25.

Sheep and Lambs.—Lambs, \$9.50 to \$13; spring lambs, 15 1/2c. to 16 1/2c. per

lb.; light ewes, \$8 to \$10; heavy ewes and bucks, \$7 to \$8; culls, \$5 to \$6.

Hogs.—Weighed off cars, \$11 to \$11.15; fed and watered, \$10.75 to \$10.80; f.o.b. country points, \$10.25 to \$10.35.

Breadstuffs.

Wheat.—Ontario, No. 1 commercial, \$1 to \$1.01; No. 2, commercial, 98c. to 99c.; No. 3 commercial, 92c. to 93c.; feed wheat, 85c. to 87c. Manitoba (track, bay ports)—No. 1 northern, \$1.17; No. 2 northern, \$1.16; No. 3 northern, \$1.11 1/4.

Oats.—Ontario, No. 3 white, 48c. to 49c. Manitoba oats (track, bay ports), No. 2 C.W., 53 1/2c.; No. 3 C.W., 52c.; extra No. 1 feed, 52c.; No. 2 feed, 49 3/4c.

Barley.—According to freights outside, malted barley, 65c. to 66c.; feed barley, 60c. to 62c.

Peas.—According to freights outside, No. 2, \$1.70; 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, 94c. to 95c.

Corn.—American (track Toronto), No. 3 yellow, 81c.

Flour.—Manitoba first patents, in jute bags, \$6.70; second patents, in jute bags, \$6.20; strong bakers', in jute bags, \$6. Ontario, winter, according to sample, \$4.10 to \$4.20, track, Toronto; \$4.10 to \$4.20, bulk, seaboard.

Hay and Millfeed.

Hay.—No. 2, per ton, best grade, \$18 to \$20; No. 2, per ton, low grade, \$15 to \$17.

Straw.—Car lots, per ton, \$7 to \$8, track, Toronto.

Bran.—Per ton, \$20 to \$21. Shorts.—Per ton, \$24 to \$25.

Middlings.—Per ton, \$25 to \$26. Good Feed Flour.—Per bag, \$1.65 to \$1.70.

Country Produce.

Butter.—Butter remained about stationary on the wholesales during the past week. Creamery, fresh-made lb. squares, 29c. to 31c. per lb.; creamery solids, 28c. to 30c.; separator dairy, 27c.; dairy, 25c.

Eggs.—New-laid eggs firmed slightly, the case lots selling at 27c. per dozen, wholesale; cartons bringing 29c. to 30c. per dozen.

Cheese.—Old, 21c. to 22c. per lb.; new, 18c. to 19c.

Poultry.—Live weight—Spring chickens, 35c. per lb.; spring ducks, 25c. per lb.; turkeys, young, 20c.; fowl, 17c. to 19c. per lb.

Squabs.—\$3.50 to \$4 per dozen.

Hides and Skins.

Lamb skins and pelts, \$1.20 to \$1.25; sheep skins, city, \$2 to \$3; sheep skins, country, \$1.50 to \$2.50; 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., 28c.; horse hair, per lb., 43c. to 45c.; horse hides, No. 1, \$5 to \$5.50; horse hides, No. 2, \$4.50 to \$5; tallow, No. 1, 7c. to 8c.; wool, washed, 40c. to 44c.; wool rejections, 33c. to 35c.; wool, unwashed, 28c. to 32c.

Wholesale Fruit and Vegetables.

Canadian strawberries are beginning to arrive more freely, but are not of very good quality, and are now selling at 12 1/2c. to 15c. per box.

Imported strawberries are arriving in large quantities, twelve carloads coming in in one day. They are of

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Branches thro of the Don

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Savings De B

"1900"

Sent free fo Write

"1900" WA 357 Yonge Street (Factory, 79-8

very good qua 13c. to 15c. p

California fru of cherries, ar \$2; apricots at \$2 to \$2.25 per case; Cali slightly easier, at \$6.25 per ca flats at \$2.25 p

Lemons are Messinas sellin and a few new \$4.50 per case.

Pineapples h sell at \$2.50 t

Imported to very freely, m and are much carriers selling

Hot-house t in quantity at the No. 1's sel lb, the No. 2' lb.

Watermelons now being offer

Asparagus at for a few days quantities agai the week, the 11-qt. basket, \$1.75.

Imported, ne high. Carrots beets at \$1.75; beans at \$2.25 \$2.75 per case.

New Canada is now being c basket.

Old Potatoes priced. New ing at \$2.10 to at \$2 to \$2.10 at \$2.10 to \$2

New potato in quantity, h much in price selling at \$7.50.

Canadian B continues to be is a little easie is so much o on sale. The \$1.50 to \$2 pe to 25c. per doz selling at 40c.

The first E season came in of very good 100-lb. bag.

The Texas very firm at \$

Chee

Brockville, 16 5-16c. to Listowel, 16 1/2 Victoriaville, 16 Napanee, 16 1/2 16 7-16c.; Al Joli, Que., 16c. ville, bid, 16 1/2



**THE ROYAL BANK OF CANADA**

Capital Authorized - - \$ 25,000,000  
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 Reserve Funds - - - 13,236,000  
 Total Assets - - - - 214,000,000

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very good quality, and now sell at 13c. to 15c. per box.

California fruits, with the exception of cherries, are plentiful: peaches at \$2; apricots at \$2 to \$2.25; plums, at \$2 to \$2.25, and cherries at \$3.50 per case; California cantaloupes are slightly easier, the standards selling at \$6.25 per case; Ponies at \$5.50, and flats at \$2.25 per case.

Lemons are very high—the old Messinas selling at \$4.50 per case, and a few new Verdillis also bringing \$4.50 per case.

Pineapples have advanced and now sell at \$2.50 to \$3.50 per case.

Imported tomatoes are coming in very freely, mostly from Mississippi, and are much easier, the four-basket carriers selling at \$1.40 to \$1.50.

Hot-house tomatoes are increasing in quantity and decreasing in price; the No. 1's selling at 22c. to 23c. per lb., the No. 2's at 12½c. to 15c. per lb.

Watermelons of splendid quality are now being offered at 75c. to 90c. each.

Asparagus after being rather scarce for a few days was shipped in in larger quantities again towards the close of the week, the best bringing \$2 per 11-qt. basket, and others at \$1.50 to \$1.75.

Imported, new vegetables keep very high. Carrots at \$1.75 per hamper; beets at \$1.75; wax beans \$2.75; green beans at \$2.25 to \$2.50; cabbage at \$2.75 per case, and \$3.50 per bbl.

New Canadian hot-house cauliflower is now being offered at 75c. per 11-qt. basket.

Old Potatoes continued to be high priced. New Brunswick Delawares selling at \$2.10 to \$2.15 per bag; Ontarios at \$2 to \$2.10, and British Columbias at \$2.10 to \$2.15.

New potatoes, although increasing in quantity, have not decreased very much in price; the Red Star brand selling at \$7.50, and others at \$7 per bbl.

Canadian Boston Head lettuce continues to be of excellent quality, but is a little easier in price because there is so much of the Leaf variety now on sale. The Boston Head brings \$1.50 to \$2 per case, and Leaf at 15c. to 25c. per dozen. The Hamilton Head selling at 40c. to 50c. per doz.

The first Egyptian onions for this season came in last Thursday and were of very good quality, selling at \$5 per 100-lb. bag.

The Texas Bermudas onions keep very firm at \$2.85 to \$3 per 50-lb. crate.

**Cheese Markets.**

Brockville, offered 16½c.; Madoc, 16 5-16c. to 17c.; Kingston, 16½c.; Listowel, 16½c.; Cornwall, 18½c.; Victoriaville, 16c.; Iroquois, bid, 16½c.; Napanee, 16½c. to 16 7-16c.; Picton, 16 7-16c.; Alexandria, 16½c.; Mont Joli, Que., 16c.; Perth, 16½c.; Kemptville, bid, 16½c.

**Montreal.**

The local market for cattle showed renewed strength and prices were quoted ¼c. higher last week. Offerings were by no means large, and butchers seemed to be short of stock. The result was that the feeling was very firm, particularly in the case of choice stock of which practically none was available. Fine steers were quoted at 9½c. to 9¾c. per lb., while fair ranged from 8½c. to 9c. and lower grades down to 7½c. Cows were quoted at 6¾c. to 8½c. per lb., and bulls at about ¼c. more. Other meats were also in good demand and sheep sold readily at 7½c. to 8c. for old stock, while spring lambs brought \$4.50 to \$8 each. Calves were still in good demand, both for local and export account, and quite a number were still being shipped across the border. The price ranged from 9½c. to 10c. per lb. for choicest, and 8c. to 9c. for good calves. Hogs were also in fair demand and selected lots were quoted at 11¼c. or a shade more up to 11½c. per lb., while rough hogs were quoted around 11c. to 11¼c. per lb.

Horses.—No interest was displayed in this market, both supply and demand being exceedingly light. Quotations were 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 horses \$100 to \$125 each; culls \$50 to \$75 each and fine saddle and carriage horses \$200 to \$250 each.

Dressed Hogs.—Dressed hogs were limited, and as a consequence prices ranged unchanged at 16c. to 16½c. per lb. for abattoir-dressed, fresh-killed hogs.

Poultry.—The market was quoted nominally at 24c. to 27c. for cold store turkeys; 22c. to 24c. for chickens; 17c. to 19c. for geese and fowl; 19c. to 20c. for ducks.

Potatoes.—Although American potatoes are entering the market in larger quantities, the price was against them. The price of Green Mountains was unchanged, being \$1.95 to \$2 per bag of 90 lbs. car load-ex-track, while Quebec stock was \$1.85 to \$1.90. In a smaller way, 10c. to 15c. margin was added to these figures.

Honey and Maple Syrup.—The market for maple syrup was moderately active and the price held steady at 85c. to 90c. each for 8 lb. tins; \$1 to \$1.10 for 10 lb. tins, and \$1.25 to \$1.50 for 13 lb. tins, according to quality. Sugar was unchanged at 12 to 14c. There was very little going on in the honey market and white clover comb ranged from 15c. to 15½c., with white extracted at 12c. to 13c. per lb. Brown clover comb was 12c. to 13c. and brown extracted 10 to 11c. per lb. Buckwheat honey was 9c. to 10c. per lb.

Eggs.—This market was never more steady than it has been since new eggs began coming in. The price was practically unchanged, straight-gathered eggs being 25c. to 26c. per doz. No. 1 new-laid were 26c. to 27c. and No. 2, 23c. to 24c.

Butter.—The make of butter is now large and receipts were up to top point, while quality was excellent. Finest creamery declined slightly and was quoted at 29¼c. to 29½c. per lb., while fine stock was ½c. below these figures. Held creamery was still quoted but was not in very good demand. Dairy butter brought 22½c. to 23c.

Cheese.—The auction sale of cheese held here probably furnishes the best evidence of prices. No. 1 white, 16½c.; No. 2 white, 16½c.; No. 3 white, 16½c.; No. 2 colored, 15½c.; choicest Ontarios were held at 17c. by some.

Grain.—The wheat markets have been weak of late, and the price was as low as at any time this year. There was sale for wheat in Montreal, however, export sales being made on Winnipeg prices and local consumption being all in flour. Oats were practically unchanged, being 54c. for No. 2 Canadian Western; 52½c. for No. 3 and No. 1 extra feed; 51½c. for No. 1 feed and 50½c. for No. 2 feed. No. 2 Ontario and Quebec oats were 52c.; No. 3, were 51c., while No. 4 were 50c. per bushel, ex-store.

Flour.—The constant decline in the market for Manitoba wheat brought about a drop of 20c. per barrel in the price of Manitoba flour. First patents were \$6.60; seconds being \$6.10 and strong bakers' \$5.90 per barrel, in bags. Ontario flour was unchanged, being

\$6 to \$6.25 for choice patents; \$5.40 to \$5.60 for 90%; \$5.10 to \$5.30 for straight rollers, per barrel, the latter being \$2.40 to \$2.50 per bag.

Mill Feed.—Bran was steady at \$21 per ton; shorts at \$24, middlings being \$25 to \$27. Pure grain moullie \$31 to \$32 and mixed moullie \$27 to \$29 per ton, including bags.

Hay.—Prices were unchanged at \$22 to \$22.50 for No. 1 baled; \$21.50 for extra good No. 2; \$20.50 to \$21 for No. 2; \$19.50 for No. 3 and \$18.50 for clover mixed.

Hides.—Calf skins were steady at 33c. and 31c. per lb.; beef hides were 1c. up, at 20c., 21c. and 22c.; lamb skins were up to 50c. each; horse hides steady, at \$2.50 to \$3.50 each and rough tallow 1½c. to 2½c. per lb. with rendered 7c. to 7½c.

**Buffalo.**

Cattle.—One of the strongest trades of the year was had here last week. Monday receipts were 150 cars, sixty of which were good weighty steers and these sold generally from a dime to forty cents per hundred higher than for the preceding week, prime shipping steers running from a quarter to forty cents, while the medium and less desirable averaged from a dime to fifteen cents stronger. Three loads of prime Michigan steers sold up to \$11.40, the highest price ever paid on the Buffalo market for straight market cattle. Handy butchering steers sold from \$10 to \$10.50, and this range was made on yearlings. Nothing in the steer line was quoted below \$8, with any kill to it, feeders being quotable around \$7.75. On fat cows and heifers the trade was a dime to fifteen cents higher, except on grassy kinds, which ruled about steady. Bulls brought strong prices and stockers and feeders were slow sale, at shade easier prices. Milchers and springers sold lower, with plenty of grass and a lot of milchers on the range, milk selling low and affecting the trade on these. Predictions are for a continued strong trade on strictly dry-fed cattle but possibly weaker values on the grassers. Receipts last week were 4,250 head, as against 4,600 for the preceding week and 5,100 for the corresponding week last year. Quotations:

Shipping Steers.—Choice to prime natives, \$10.75 to \$11.40; fair to good, \$9.75 to \$10; plain, \$9.00 to \$9.25; very coarse and common, \$8.50 to \$9; best Canadians, \$10 to \$10.50; fair to good, \$9.50 to \$9.75; common and plain, \$9 to \$9.25.

Butchering Steers.—Choice heavy, \$10 to \$10.50; fair to good, \$9.25 to \$9.75; best handy, \$9.50 to \$10.00; common to good, \$8.60 to \$9.25; light, thin, \$8 to \$8.40; yearlings, prime, \$9.75 to \$10; yearlings, common to good, \$8.25 to \$9.50.

Cows and Heifers.—Prime weighty heifers, \$8.50 to \$9.50; best handy butcher heifers \$8.50 to \$8.75; common to good, \$7 to \$8; best heavy fat cows, \$7.75 to \$8.25; good butchering cows, \$7 to \$7.50; medium to fair, \$5.50 to \$6.50; cutters, \$4.75 to \$5; canners, \$3.25 to \$4.50.

Bulls.—Best heavy, \$8 to \$8.50; good butchering, \$7.75 to \$8; 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, \$6.25 to \$7.

Milchers and Springers.—Good to best, in small lots, \$80.00 to \$100.00; in car loads, \$70.00 to \$75.00.

Hogs.—Prices were on the jump last week, an advance being noted nearly every day. Monday the extreme top was \$9.95, several decks moved at \$9.90 but bulk landed at \$9.85 and pigs generally \$9.25. Tuesday it was generally a \$10.00 market for best grades, with pigs selling at \$9.50, Wednesday and Thursday sales on best grades were made at \$10.20 and \$10.25, bulk \$10.25, with pigs \$9.75 and Friday the bulk of the crop was placed at \$10.40, with one deck reaching \$10.45. Pig prices on Friday were the same as Thursday. Roughts ranged from \$8.50 to \$8.90 and stags \$7.25 down. Receipts last week were approximately 24,000 head, being against 29,087 head for the week previous, and 30,750 head for the same week a year ago.

Sheep and Lambs.—Receipts last week were the lightest this year and prices from day to day were but little changed. Best spring lambs sold from \$12.00 to

\$12.50, top dry-fed yearling lambs brought from \$10.25 to \$10.50 and cull yearling lambs went from \$9.00 down. Top for wether sheep was \$8.25 and ewes sold from \$7.50 down, heavy ones landing mostly at \$7.00 and \$7.25. Receipts last week were 4,400 head, as against 6,167 head for the week before and 3,200 head for the same week a year ago.

Calves.—Market showed improvement as the week advanced. Monday top lots went at \$11.75 and \$12.00. Tuesday's market was steady, Wednesday the top was \$12.50, Thursday bulk sold at \$12.50 and \$12.75, with a few as high as \$13.00 and Friday the general market for choice veals was \$13.00 and \$13.25. Culls the fore part of the week sold from \$10.50 down and Friday the best throw-outs reached as high as \$11.50. Receipts last week were estimated at 3,200 head, being against 3,556 head for the previous week, and 2,875 head for the corresponding week a year ago.

**Chicago.**

Cattle.—Beeves, \$7.85 to \$11.40; stockers and feeders, \$6 to \$8.80; cows and heifers, \$4 to \$10; calves, \$8.50 to \$11.75.

Hogs.—Light, \$9.40 to \$9.95; mixed, \$9.55 to \$10; heavy, \$9.50 to \$10.10; rough, \$9.50 to \$9.95; pigs, \$7.60 to \$8.15; bulk of sales, \$9.80 to \$9.95.

Sheep.—Native, \$7 to \$8.10; lambs, native, \$7.50 to \$10.30; spring lambs, \$8.25 to \$11.50.

**Smiles.**

Tommy (dictating letter to be sent to his wife)—"The nurses here are a very plain lot—"

Nurse—"Oh, come! I say! That's not very polite to us."

Tommy—"Never mind, Nurse, put it down. It'll please her!"

Here is a story of a London 'nut' who had mounted guard for the first time:

The colonel had just given him a wigging because of the state of his equipment. A little later the colonel passed his post. The nut did not salute. The indignant colonel turned and passed again. The nut ignored him.

"Why in the qualified blazes don't you salute?" the colonel roared.

"Ah," said the nut, softly, "I fancied you were vexed with me."—New York 'Globe.'

Well picked.—Aunt—"Your bride, my dear boy, is wealthy and all that, but I don't think she'll make much of a beauty-show at the altar."

Nephew—"You don't, eh? Just wait till you see her with the bridesmaids she has selected."—Nashville Tennessean.

A Swede was being examined in a case in a Minnesota town where the defendant was accused of breaking a plate glass window with a large stone. He was pressed to tell how big the stone was, but he could not explain.

"Was it as big as my fist?" asked the judge, who had taken over the examination from the lawyers, in the hope of getting some results.

"It ban bigger," the Swede replied.

"Was it as big as my two fists?"

"It ban bigger."

"Was it as big as my head?"

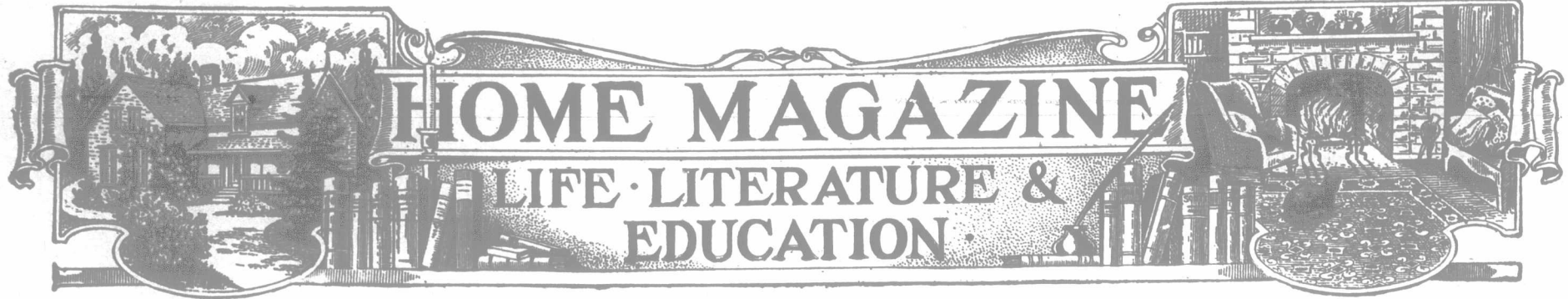
"It ban about as long, but not so thick," replied the Swede, amid the laughter of all but the judge.

Mr. Lloyd George was addressing a meeting in South Wales when the chairman, thinking to be witty at the Chancellor's expense, remarked to the audience that he was a little disappointed in Mr. Lloyd George's appearance.

"I had heard so much about Mr. Lloyd George," he said, "that I naturally expected to meet a big man in every sense; but, as you can see for yourselves, he is very small in stature."

"I am grieved to find," retorted Mr. Lloyd George, with mock seriousness, "that your chairman is disappointed in my size, but this is owing to the way you have here of measuring a man. In North Wales we measure a man from his chin up, but you evidently measure him from his chin down!"—Current Opinion.





**Li Yuan Hung, the New President of China.**

He was Vice-President before the death of Yuan Shi Kai, and is a military leader. In the revolution of 1911 he was commander of the Republican forces which overthrew the Manchus.

**June Song.**

BY CHARLES GRANGER BLANDEN, IN "A WILDING BOUGH."

Now that June is really here,  
Full of sun and full of cheer,  
Come, and let us for a day  
Take our staffs and be away—  
Out into the meadows green,  
Where the bobolinks are seen  
Sprinkling all the air with song;  
Where the brook doth glide along,  
Full of music, full of joy  
As the bosom of a boy.

Tarry not another hour;  
Twinkling dewdrops on the flower;  
Not the Queen of Sheba had  
Such bright gems to make her glad.  
This blue sky that bends above,  
Full of everlasting love,  
Full of beauty, full of light,  
Full of countless worlds at night—  
Think you Peter's mighty dome  
Half so high as this at home?

Come, I pray you; leave your task;  
Throw away the sorry mask  
Of dead learning worn by sages;  
Out and glean from Nature's pages:  
Let your spirit spread her wings  
In among the living things;  
Out, and for a time commune  
With the year's own Sappho, June;  
Out into the morning—Hush!  
Harken! Israfil, the thrush,  
Greeting Allah in the bush!

**Among the Books**

**"A Day in June."**

[The following selection is from "The Rambles of a Canadian Naturalist," by S. T. Wood, already well known to Canadian readers of "The Globe" through his unsigned nature articles. The title of the book is most happily chosen: the book itself is just what it would lead one to expect—a series of "rambles" in which the explorer finds birds and flowers, animals and butterflies, clouds and wind, all grist for his mill. He not only keeps his own eyes open to the wonder and charm of Nature, but teaches others to open theirs. The book has been beautifully illustrated by Robert Hoopes. The paintings of Showy Lady's Slipper and Bloodroot could scarcely be better,

while in that of the whip-poor-will is a touch of poetry that makes the picture more than a mere representation of a bird. "Rambles of a Canadian Naturalist" is published by J. M. Dent & Sons, Limited, Toronto. Price \$1.50 net.]

It seems in all including motherly kindness that the trees are spreading their great, umbrageous leaves over the hot tired earth. The brooding shade is ever cool and inviting. There is a soothing quietness in it that lulls the most restless into placid waking sleep and day dreams. The inspiring panorama of spring has passed. The transient feathered visitors who lent the charm of melody to the joyful season have departed for their northern homes. Those who have come to spend the summer have quietly settled down to the serious affairs of life. Many do not sing as in the earlier days. Their joy has not departed, but has found new fields of expression. It is manifested in the lively happiness of domestic life. A few continue their song through the sultry season, and seem to have a double portion of the delights of existence. The song of the Veery, the churning, dashing, bursting melody that reveals a spontaneous gladness, is still heard among the leafy shades. Much has been said and written of the Veery's song, but only to reveal the poverty of words in its description. It is a part of the gladness of nature, to be absorbed and enjoyed in its own spirit. Other songsters, with their own peculiar charms, are still carrying the spirit of spring on into the summer. Perhaps that is the mission of all songsters. The Yellow Warbler still sings as happily as in the days of his courtship, and his note has a distinctiveness lent by the silence of so many of his feathered relatives. The Oven Bird's penetrating repetitions come along under the branches, and the Brown Thrasher still sings to the sun from a lofty perch. There is just enough melody through the shady branches to make their quietness more somnolent.

A glimpse of yellow and white shows where a Flicker curves and undulates through the open spaces to the broken shaft of an old, dead willow. The brown-grey back, almost invisible against the bark, disappears, and after a long, patient wait, with no sign of the alert head on the other side, the temptation becomes irresistible. There is a nest. Just below the broken limb a hole has been picked in the decaying wood, but it is a false one. One would like to think it was made to deceive or distract attention, but chilling, disagreeable fact suggests that the wood was found too hard. The successful excavation is higher up, and there she is already, alarmed at the stealthy approach, looking down with bright, round, startled eyes at the great, threatening intruder. A moment, and the staring spell is broken—she glides boldly out and wings her irregular course beyond the sheltering maples. A slender arm can explore the rough tunnel in the wood, and down at the bottom is a little, solitary egg. It is pure white—so pure and translucent in the sun's rays that the yolk within gives it an elusive yellow tint, but in the shade its clear whiteness returns. With a care that even the startled bird could not surpass it is replaced, and with apologies unexpressed the intruders retire. Again the passing flash of yellow and white shows how anxiously and carefully she has been watching. She enters eagerly, and, after an anxious half-minute, comes forth again, happily satisfied in the safety of her treasure.

The Indigo Bunting is among the pleasant summer songsters, but it is only by an accidental meeting in a shady spot that his handsome color can be appreciated. In the warmth of

summer even little Chippie, with his chattering trill, has a place among the favorites. The industry of their little friends, brightened by an occasional song, blends with the atmosphere of life and growth pervading the season of fruition, an atmosphere that steals upon the senses, more seductive and inspiring than the subtle fumes and vapours distilled from the drugs of the somnolent East.

**Hope's Quiet Hour.**

**The Way of the Red Cross.**

"A child's kiss  
Set on thy sighing lips, shall make thee glad;  
A poor man served by thee, shall make thee rich;  
A sick man helped by thee, shall make thee strong;  
Thou shalt be served thyself by every sense  
Of service which thou renderest."

The Red Cross has gone quietly on its merciful way for about fifty years; but now it has suddenly sprung up in giant strength, reaching out mighty arms everywhere and getting into its comforting embrace millions of the sick and wounded. I have beside me a book, called, "The Way of the Red Cross," published in aid of "The Times Fund for the Sick and Wounded," and sent out with a preface by Queen Alexandra.

Knowing that you are all helping forward this great and noble movement, I will pass on to you to-day some quotations from this book, which I bought from the T. Eaton Co., Toronto. A nurse in a big base hospital said: "The Red Cross Society has been wonderful. We have come to look on it as a sort of 'Aladdin's lamp,' for we have only to ask for a thing and we get it."

She pointed with pride to a number of leather pillows which she was fitting into their cases. "This is the very last thing we asked for," she said, "for we had to think of necessities first. But you know what a hard, unsympathetic thing the regulation bolster is, and you can guess how much we wanted something of this sort, especially in cases of wounds in the head and back. Now we have them, thanks to the R. C. Society, and there seems nothing left to ask for—except ash trays."

"On arrival each ambulance train is met by the nursing staff, the wounded men are furnished with hot drinks and cigarettes, and conveyed without delay to the hospitals to which they have been appointed. Everything is done in orderly, methodical fashion; the confusion we might expect to see arising from the irruption of thousands of wounded in a day does not exist. . . . The best of nursing, the best means of transport, the best of surgeons and physicians are at work, and for such men as come down from the trenches and the firing line the best is none too good. And in men and women and goods the Red Cross organizations have given the very best, with results that cannot be overestimated—all drawn from the voluntary spirit of the nation."

"And so you want to know about the Red Cross work," said the doctor, "Well, we're uncommon glad there is a Red Cross Society. You see that our bed—where they're just moving the men on to it? We have to thank the Red Cross people for things like that—our beds and pillows, and all the little

luxuries that we want for the bad cases."

Here, in London, are "society ladies" giving all their time and energy to the uninteresting business of packing stores in the Red Cross headquarters. We may have pictured these ladies elegantly gowned, spending an hour or two in a luxurious office and "playing at work." We find them at work from nine till seven every day—except the days they work overtime.

"On the day that I visited the stores' department only 500 wounded landed in this country, and so to fill up spare moments the ladies were packing for Servia, Montenegro, and East Africa. The long shelves were filled with every kind of medical requirement—bandages of lint, bales of absorbent cotton, syringes and porous plasters, oxygen and innumerable bottles of tablets, tetanus and typhoid vaccines, cases of needles, spools of plaster. . . . hot water bottles by the hundred, of every color, shape and size."

The ladies fulfil the demands of the base hospitals in France, almost as soon as made. They collect, they pack, and now they send a messenger with every large consignment to ensure its certain delivery. Just a messenger in khaki, but Gabriel could scarcely be more welcome than that khaki figure is to the anxious doctor in France, who, when one comes to think of it, can do little enough unless the ladies at this great base supply his needs." This store department is on such a tremendous scale that its contents are insured for £50,000.

The ladies have already become so familiar with their work of sorting and packing that they "feel capable of tackling the outfit of the whole army. It is, indeed, with a feeling of regret that they acknowledge they can do nothing for a man till he is incapacitated. 'Then he is ours,' said one of the principal workers here in the stores' department. Which means just this—no less, and it cannot mean more—that she and her associates provide for his every physical need and material comfort. 'He is ours,' they say. They look well after their belongings in the stores' department of the Red Cross."

"The story of the mobilization of the V. A. D. (Voluntary Aid Detachments) in the county through which I toured is a romance. In the late hours of Tuesday, the thirteenth of October, a telegram was dispatched from headquarters: 'Mobilize all your hospitals at once. . . . Large number of wounded arrive to-night. . . . By mid-day of the next day 3,000 wounded Belgians were in bed in the hospitals mobilized and prepared by the V. A. D., a feat which stands as a unique record in speed and efficiency. . . . All the accommodation and equipment and stores of these detachments, at the time the message was received, consisted of promises, promises for the most part made in days of peace. Nothing else. Here a contributor to the scheme had signed her name to a promise of a bedstead and bedding; here another had said that a certain amount of hospital clothing should be available if necessary; yet another had promised the use of a house as a hospital; and another had undertaken to provide certain stores of food or drugs." These promised things had to be collected, houses scrubbed, beds got ready and conveyances provided for carrying the wounded. All night the work went on, and the wards were not only ready but were bright with flowers when the wounded arrived. Nurses were at the railway stations with hot soup and coffee, and men were ready to carry each soldier to the motor transport awaiting him. This was the orderly work of volunteers. In one of these suddenly im-

provised hospital are made out of fixed on legs, pain-

Many men shattered nerves convalescent the Red Cross Society blessing. One of cially for the b they "will be ta making use of world."

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**The W**

From the begi June 11th mo letters and 40,00 sent to the Bri and Flanders, 800,000 books a

The Kiel Ca 1895. Later it Dreadnoughts, a was opened on days later the A was shot at Ser begun.

Over 4,000,000 of the American now vote, will be ballots for Presic This number will Iowa decides to

John Barleyco the Men of Dea fit team. Franc saying: Consum le zinc—that is, that alcoholism of the bed of consu Lancereaux com half the cases of have been chron dependent.

The Germans moss, abundant o for absorbent ba tenfold its weigh hours.

While most of been driven far of Europe a num the lark, thrus —continue to The crows and s refused to leave

It is an odd f notwithstanding dandelions in A dandelion roots poses were imp Of late years, h farms have be United States, Conn., others n Boston. It is profits will acc



provised hospitals the bedside lockers are made out of soap and sugar boxes, fixed on legs, painted and varnished.

Many men leave the hospitals with shattered nerves, and for these the convalescent homes, provided by the Red Cross Society, are a priceless blessing. One of these homes is especially for the blinded soldiers, where they "will be taught the best ways of making use of their lives in a dark world."

I have only given you a glimpse at the energies of the Red Cross—as described in the book—and the book itself only gives a peep at the work being done. This war is horrible enough, but how many devoted men and women are trying to mitigate the horrors! We should all do something, and the work is so organized that we all may do something—for Red Cross branches are everywhere. The novelty may wear off but the opportunity remains.

"The hands that do God's work are patient hands,  
And quick for toil, though folded  
oft in prayer:  
They do the unseen work they understand  
And find—no matter where."  
DORA FARNCOMB.

**For the Needy.**

A "reader of the Advocate" sent a dollar for the needy, and "a country girl" donated two dollars. Part of this money has been spent in clothing (material for dresses) for two little babies—twins. The remainder is tucked into the "Advocate purse," waiting until some special case of need presents itself. Thank you! my unknown friends.  
HOPE

**The Windrow.**

From the beginning of the war until June 11th more than 450,000,000 letters and 40,000,000 parcels had been sent to the British troops in France and Flanders, in addition to about 800,000 books and magazines.

The Kiel Canal was completed in 1895. Later it was enlarged to admit Dreadnoughts, and the enlarged canal was opened on June 24th, 1914. Five days later the Austrian Crown Prince was shot at Serajevo, and the war had begun.

Over 4,000,000 women in the 12 states of the American Union where women now vote, will be eligible to cast their ballots for President in November, 1916. This number will be greatly increased if Iowa decides to grant woman suffrage.

John Barleycorn and the Captain of the Men of Death are an extraordinarily fit team. French physicians have the saying: Consumption is contracted *sur le zinc*—that is, across the bar. Also that alcoholism *fait le lit*, that, is makes the bed of consumption. The physician Lancereaux computes that more than half the cases of tuberculosis among men have been chronic alcoholics.—The Independent.

The Germans are using sphagnum moss, abundant on the moors of Germany, for absorbent bandages. It will absorb tenfold its weight, and dries in 24 to 36 hours.

While most of the larger birds have been driven far from the fighting fields of Europe a number of the song-birds—the lark, thrush and finch included—continue to sing in their haunts. The crows and sparrow-hawks also have refused to leave.

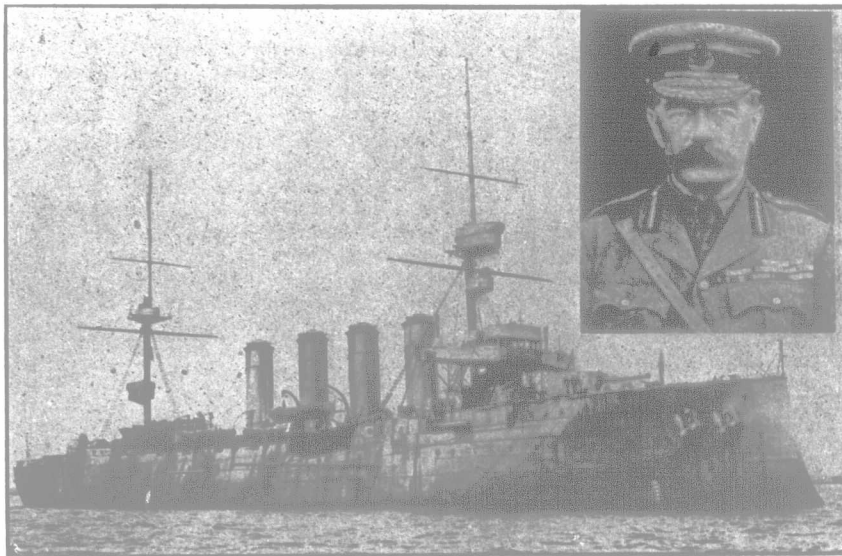
It is an odd fact that before the war notwithstanding the abundance of dandelions in America, most of the dandelion roots used for medicinal purposes were imported from Europe. Of late years, however, a few dandelion farms have been established in the United States, one at New Haven, Conn., others near New York and Boston. It is likely that increased profits will accrue to the American

farms now that the supply from Germany and Austria has been cut off.

Great Britain has relaxed her blockade to the extent of passing the food-ships that are carrying relief to 3,000,000 starving Poles. Germany has undertaken to supply those in the sections of country governed by her military staff. The suffering in Poland has been frightful, especially among the children.

A Mr. Banholzer of Philadelphia has invented a telegraph transmitter which can be attached to any telephone-standard.

ventures in Friendship," and "The Friendly Road," will be glad to know that the man himself measures up to all that would be expected of him from his writings. "Ray Baker is naturally good," says one who knows him well, "It seems easy for him. He has camped, hunted and tramped and worked in many parts of the West and North. He has foregathered with all kinds of men, rough and cultivated alike. He has been among the brigands of the rough Balkans, with the university groups of Germany and Great Britain, with people of Cuba, Central America, Hawaii, and most States of



**The Hampshire.**  
The cruiser on which Earl Kitchener lost his life.

Some scores of Y. M. C. A. buildings have been established from Dixmude to Frise behind the British lines, and are doing much to make life happier for the men, helping to provide shelter and baths as well as encouragement and amusement. The work deserves every encouragement.

Butter, as established by recent investigation, is one of the most valuable foods we have. It is poor economy, so far as the health of the body is concerned, to reduce its use to a minimum.

the Union. He has been on intimate and friendly terms with all sorts, often where good fellowship expresses itself in purely masculine modes and manners and habits of speech. Yet in Ray Baker it seems normal and natural that he does not drink or smoke or swear. It is not an exclusion, it is not a deprivation, apparently these things never interested him. He is just as much a good fellow and companion. His sense of life is so buoyant and joyous that he has not seen the need of anything to stimulate it.—All of



**A Wounded Red Cross Dog Being Treated by a Member of the French Army Red Cross.**

According to Mr. S. McClure of the New York Evening Mail, who has just returned from Central Europe the milk supply from the 10,000 cows owned by the city of Berlin has been reduced from 1,000,000 liters a day in pre-war-time, when fodder was abundant, to 600,000 liters. A system has been established by which the babies are ensured their share of the milk.

Lovers of "David Grayson," (Ray Stannard Baker) through his books "Adventures in Contentment," "Ad-

which is just what one would expect of "David Grayson."

Richard Harding Davis, author and war correspondent, who died recently at the age of fifty-two, had a remarkable history. "One of his months," says The Bookman, "was equal to at least a full year in the career of the average man." He went out and sought adventure, then wove his adventures into his books, nearly all of which are, to a great extent, autobiographical. In 1886 Davis, "a tall stripling wearing

a long yellow ulster with light green stripes," applied for a position as reporter on the Philadelphia Inquirer, stating his ambition to be a newspaper man. He was accepted, and his first commission was to find out some information in regard to a gang of burglars that was troubling the city. Davis at once demonstrated his ability to make good. He donned a sweater, cap and overalls, copying the make up from one of the characters of Romany Rye, adopted the name of "Buck Meiley," and became one of the gang. At the first daring burglary he notified the police to be on hand and was arrested with the burglars. From that his career was a succession of events, including experiences as a war correspondent in Greece at the time of the Greco-Turkish war of 1897, in Cuba in 1893, in South Africa in 1899 and 1900, in Japan and Manchuria in 1904, and in Belgium and Northern France in 1914. Finally he went with the French to Salonika and it was undoubtedly the hardships which he encountered there which led to his death. Mr. Davis' account of the march of the Germans through Brussels is one of the most graphic bits of war-writing that have ever been penned.

**The Beaver Circle**

"The world is so full of a number of things,  
I'm sure we should all be as happy as kings."

Dear Beavers.—This morning the lines given above popped into my head. I forget who wrote them. It was either Robert Louis Stevenson or Eugene Field—Stevenson, I think. At all events I began to think of what a "number of things" boys and girls in the country can find to be interested in during the summer, so I just thought I would write you a letter. I wonder how many of you will answer it.

How many thousands and thousands of things there are for you to see. Perhaps you paddle out on a pond sometimes in an old boat or on a raft, to gather white water lilies. If you do be sure you put them in a large pan filled with water, so that the flowers will lie on the surface, as in that way they will open out beautifully. And on the way have you ever found pitcher plants? What odd things they are! Tear one of the queer little pitchers open and examine it, and you will find bristles pointing towards the bottom where there is likely to be some water and drowned insects. The insects go in at the top, the sharp points keep them from coming back again, and so they fall into the water and are drowned. In this way the pitcher plant secures "meat dinners." It is a very pretty plant, but I think it is a bit cruel, don't you?

There are so many, many other plants and flowers that are interesting. Perhaps, when you answer this letter some of you will tell me about some of those that grow near your homes.

I'd like to talk about birds to-day, but that will have to stand over for another day because I want to talk about dogs. I have always loved dogs, and as berry-picking time draws near I always think of a dear old collie that used to come with me on all my berry-picking tramps. How he used to love it! And how he used to run miles and miles through the woods, "looking up" every squirrel haunt and groundhog hole within reach. When tired he would come back to me and lie down, panting and happy. Sometimes, too, he would get up on a log beside me and snatch the berries just as I was about to pick them. I always thought that this was one of his jokes; his eyes would fairly twinkle as he did it, and he would open his big mouth with such a funny grin.

I do hope you, too, love dogs. If you don't you are missing some very good comrades. Did you ever hear of Caesar, the Airedale terrier that walked alone at King Edward's funeral? The King was very fond of him, and took him even to formal dinners where he sat at his feet and was given a bit of every course served. He always slept at the foot of the King's



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bed, and when his kind master was no more, grieved for weeks, almost refusing to eat. Happily for Caesar Queen Alexandra also loves dogs, and so, before long, he began to follow her about, and received plenty of petting.

I can't see how anyone can be cruel to dogs—they are so wise, and faithful, and loving, if given half a chance. Do you not know how wise a dog is? Then just talk to one, every day, and see how soon he will begin to understand many of the things that you say. They think, too. Only this morning I read of one that saved a passenger train on the Lackawanna Railroad, N. J. The dog, a little fox terrier named Toots, belonged to a man who attended one of the switches. There was only a single track. One day a mistake occurred. A westbound train was coming in and the switchman dropped his red flag and ran to throw a switch. At the same time an eastbound train was rounding the curve. Toots saw the danger, seized the flag in his teeth and ran up the track. The engineer saw him, and was wise enough to stop the train, and so an accident was averted.

Then think, too, of all the wonderful dogs that are serving at the front. They have been well trained, and can be depended upon to do their duty in any danger. They carry assistance to wounded soldiers and do lots of other things. When they are wounded the doctors who chance to have time attend to them just as they would wounded men, as our picture shows.

Just one word more: If you have a dog be sure to give him plenty of water to drink. You know how you yourself need water, particularly in summer. Your dog needs it, even more; so keep a clean dish of cool water where he can find it at any time.

Now Beavers, I think I have written you a long letter. Write to me, some day, won't you?

Puck.

**Little Bits of Fun.**

For a five-year-old, Margie had travelled a great deal. One day her aunt remarked, "Through all her travels Margie seems quite happy and contented." "Yes'm," answered Margie. "No matter where I go I always find some dirt to play in."

A little boy only six years old was boasting that he worked in a blacksmith shop. "What do you do there?" he was asked. "Do you shoe horses?" "No, sir!" he answered, promptly. "I shoo flies."—Our Dumb Animals.

**Beaver Circle Notes.**

Honor Roll—Bessie Brown, Delbert Peterson, Fred Stork, Muriel Jamieson. Fred Stork (age 13) R. R. 1, Pickering, Ont., wishes some of the Beavers to write to him.

**Junior Beavers' Letter Box.**

[For Beavers up to Junior Third, inclusive.]

Dear Puck and Beavers.—This is my first letter to your charming Circle. May I enter too?

I go to school every day. I am in grade VI. We have had two teachers this term; the first one took appendicitis and so we had to get another. Her name is Miss Bissett.

They fish oysters on our shore. We have water on every side of us but the West.

My father is a farmer. Papa's father took the "Farmer's Advocate" until he died and now papa is taking it.

Since this is my first letter I guess I will close with a riddle: If soldiers of every nation were shut into a locked car which would get out the quickest? Ans.—British, because they have the khaki (car-key).

Hoping this will escape the w. p. b. ANNIE CLARK, age 11 years. Bayhead, N. S.

Dear Puck and Beavers.—This is my first letter in your Circle. I am eleven years old. I have one box to drive. My father has read the Advocate for two years. We are Dutchmen and have read this paper as long as we are

here. I'll close with a riddle: First it walks on four legs, then on two and then on three. What is it?

WILLIAM Y. OLIE.

Selma, Hants Co., N. S.

Junior Beavers' Honor Roll.—Harold Price, Laura Whitteker.

Harold Price (age 10) wants some Beavers about 7 years old to write to him. His address is R. R. 3, Cobden, Ont.

Phoebe Lymburner sends this riddle: What is the difference between a cat and a match? Ans.—A match lights on its head and a cat lights on its feet.

**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.—As I came to the den this afternoon the rain was coming down in sheets—not that that is anything new this season. What I am thinking of is how comfortable we can manage to be here in Southern Canada, no matter what the weather takes into its head to do. With rubbers, raincoat and umbrella, one could saunter along, even enjoying the sound of the drip from the trees and the sight of blooming spires bending gracefully over and shedding rivulets from every branch. On the way, perhaps a dozen automobiles passed—every one closed in with mica walls. Also there was a limousine or two. "How we coddle ourselves up lest a breath blow on us," one thought,—and then, of course, one's roving imagination could not but go off to the trenches where our boys are braving all the blasts that blow,—weather and shells, and all the horror and din of war.—"Our boys," many of them accustomed, all their previous lives, to just such coddling as that possible to these folk in limousines. And how finely even they have measured up to the day of necessity! Truly war is a great revealer as well as a great leveler.

I think that some of these lads will come back rebellious all the rest of their lives at too much luxuriousness. True, for a time it may seem like heaven to bowl off in a limousine, or to sink into yielding upholstery in a drawing-room. "War is hell," and none know it so well as these lads in the trenches. At the same time those among them who, before going to the front, knew nothing but "downy ease," are getting some sharp and clear-cut revelations. They are learning what it is to taste man's work; they are seeing that people can get along with very much less than they had thought; they are realizing that men who have never had anything to do with luxury may be very fine fellows indeed, willing to shoulder the burdens of weaker brothers, and ready to give and take in the splendid camaraderie of a common cause. Best of all will be the lesson that people cannot live unto themselves; a new sense of brotherhood; a new sense of service towards humanity; a new understanding that in self-sacrifice in a good cause there is, in the end, a deeper satisfaction than can ever be gained from self-indulgence. Perhaps one of the most astounding things, to those who come back from the war, will be that their sense of values will be thus shaken. Things can never look just the same again.

Speaking of simplicity in living makes one think of all the people in the world who, in peace time, find it possible to be happy with comparatively few possessions, provided only that they live close to the heart of Nature. It seems only natural that city people should want "things." They have only brick walls to look out at, for the most part, only hard sidewalks to walk upon; therefore, they must secure their meed of beauty by buying ornaments for the home,—beautiful rugs, and upholstery and pictures. In the country conditions are somewhat different, in every country home there is— or

should be—a picture of trees, hills, grass, a varying color to fall. Less indoors.—Painted woven and colored places; brocade on the sill; silver and brass candle able chairs; perhaps one can see in coziness and by comparatively little. Good cheer, to as artistic as the glorious, through the wire

A perfectly dropped into t She lives on the and, of late, sh for gardening. of delight in Potatoes and growing both, a gives rise to as other. Much a abbreviated gar she has devised, that it is abso a bit more so, pe costume in wh disport at every she is right. Sh simplify to suit short, trim gard a pair of garden ing cushion, such of "The Farme night or so ago any woman to gardening, or or spoiling good And surely, if in one direction so in others.— wearing gloves a Why can't we throw convention ever it conflicts venience, and e sense? I fancy, so we should w end. Sincerity a dignity all the ridiculous.

Simplicity! A gorgeous in sunr beneath the blue clean in verdure very sane, and . . . Away in campers and pro tents, become r and taste the r the trees and rippling rivers; provided only and flowers, and many men and girls, find life some day, wher us much, city go back to a simple life, w things are to-c and we others the cities, are superfluity of w daily the chains

**A Question**

I would like readers of the think about k soldier boys o be doing wron knitters that hav knitting during t we would like must be getting Our boys have on Sunday. Sur all we possibly have to go w heard this quest and have been my knitting on done so.

INTERESTED R It seems to m which everyone own conscience. many of the b knitting on Sun to fight, and ma socks on Sunda footwear gives suffering enoug the doctors and



should be—a picture at every window: trees, hills, grass, changing crops, flowers, a varying color-scheme from spring to fall. Less need there for finery indoors.—Painted floors and nicely-woven and colored rag rugs; big fire-places; broad windows with plants on the sill; simple curtains; blue china and brass candlesticks; plain, comfortable chairs; plenty of cushions—surely one can see in these a suggestion of coziness and homyness, that means comparatively little outlay of money. Good cheer, too—color combinations as artistic as may be—and always the glorious, changing landscapes through the windows.

\* \* \* \*

A perfectly darling little woman dropped into the den this morning. She lives on the outskirts of the city, and, of late, she has taken a mania for gardening. She is finding all sorts of delight in it—hence the mania. Potatoes and daffodils—she spoke of growing both, and apparently the one gives rise to as much interest as the other. Much amused is she at the abbreviated gardening costume which she has devised, but she is quite assured that it is absolutely as respectable, a bit more so, perhaps, than the bathing costume in which girls and women disport at every summer resort. And she is right. She has learned how to simplify to suit her work. With a short, trim gardening dress, a big hat, a pair of gardening gloves, and a kneeling cushion, such as shown in the pages of "The Farmer's Advocate" a fortnight or so ago, there is no need for any woman to be distracted from her gardening, or worried over soiling or spoiling good garments.

And surely, if we begin simplifying in one direction it will be easy to do so in others.—The senseless fad for wearing gloves all summer, for instance. Why can't we be brave enough to throw conventionality overboard whenever it conflicts with our ideas of convenience, and economy, and common sense? I fancy, too, that if we did so we should win more respect in the end. Sincerity and common sense have a dignity all their own; they are never ridiculous.

Simplicity! Away out on the moors—gorgeous in sunrises and sunsets, serene beneath the blue of heaven, green and clean in verdure—people manage to be very sane, and happy, even in cabins. . . . Away in the northern forests campers and prospectors make homes of tents, become resourceful in the wilds, and taste the real joy of life among the trees and by placid lakes and rippling rivers; in tiny farm homes, provided only that there are love, and flowers, and books, and refinement many men and women and boys and girls, find life worth living. Perhaps some day, when the war has taught us much, city and country will both go back to a greater simplicity—the simple life, with time to live. As things are to-day, we in the cities and we others who strive to emulate the cities, are overburdened with a superfluity of wants. And so we forge daily the chains that bind us.

JUNIA.

**A Question for the Ingle Nook Readers.**

I would like to ask Junia and the readers of the Ingle Nook what you think about knitting socks for our soldier boys on Sunday. Would it be doing wrong, think you, for us knitters that have not as much time for knitting during the six working days as we would like to have? The need must be getting greater all the time. Our boys have to fight our battles on Sunday. Surely our part is to knit all we possibly can so they will not have to go without socks. I have heard this question asked many times and have been tempted to pick up my knitting on Sunday, but have not done so.

INTERESTED READER OF INGLE NOOK.

It seems to me that this is a question which everyone must settle with her own conscience. I may say this—that many of the best women I know are knitting on Sundays. The soldiers have to fight, and march, and wear out their socks on Sundays; they suffer if their footwear gives out,—and they have suffering enough without that. Also the doctors and nurses must keep on

working, just the same, every day in the week. These are facts that must be considered. We are living in extraordinary days, and I think the good Lord is big enough to consider the suffering of the soldiers of greater account than enforced idleness on Sundays. However, as I said before this is a question that every woman must settle for herself.—We should be glad to hear opinions.

**Marmalades and Jams.**

Rhubarb Marmalade.—Six lbs. rhubarb cut in cubes. (Do not peel if the skin is tender.) 5 lbs. sugar; 1 lb. figs, cut fine; 1 lb. candied orange peel, cut fine.

Raspberry, Strawberry or Blackberry Jam.—Allow ¾ lb. of sugar to a pound of fruit. Crush the fruit and let it boil 20 minutes. Heat the sugar, add and let cook until, when tested on a cold saucer, the mixture seems of the right consistency.

Gooseberry Jam.—Four lbs. gooseberries, 1 pint red currant juice, 3 lbs. sugar. Melt the sugar in the currant juice and let boil for 5 minutes after boiling begins. Add the berries and let boil about 40 minutes, skimming as needed. Set aside until next day. Skim the berries into jars, boil the syrup until thick, and pour over them.

Tomato Marmalade.—Four quarts ripe tomatoes, 6 lemons, 1 cup seeded raisins, 4 lbs. granulated sugar. Peel the tomatoes and cut the pulp in thin slices. Cut the lemons in halves, lengthwise, and slice thin. Put all the fruit into a saucepan in layers, alternating with the sugar. Let cook 1 hour on the front of the stove, then move back and let simmer until the mixture is of the right thickness. Store in jelly glasses with melted paraffin on top.

Peach Marmalade.—Skin the peaches, cut them up and press through a potato ricer or mash fine with a wooden potato-masher. Add an equal amount of sugar to the pulp, the juice of one lemon and a dozen peach kernels. Cook very slowly for half an hour, stirring frequently to prevent burning.

Spiced Red Currants, Black Currants or Gooseberries.—For each pound of currants allow a pound of sugar. Make a syrup, using for each 4 lbs. sugar, 1 pint vinegar, 2 teaspoons cinnamon, 1 scant teaspoon cloves, ½ teaspoon mace or nutmeg, and ¼ teaspoon salt. When the syrup boils add the currants and let cook about 10 minutes. Skim out the currants and let the syrup boil till quite thick, then add the currants again. Put in jelly glasses, and when cold cover with melted paraffin.

Apple Butter.—Boil 10 gals. sweet cider until reduced one-half, then add, a few at a time, 3 pecks of pared, quartered and cored apples. Stir almost constantly with a wooden utensil and let cook 4 or 5 hours. Add 10 lbs. sugar and 5 oz. ground cinnamon, and let cook again until quite thick, or until like marmalade.

Plum Butter.—Add a little boiling water to the plums. Cook slowly and press through a colander. For 2 quarts of this add 1 quart honey. Let cook until thick. Sugar may be used instead of honey.

Carrot Conserve.—Cut scraped, tender carrots into small cubes. Cook gently until very tender and the water is nearly evaporated. To each quart of carrot cubes allow 2¼ cups sugar and the grated rind and juice of a large lemon. Dissolve the sugar in the lemon juice and small quantity of water remaining in the carrots, then add the carrots and let cook until the syrup thickens. Store like jelly.

**Seasonable Cookery.**

Popovers.—These are particularly nice to make in summer, as they are so quickly and easily made. They may be made in deep, patty-pans or the little aluminum or earthen cups so much used for jelly. The cups should be hot when the batter is put in. Batter.—Put 1 cup flour in a bowl and make a hole in the center of it. Drop in ¼ teaspoon salt, then 2 eggs, unbeaten. Add 1 cup milk gradually and stir (not beat) gradually. Bake quickly in the hot, greased shells. Popovers need neither shortening nor baking powder. They are nice served with butter and syrup or jam.



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**Good Method for Griddle Cakes.**—Sift together 2 cups flour, a little salt and 1 teaspoon baking-powder. Beat an egg well and add to it 2 cups sour milk. Beat all to a batter and bake on a hot griddle. When full of small bubbles on top turn and brown the other side. If large bubbles appear the griddle is too hot. Adding a teaspoonful or two of treacle to the batter will make the cakes brown nicely. Do not turn them more than once or they will be heavy; let one side brown thoroughly before turning. When greasing the griddle-pan, or any other for that matter, use beef fat or crisco in preference to butter, which burns easily. Tie the beef fat on the end of a fork.

**Biscuits.**—Sift together 2 cups flour, 3 (level) teaspoons baking-powder and 1/2 teaspoon salt. Rub in 1 good tablespoon firm butter with the tips of the fingers, then pour in slowly 3/4 cup sweet milk, cutting it in with a broad knife. Turn on a floured board, knead a very little, then roll lightly to 3/4 inch thick and cut into biscuits. Bake 12 to 15 minutes in a hot oven. If the oven is not hot the biscuits will not be light.

**Plain, Eggless Muffins.**—Sift together 2 cups flour, 3 level teaspoons baking-powder, and 1/2 teaspoon salt. Stir in about 3/4 cup sweet milk, beat well, then add 1 tablespoonful of butter melted. Beat up quickly and bake in hot, greased muffin pans.

**Cornmeal Muffins.**—Scald 1/2 cup milk. Separate an egg and beat the white stiff. Put 3/4 cup cornmeal in a bowl and make a hole in the center. Into this put 1/2 teaspoon salt and 1 tablespoon butter. Stir in the scalded milk. Add the unbeaten yolk and 1/2 cup cold milk, then 1 cup flour sifted with 2 teaspoons baking-powder and the white. Beat quickly and bake in a hot oven for half an hour.

**Salt-Rising Bread.**—Take 1 cupful of hot milk, 2 tablespoonfuls of cornmeal, 1 tablespoonful of sugar, 1 cupful of sweet milk, 1 cupful of boiling water, 1 tablespoonful of lard, 1 1/2 teaspoonfuls of salt, some flour.

Prepare a leaven in the evening by pouring a cupful of boiling milk over the cornmeal, mix thoroughly and put into a warm place to rise. In the morning pour a cupful of sweet milk into a large bowl; add the sugar, half a teaspoonful of salt and the boiling water. Stir in flour enough to make a stiff batter, then add the leaven, which thins the yeast to a proper consistency. Place the bowl in a pot of warm water, which must be kept warm. The dough will rise in an hour. When it has risen sufficiently add as much warm water as is desired, a teaspoonful of salt and the lard, and mix into a dough that can be well kneaded. It must not be too stiff. Put into a warm place to rise. When well risen divide into loaves and bake in a good steady oven until the bread leaves the sides of the pans. It usually requires two pints of flour for the yeast. The yeast alone will make up about four or five pints of flour, and for this amount add about a pint of warm water. The top of the dough should be greased before it is put to rise. The bread-pans should be well greased.

**The Scrap Bag.**

**Laundering Colored Dresses.**

Each time before laundering colored dresses soak the dresses in water to which has been added a tablespoonful of turpentine or a cupful of salt. Use just enough water to wet the goods thoroughly. Afterwards launder as usual, but be sure to dry the garments very quickly in a place where the wind will strike but not the sun.

**Paper Box Cooking.**

Cracker and butter boxes, lined with paraffin paper, are very nice for baking meat loaves in. Butter the paper well and put on the cover. Cook 3/4 hour in a moderate oven. When cold cut in slices.

**Rust Stains.**

If white articles become rusted rub the spots with salt mixed with lemon juice and expose to bright sunshine. If this does not remove them apply the following mixture: Add 2 parts cream of tartar to one part oxalic acid ground fine. Keep in a bottle and apply a little of the powder to

the stains while the article is wet. Rinse out in several waters to be sure that the acid will not "eat" the goods.

**To Clean Yarn.**

To clean white wool yarn that has become slightly soiled sift warm cornstarch (or starch and borax mixed) through it, and roll in a towel. Leave for two days, then shake out well. The same method may be used for cleaning white woollen summer shawls and sweaters that are not too much soiled.

**Laundering Fine Waists.**

Very delicate draped waists and frocks should be washed in bags. These can be bought at the stores and are known as "laundry nets." They can be made at home of coarse mosquito netting or of cheesecloth, and either of these materials is to be preferred to the practice of using a pillow-slip. The material of a pillow-slip is too heavy and the washing is apt not to be effective. Garments washed in laundry nets should be dried in the same nets, as such delicate materials are apt to be torn by the wind.

It is a very difficult matter to properly dry draped garments. The materials of which they are made are so soft that any pinning is apt to stretch them out of shape. If the fabric is not too heavy the best plan is to press it out as dry as possible, and then to hang it to dry on a thick, rounded coat-hanger. Be sure that there are no sharp points on the hanger or the frock will be stretched out of shape. White dresses may be hung in the sun, but colored goods must hang in the shade.

**Don't Let the Children Handle Dead Flies.**

The tendency at this time of the year of the health authorities in certain cities to offer a premium of 10 cents a hundred for dead flies in connection with their municipal clean-up campaigns brings up for discussion an important question of sanitation and hygiene. If a fly, alive, is a possible bearer of death through the disease germs which it carries on its body, how do children who swat the fly and then carefully preserve the decomposing bodies for the coveted 10 cents a hundred, escape infection through the same germs?

Apparently, through zeal in these wars of extermination, those in authority have overlooked a most dangerous feature of the movement. Swat the fly, of course, but burn him up immediately because he is more filthy dead than he ever could be alive. Decomposition adds to the menace.

To instruct children to "swat flies" and accumulate them until they have enough to bring in and collect 10 cents a hundred seems nothing short of a crime against modern sanitation. It would be a dangerous practice for grown people who took every possible precaution against infection; but for children to carry dead flies with their hands and then perhaps handle food without washing is almost certain to spread every disease that flies are known to carry.

The only possible way, from a sanitary standpoint in which flies could be caught and preserved for the estimating of their number would be on a sheet of sticky fly paper which embalms the flies' bodies with a glue which prevents germs from spreading. This might add to the difficulty of estimating the exact number, but it would be near enough for all practical purposes. And it would protect children from probable infection in the very diseases against which the fly campaign is supposed to protect them, and would teach them to regard the fly as the deadly insect he is instead of encouraging them to regard him as an object of familiarity and indifference. — Child Betterment Bureau, Chicago.

**No More Ants.**

Have you been bothered with ants? Measly, little, red ones that get into your cupboard, ice-box and various places where you simply cannot have them?

Try this: It is one of a dozen "sure-cures" which came to me well recom-

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THE war has increased the cost of living. The housewife must, therefore, make her money go farther. By using a tea, like Red Rose, which is largely composed of Assam Indian teas, she can reduce her tea bills considerably. The rich Indian strength requires less tea in the tea pot.

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Cook two Cups of Lantic Sugar with half a cup of strong coffee until the syrup forms a soft ball when dropped in cold water. Add a teaspoonful of vanilla extract and beat until cold enough to spread.

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"The All-Purpose Sugar"

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THE SHERLOCK-MANNING PIANO CO.,  
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DO YOU NEED  
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Write for our large photo-illustrated Catalogue No. 7—it's free to you.  
THE ADAMS FURNITURE CO., Limited  
Toronto, Ontario

mended, and a which had the

Get five cents from your drug this with about sugar and add Stir this with until well mixed too much wa is best. Put ants are, also they will find

A good plan enter the ho will show this. come and go and it is an entrance to a a defective wi air register. F entrance way, ant problem s

**Current**

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At time of a lull at Ver part of the neighborhood where the sa presumably, thought, how a great even shall so orde the battle of truth leak out unknown to f German fleet, across the C accelerated, a becomes st Eastern fr Gen. Brusiloff their victorio repulsed, an only two poin taken by the weeks, is pla many heavy During the evacuated C is said to hav men in servic This great Ru lessening th on Italy, wh are almost at army is being In the Far E defeated a Br

**The D**

A fund n The Farmer Magazine for (2) Soldiers Relief. (4) S Contributio "A Country "E. A. W., Choisy, Que., Ont., \$1.00; Ont., \$15.00; Ont., 50 cent thizer, \$1.50.

Amount pre edged..... Total to June

Kindly adv Farmer's Adv London, Ont.



mended, and absolutely the only one which had the necessary effect.

Get five cents worth of Tartar Emelie from your druggist. Mix a little of this with about one-fourth as much sugar and add a few drops of water. Stir this with a match or tooth-pick until well mixed. Be careful not to use too much water. A very thick paste is best. Put drops of this where the ants are, also make "runs" where they will find them.

A good plan is to find where they enter the house. A little watching will show this. You will find that they come and go in a general direction, and it is an easy matter to trace their entrance to a porch post, porch steps, a defective window or perhaps a cold-air register. Put your paste at their entrance way, and you will find your ant problem solved.—Sel.

### Current Events.

At the Presbyterian General Assembly, which met in Winnipeg last week, a vote of four to one was given in favor of Church Union. Eighty-eight voted against the measure, and subsequently passed a resolution declaring themselves to be the only representatives of the Presbyterian church in Canada. Led by Rev. Dr. Robert Campbell, Clerk of the Assembly, they have lodged a solemn protest against the step.

Owing to the return of some prisoners from Germany in a deplorable condition, the treatment of British prisoners in German camps is again the subject of investigation in Parliament. The reports from Camp Wittenberg are a lasting disgrace to the officials in charge at that place.

At time of going to press there is a lull at Verdun and along a great part of the British lines except in the neighborhood of Zillebeke near Ypres, where the salient is being held still, presumably, by Canadians. It is thought, however, that preparations for a great event, whenever Gen. Joffre shall so order, are under way. Since the battle of Skagerrack, which let the truth leak out that the Allies have nothing unknown to fear in connection with the German fleet, the movement of troops across the Channel has been greatly accelerated, and the army every day becomes stronger. Along the Eastern front the Russians under Gen. Brusiloff's clever leading, continue their victorious advance, having been repulsed, and that but slightly at only two points. The total of prisoners taken by them during the last two weeks, is placed at 166,500 men, with many heavy guns and machine guns. During the past week the Austrians evacuated Czernowitz. Gen. Brusiloff is said to have three quarters of a million men in service, with an equal reserve force. This great Russian offensive is, of course, lessening the pressure of the Austrians on Italy, where offensive operations are almost at a standstill and the Italian army is being greatly strengthened. In the Far East the Turks claim to have defeated a British squadron near Felahie.

### 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 June 9 to June 16: "A Country Girl," Elmira, Ont., \$3.00; "E. A. W.," \$4.00; The Park Family, Choisy, Que., \$5.00; "L. M.," Kerwood, Ont., \$1.00; Mrs. W. J. Johnson, Perth, Ont., \$15.00; W. B. Snow, Snowville, Ont., 50 cents; A Tilbury East Sympathizer, \$1.50.

Amount previously acknowledged.....\$2,502.70  
Total to June 16t.....\$2,532.70

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

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**DIAMOND**

## Cook's Cupful produces the most sweetening if St. Lawrence Sugar is used because it is all cane Sugar, easily dissolved, and absolutely pure sweetening.

Sold by best grocers in many sizes and styles of refinery-sealed cartons and bags

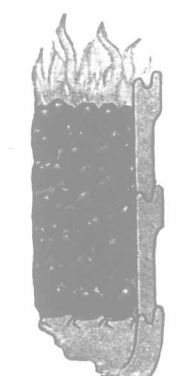
Ask for St. Lawrence Red Diamond extra Granulated Pure Cane Sugar

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**DIAMOND**  
NOW PROMINENTLY PLACED ON EVERY PACKAGE

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ST. LAWRENCE SUGAR REFINERS LIMITED MONTREAL

## Avoid waste of Fuel



Straight Walls Fire-pot of "SUNSHINE"



Slanting Walls Fire-pot gathers ashes and decreases radiating surface

Unless you *KNOW* positively that a cheaper furnace will heat your home without waste of fuel, there is small satisfaction in saving a few dollars on its purchase. The Sunshine Furnace saves coal because it is well made and because every part has been carefully thought out.

Look It Over.—Any one can see that the greatest heating factor in a furnace is the fire-pot; that a pot with straight walls, like the Sunshine fire-pot, will give off more heat than one that must often have an outer lining of ashes.

Doors and dampers that are tightly fitted will certainly hold the fire longer than those that are loosely fitted. The *WIDER* air passages and *LARGER* radiating surfaces of the Sunshine must heat the air much more readily. These Sunshine Furnace features are coal-savers that mean much in mid-winter.

# McClary's Sunshine Furnace

Saving coal interests you, of course. Then you will want a copy of our booklet on the Sunshine Furnace. Send for yours to-day.

**McClary's**

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**TEAR OFF THIS COUPON**  
1. Your booklet on the Sunshine Furnace.  
2. Also forms for your engineers to tell me how to order a system that will properly heat my home.

Name.....  
Address.....

**Newcastle Tamworths and Shorthorns** Boars ready for service. Sows bred to farrow in June and July, others ready to breed; both sexes ready to wean. All descendants of Imp. and Championship stock. Several extra choice young bull and heifer calves, recently dropped, grand milking strain; 2 bulls, six and seven months old, several extra choice young cows with calves at foot, also heifers, all ages. Prices reasonable.  
A. A. Colwill, Newcastle, Ont.

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

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

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FARM FOR SALE. A VERY GOOD FARM of 97 arpents, rich soil, all under cultivation, with good house, barn and other buildings in perfect order. Well situated on the Automobile Highway at St. Hubert, Que., 9 miles from Montreal, 1 1/4 mile from Electric Railway. For price and particulars please write to H. E. Trudeau, 34 Decelle Ave., Ville St. Laurent, Que.

FOR SALE—CHOICE PURE-BRED SCOTCH Collie puppies. W. A. Campbell, Alliston, Ont. R. 3.

FARM FOR SALE—A CHOICE FARM ON Lot 26, Con. 14, and part of Lot 16, Southwest Boundary, Fullarton, containing 113 1/4 acres in a splendid state of cultivation. Farm is well fenced and well drained. Crop will be all in for 1916. Buildings are all in A1 condition. A good frame house. If not sold on or before the 27th day of June, the farm will be sold with a dispersion sale of pure-bred stock. For further particulars apply to R. I. Dawson, Science Hill, R. R. 1, Fullarton Township, County Perth, Ont.

WANTED AT ONCE, FARM HELP: GOOD milker and feeder, married, house, \$35 per month. Apply J. Evans, Palmer Street, Guelph.

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Condensed advertisements will be inserted under this heading at 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 for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisements inserted for less than 50 cents.

S.-C. WHITE LEGHORNS BRED FROM PEDIGreed stock with heavy laying records. Eggs \$1.00 per fifteen, a hatch guaranteed, \$4.50 per hundred. Geo. D. Fletcher, R. R. 1, Erin, Ont.

### Live Poultry Wanted

We are open for shipments of live poultry of all kinds. Highest market prices paid, according to quality. Write us for quotations. Wholesale and retail.

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348 Dorchester Street West  
MONTREAL

Fish, Oysters, Game, Poultry,  
Eggs and Vegetables





## Have running water in your house and barn

Enjoy the comforts of a bathroom. Have hot and cold water—hard and soft—in the kitchen. Have water under pressure in the barn, and for fire protection. How? By installing an

## Empire WATER SUPPLY System

Read what Mr. N. Sangster, of Ormstown, Quebec, vice-president of the Holstein-Friesian Association of Canada, says regarding the Empire System illustrated above:

Gentlemen,—The Hydro Pneumatic System I purchased from you a year ago is giving excellent satisfaction. We use one tank for soft water and one for hard water. I find that the engine uses very little gasoline, and is very easy to operate. Ten pounds pressure on the tank will force the water to any part of the house. Yours truly,

N. SANGSTER.

### THE OUTFIT CONSISTS OF:

White enamel bathtub, closet with tank, lavatory with fittings, hot water boiler for kitchen range, kitchen sink, engine and pump, pneumatic pressure storage tank and piping.

We have installed many similar systems in all parts of Canada.

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THOROUGHLY DIGESTIBLE. TONES THE SYSTEM. PERFECT SAFETY IN FEEDING TO ALL ANIMALS.

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MORE MILK AND BETTER MILK

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Manufacturers of Pure Canadian Flax Seed Products

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## 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.

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II.

12

Yuan Kang Su and I were dining at the Ambassadors' Club in Washington. On the evening before I had supped with Mary Romany in Covent.

"You have kept your word, my friend," he said. "You have come back to me reeking with power."

I had been regarding the Oriental face. He was so fit physically that he would wear about as readily as a platinum tip, yet he was feverish from fighting and close to exhaustion.

"I'm glad you didn't try to say anything good-natured about me," he laughed. "For the first time in my life, I feel as if I were burning off the bloom. . . . You will meet Shan Wo Kai to-night, and I shall listen—"

This was a most unusual idea to me—that I should take up the man's cause for him against his master. An American would never have thought of it, nor remotely approached the manner of at-last-I-can-wash-my-hands-of-the-whole business, with which he uttered the final sentence.

"And my friend, Jane Forbes?" I inquired after a while.

"She is still in Philadelphia. I have not seen her. I am afraid of her—afraid of every letter and messenger-boy."

There was desolation to me in the courage of this pair. Yuan's calmness was like a cold wind in the room.

"You mean that she may determine what is best before you do?" I asked.

"Exactly. . . . And whom do you suppose I heard from to-day?"

"Not Huntoon?"

"The man, and none other. He will be on from St. Louis to-morrow."

On the way to the Legation, I told him that I was leaving shortly for South America.

Shan Wo Kai, Yuan's Chief, was a passionate servant of China. America knew him only as a remarkable diplomat. Because he was Chinese, the American press called "wily" what would have been denoted wise in another. It had been seven years since he first reached our world, and journeyed eastward from San Francisco, restless and bewildered by the great animation which left its frenzy-marks in pile granite, singing wires and trans-continental stretches of steel. A natural ascetic, he was dismayed and humiliated at first. These days were filled with loneliness and rebellion, but no one could have discerned this, through the calm interest, almost ennui, apparent in his slant eyes. In a little while he was adjusted, and found the lessons of the younger civilization laughably easy, after the towering abstractions which his mind had gripped and assimilated, back in the silent years of preparation.

To him, America was a metal—the people magnetized to attract metal, and to be maddened by it. The race-soul of the nation, to his eyes, was pent, sheathed, and poisoned by copper and silver and gold. From the thousands who passed him on the streets of New York, and later in Washington, he felt the looks of curiosity and contempt. They could not distinguish from his clothing, his hands, nor his brow, that he was not a laundryman—an extra tall one.

The career of Shan Wo Kai was much that Yuan Kang Su's was meant to be. He appeared young for Minister Plenipotentiary, wore a queue, and the clothing of his country. His English was admirable, his manner fascinating, his oblique eyes weary unto mystery. His mind was hot with work. He loved Yuan Kang Su for himself, but more for the promise of service to China. He saw that Yuan was breaking under an alien martyrdom.

We talked for an hour. I felt the great force of the man. If the vitality of his intelligence was at all aroused, it was because though an American, I did not raise my voice, aired no studies, and seemed to have no interest in making an impression. It is true that I recalled often and with gusts of fervor, that

this time last night I was walking the cliffs of Covent with Mary Romany and a hunting moon.

Finally the Minister mentioned Yuan. After that, until the telegrams came, Yuan spoke no word. The elder man told me much, as Yuan had, of a Chinese student's life of preparation. Memories mellowed where America had made him hard. He spoke of the old teachers and their shell-rimmed glasses and how they love their boys—the first fruits of the Empire; and how they are taught from babes that men may fail, and rulers may sin, but that China herself—the spirit—can do no wrong.

Shan Wo Kai paused, tapped the table nervously with the polished claw of his little finger, and remarked, how sadly the mighty were fallen.

Amiably I questioned the "fallen." "Yuan, thirty years old, had not looked upon a woman before," the Minister said. "He was pure, as white men at thirty are seldom if ever pure. He looked into a woman's eyes and has forgotten his country—"

"Would a woman of his own people—make him forget his country?" I asked.

"It would not amount to the same thing. We do not listen to women in China."

"The woman he has met then, is more formidable than a Chinese woman?"

Since he did not hasten to speak, I added: "I quite agree with you that this woman may rival the abstraction, Motherland, in a man's heart—but not to the detriment of his service to either."

He spoke of what Gautama, Confucius, Jesus, and the latter's inspiring armor-bearer, Saint Paul, had said upon this matter. He mentioned the northern purity of the Fore-runner.

"If China is looking upon Yuan Kang Su as a coming prophet," said I, "she is perhaps unfortunate in her choice, since he loves a woman—"

Instantly he saw my point—that the larger dimension of manhood which seems to contain in itself the feminine quality of divination, has celibacy for one of its first laws. He refused to concede, however, that Yuan might not prove a prophet.

"My career is but burnished brass. His may prove fine gold," he said.

"But those who are called to prophesy," said I, "have a feminine consciousness and a man's fighting quality blended into a sort of completion. One called to prophesy could not see completion in the eyes of a woman—and I happened to witness that miracle in Yuan's case."

I liked his answer:

"I wonder if many of those called to prophecy, as you say, have not looked into the eyes of a woman—and turned away. I think of your Dante—whose Lady turned away—how he used the power of her absence, to make his race distinguished. Our young friend might take his love into the world's work for China, but not his mate. . . . What is the meaning of life on earth for a good man? Which is the greater incident in a good man's life—winning a woman or refining the ties of brotherhood in his native land? Through which does a good man leave a perennial warmth of gratitude in the hearts of his people?"

Looking straight that moment into the eyes of the ranking Chinese in America, I thought of Mary Romany in the Other Room alone; then, of Jane Forbes in Philadelphia alone—of women everywhere alone—whole races of women alone.

"The trouble is," I said, "that you want to use Yuan Kang Su in your way."

A country which produces such men as Yuan should give them the first gifts of enlightenment—the privilege of living their own lives. The love of man and woman is older than America, older than China. It is the love of man and woman that gave the first State-builders their ideals. Vile debasements of the love of man and woman have brought nations to impotence and ruin. A race can be lifted only by great men. Great men are the sons of much loved women. There have always been vain young men, hasty to accept the teaching of the defilement of women, swift to fill the monasteries, who have fallen far short of ideal citizenship, and farther from prophecy. I hold that no nation is great enough to say to a man and a woman who greatly love each other—"Thou shalt not mate together."

"China is very miserable," Shan Wo Kai said benignly. "It is her lowest

hour. Her sons true man would it would open a heart. That is

The Minister uttered with the in the soul of Y. "It is a ver I said, "but I s Mother. I do motherhood of C said it: 'We c in China.' You before you can hood."

"Your view i

"China has clung to types, your coolies, yo students. Each more rigid than The wife of a breed a sca daughter, and should breed a be a scandal a whole class wo and rebellion women so the animalized socie man artificially, then sacrifice hi prevent his bloe all to preserve th

"I wish to u a great man a said.

"A man born has never breat the most obvio is that she is a that her body desires; that she a karmic retrik in her not bein man born of suc from babyhood raised."

"Thank you-point of view— Then with a g summate, and words, he laid women, America—left her down, septicæmia set not only poison it was so true life that a man whole story in e American daily.

"I realize wh I answered. Ce here—apes of t loud-voiced, mu and much do t awake. Strang but awake; a uses of their freed ing their freedo have shown us t should know, t of bringing for value becoming make war impos in the mass ha ception of br society everywh ized non-resista It is like the l whole country? not seen your a wrong in the Men must have Courage does reconciled to be If in America cattle by a as you lost f overflow of th would rise to p millions in app engineers of th all this that Ame is breeding ind ividuals lost you the loss is ing types. The world lies in t make the broth saying so much, is more import world, than the America."

Both Chinese a peculiar sense harmless agains

"Perhaps now case of Yuan in said the Ministe I bowed.

"I speak with your conception a servant of Ch



hour. Her sons must sustain her. A true man would not marry—if he knew it would open a fatal leak in his mother's heart. That is all—"

The Minister's quiet words were uttered with the intent to kill romance in the soul of Yuan.

"It is a very effective sentiment," I said, "but I should have to know the Mother. I do not believe in the motherhood of China, because—you have said it: 'We do not listen to women in China.' You must listen to women before you can have a national motherhood."

"Your view is interesting," he said. "China has held on for centuries, clung to types," I added. "You have your coolies, your merchants, and your students. Each class has its subdivisions more rigid than our whole social scheme. The wife of a scavenger-coolie must breed a scavenger-coolie—and her daughter, and her daughter. If she should breed a merchant, there would be a scandal among the scavengers. The whole class would quiver with hatred and rebellion. You animalize your women so they will breed true—an animalized society. You raise a great man artificially, with infinite care—and then sacrifice him, stop his evolution, prevent his blood from lifting his race, all to preserve these ancient abominations—"

"I wish to understand about raising a great man artificially," the Minister said. "A man born of a woman whose soul has never breathed—a woman to whom the most obvious fact of all existence is that she is a racial inferior to man; that her body is an electrode of evil desires; that she is a spiritual nonentity, a karmic retribution upon her father, in her not being born a boy—I say, a man born of such a woman and fathered from babyhood to maturity, is artificially raised."

"Thank you—I see clearly your point of view—" Shan Wo Kai replied. Then with a gentleness that was consummate, and in less than a thousand words, he laid open America—American women, American system and manhood—left her down, veins open, and virulent septicæmia set in. His remarks were not only poisoned, but poised. Yet it was so true a picture of our national life that a man of vision could read the whole story in every issue of every great American daily.

"I realize what you have seen," I answered. Certain women are unlovely here—apes of the worst of men, bold, loud-voiced, much given to brutal things, and much do they suffer, but they are awake. Strange in this man's world, but awake; a few are making weird uses of their freedom, but they are realizing their freedom. It is the women who have shown us the value of men. Women should know, for theirs is the agony of bringing forth men. This sense of value becoming a national conception will make war impossible. . . . Your women in the mass have not risen to the conception of bringing forth men. Your society everywhere reflects the de-humanized non-resistance of the Chinese women. It is like the hand of death upon the whole country's manhood. Who has not seen your spiritless acceptance of a wrong in the coming of the Allies? Men must have courage from the women. Courage does not come from women reconciled to be a mere physical usage. If in America we lost as many cattle by a river running wild, as you lost farmers recently in an overflow of the Huang ho, America would rise to prevent a recurrence with millions in appropriation and the best engineers of the world. The meaning all this that America, through free women, is breeding individuals. We count individuals lost in every calamity. To you the loss is but a number representing types. The spiritual hope of the world lies in the individual. He will make the brotherhood. Forgive me for saying so much, but a great love-mating is more important to the good of the world, than the abstractions, China and America."

Both Chinese were smiling. I had a peculiar sense of my words striking harmless against a bony wall. "Perhaps now we had better take the case of Yuan in its more intimate aspect," said the Minister.

I bowed. "I speak with intense admiration for your conceptions," he said, "but I am a servant of China. Yuan is trained to

be. Your country would despise this woman; China would despise Yuan Kang Su—if they mated."

I bowed.

"Five years ago, Japan gave us a series of severe defeats," Shan Wo Kai said with bitterness. "The Allies have just now given us another. You attribute this to our national cowardice—which is far from proven to my satisfaction. Rather, as I see, it is modern warfare against non-equipment and disorganization. You who have travelled so extensively in Asia will grant China's superiority to Japan mentally and morally. And yet it was the young Japanese students who went abroad learning the Western ways that enabled them to overwhelm us five years ago. These young men will lift Japan to the first flight among the Powers. You have heard of the big part played by the Japanese infantry—among the so-called Allies?"

"Yes."

"It was the work of the Japanese youngmen. They will furnish breathing places for their crowded people."

"But you have told me that you despise war and commerce," I declared—"these matters which Japan is learning from the West. Yet, you would use your finest young men to copy Japan's copy of the West. China would use my friend Yuan to learn and become expert in war and commerce—the bane of Europe and the madness of America. Where is your superiority to Japan and to the West? You will be at the heels of Japan, but fifty years behind Europe and America in the national psychological agony of a nation passing through, first, its military—and then, its commercial stage of growth. Europe has developed monsters in this art of War, and America has developed monsters of Commerce. These men are self-magnified to show the horror they reek with to the few who will see. They are Nature's correctives—I pray not futile ones. . . . And yet you would follow us. You would use Yuan Kang Su as one of the young enlighteners to carry this ignis fatuus back to the Orient. You would deny him children and break a woman's heart, so that he may take to China the rankest toxins of these civilizations—that you both despise. . . . You must see, you, princes among men, that the imitator must always copy; that what one race has martyred itself to learn, cannot be instantly assimilated by another. You must see that by the time you have your copied explosives and war-engines brought to a finer point than we have ever brought them—we will be able to poison your rain-clouds, and from afar make deadly the air of your cities. You must see that metal cannot master mind. . . . If we could only see so well and clearly—that mind cannot master spirit—"

At this moment, certain memorable telegrams were brought in.

Imagine how the face of a mountain, seen from a great distance on a gray day, would change, if as you watched, a light rain began on the slopes. So it was with the face of Yuan, as he read his telegram, a scarcely perceptible alteration, as if his features were withdrawn a little in a mist. The Ambassador was deeply occupied with the other messages. It suddenly occurred to me that our conference was at an end; that I was very tired, and far from the Other Room.

Now, the answer on the part of China which I had expected that moment from Shan Wo Kai—did not come until months afterward.

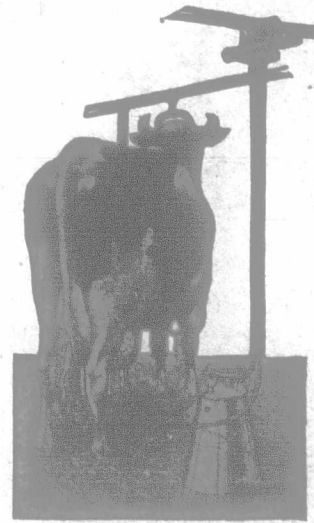
I was miserable. I had talked too much. The Minister had hardly unmasked his batteries. His first and last words after the receipt of the telegrams was honor for me and regret for the necessary ending of the talk. . . . Yuan, who could not leave, had rung for a cab. He said that he would call at my hotel early, and pressed my hand. . . . I remember looking away to the north and seaward from my hotel window that night; thinking of the advantages of saying little at all times. I felt that I had done Yuan little good.

It helped me to remember, however, certain walled cities of China—where

\*Shan Wo Kai was speaking thus of Japan long before the Powers granted her promise and potency. This was four years before the Russo-Japanese war. America at this time was inclined to regard the fine showing of the Japanese with the Allied Armies, as a dramatic bit of good fortune.

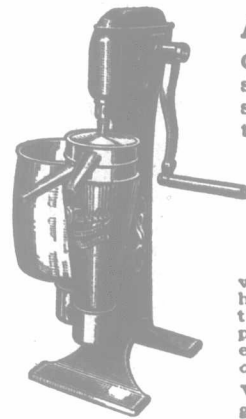
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" GALT	2.16 a.m. " " "	" WOODSTOCK	9.39 a.m. " "
" WOODSTOCK	3.30 a.m. " " "	" GALT	10.29 a.m. " "
" LONDON	4.43 a.m. " " "	" GUELPH JCT.	10.57 a.m. " "
" CHATHAM	7.00 a.m. " " "	Ar. TORONTO	12.15 p.m. " "
Ar. WINDSOR (MCR)	8.30 a.m. " " "	LONDON PASSENGER	
" WINDSOR (CPR)	8.50 a.m. " " "	Lv. DETROIT (Fort St.)	7.00 p.m. Daily
" DETROIT (Fort St.)	9.30 a.m. " " "	" WINDSOR (CPR)	7.40 p.m. " "
" DETROIT (MCR)	8.10 a.m. " (C.T.)	" TILBURY	8.34 p.m. " "
Lv. DETROIT	8.25 a.m. " " "	" CHATHAM	9.05 p.m. " "
Ar. CHICAGO (MCR)	3.30 p.m. " " "	Ar. LONDON	10.50 p.m. " "

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Alvinston, Ont.

Dear Sirs,—I am well pleased with my barn, and want to say in connection with the building of the barn that one can get a barn so much quicker by taking your style than the old-fashioned wooden barn, and also the expense in the building boarding men, etc., is greatly reduced. I would judge not more than one-quarter the cost it would be for a wooden barn. These two items alone should induce anyone to build your style of barn. Now, in connection with the barn itself, I consider that it is lightning-proof, and the danger from fire is not so great should other buildings be burned close by. It never needs painting, and I think it a very much stronger barn than any timber frame I ever saw. I think it will last much longer than a wooden barn, and its general appearance should recommend it to anyone who is going to build.

Yours very truly, W. J. Bourne.

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the limbless and naked lepers shoulder themselves along through the mire; where the poor have only the warrens and the walls, and the dogs come forth at night to eat the filth, and lick the wounds of the sore diseased; where the miles of little merchants squat like spiders awaiting prey, their women farther back in the darkness of the lairs; the streets in which a white man dare not go, lest he be plucked to the bone, as by multitudes of carrion birds; creatures in human forms, to whom would seem an amiable relaxation, what to us is the most loathsome abandonment. She was not a Mother to me—China, whom these two fine men worshipped,—but a degraded monster whose breaking-down tissues menaced and dumfounded the earth.

It was mid-night. That there was a train for New York at one, haunted me, but I could not leave. I felt that I should go to Philadelphia to see Jane Forbes, but her address had not yet been given me. . . . Yuan came early.

"My dear friend," he said, drinking his tea and professing that he had already breakfasted, "you must trouble no longer. You fought the good fight. It is lost—because I cannot sustain you at the last."

"Has she written?"  
"Yes. . . . She perceives that my life will be better alone for the present. In some distant time—we may meet again."

"Was that in your telegram?"  
"No. A special letter was in my rooms when I finally reached them this morning. . . . But, that is closed. Shan Wo Kai is no longer interested in that."

The moments were heavy with intensity.

"You came in the very front of action," he added with a smile. "I heard from Philadelphia, and Shan Wo Kai heard from China."

With his arms crossed, he lifted his shoulders—as if to let the deluge slip over him. The gesture was vivid with, "Let it come." My questions, not without difficulty, made it clear to me in the next ten minutes, that Shan Wo Kai had heard officially of Yuan's assistance to the white people during the Rebellion. The younger man had been recalled. Even if Jane Forbes had not written, Yuan would not have planned to see her again. A Chinese of caste in disgrace, considers himself dead, in so far as a large part of his human relations are concerned. . . . I was to carry a message to her on the following day. "Please let me talk of something very

close to my heart, dear friend," he said finally and with weariness. "I could not try even to change the most exterior process which helped the lady to her decision—since this has happened. . . . I want to tell you something of myself long ago. Much that you said about China we understand, but there was one thing about making boy-babes into men artificially—by fathering instead of mothering—that was strange and wonderful to us. . . . You made me think of myself long ago, as you talked about women and romance, and the making of men by mothering. In the midst of your talk I was away back among the women of my house and the queer little mother. . . .

"Then I went away to school. One day they told me that she was dead. To them who brought the news, it was as if a loved servant had—ended his service. I did not go home. I did not even go to my room. I felt numbed, but did not say so. They would not have understood. Only I kept remembering her. She had seldom spoken I did not recall a single word of hers. She did not know nor dream of such things as you have suggested. Jane Forbes does not. . . . And yet, I think, if that queer little Chinese woman and Jane Forbes had been in the chambers of the Ambassador last night, it would have all come back to them—what you said and much more besides—as if they had known it once, and men had taught them to forget."

We were silent, until he repeated: "The women know it, but they have forgotten. A man must say it to them—to make them remember."

Now this thought seemed much greater to Yuan Kang Su that morning—than his recall to China, and his destroyed romance.

"When I first really knew you," he added in a moment, "I felt there was something great for me to learn. How quickly it came—the knowledge, the woman, the lesson, and now the memory. . . . I wish that queer little woman—she was incredibly little, Thomas—had lived for me to tell her."

I dared not speak. The world was very impressive that moment—not wicked at all—only the world had forgotten its benefits and was lost and suffering without them.

"You were very much right. Some-time Shan Wo Kai will tell you—how you struck his heart. China is called to defend herself in the cruel boyish modern way. She will fall in the lusts of it: first war, as you said; then the later mania, commerce—and the holy days will be more and more forgotten. It is true. The evil of the Old will make her abandon the good of the Old, for the evil of the New. . . . It is strange to us—to hear that the Light shines through women upon the race. We have tried to make it shine through men—and so we have our walled hells."

My friend was already talking of himself as of one in the past—not in the formation of sentences—but in the spirit of every thought. He was singing his swan song, and though a hush was upon my world—it was afterward that I knew. . . . He said many things I cannot repeat about the talk's trend the night before; how he had spoken with his master about it after I was gone; how China had forgotten the mothers. . . . It must have come from Mary Romany and their own readiness. Surely I was miserable enough over my part when it was done.

And so to me, it is not Mother China, quite as before," he said hours afterward. "It is Old Man China. Shan Wo Kai has not failed to see. . . . Old Man China, and his arteries are scant and hard—his beard is unclean, his eyes dim and vile. He has forgotten his hill-rock upon which the arts of life were graven. He has forgotten his hill-rock to which the images came—fortitude, purity, hope, vision. He cries out for his sons, but they do not hear him—cries for his daughters, but they are hidden away. . . . But the darkened mother, back in the gloom of ages—she hears his voice. She would come to him, but he has forgotten her. He cries out but not her name—the sick Old Man who needs her great Mothering now."

All that day we wandered about the city, and Washington was as strange to my eyes, as to the stranger's. It seemed a place of ruins, by a forgotten river, whither I was led by one whose earth-life ended with this day—and all

that he said was wise and calm and unearthly clear. We fasted together until the dusk—and the day was a book of mighty pictures and visions—at apocalypse. It comes to me now that China has not failed, if only because of Yuan Kang Su, whose dreams were so vast, and whose spirit was so strong and sweet. . . . For always the multitudes must die. Whole nations rot down; by millions the animal men are entrapped in life, dismembered, devoured by their animal kings, waste away and corrupt the earth. But one youth among them sees. The precious vials of the national spirit are poured upon and into him. He stands against the tide of his people—weeps for them in his martyrdom. Upon him, for eternity, is the imprint of the whole. The last devil of nature is shaken and convulsed by his standing alone; the animal in man defeated, and the angel arisen. Night falls upon teeming Philistia—but one youth of visions stands forth—one youth born of woman. The good God seems content with this yield of Earth, and forever blessed is the woman who interpreted His dream. . . . At last we found the dusk about us, Yuan and I,—and remembered Huntoon.

To be continued.

### London June.

BY THOMAS BURKE IN "NIGHTS IN LONDON."

Rank odors ride on every breeze;  
Skyward a hundred towers loom;  
And factories throb and workshops wheeze  
And children pine in secret gloom.  
To squabbling birds the roofs declaim  
Their little tale of misery;  
And, smiling over murk and shame,  
A wild rose blows by Bermondsey.

Where every traffic-ridden street  
Is ribboned o'er with shade and shine,  
And webbed with wire and choked with heat;  
Where smokes with fouler smokes  
entwine;  
And where, at evening, darkling lanes  
Fume with a sickly ribaldry—  
Above the squalors and the pains,  
A wild rose blooms by Bermondsey.

Somewhere beneath a nest of tiles  
My little garret-window squats,  
Staring across the cruel miles,  
And wondering of kindlier spots.  
An organ, just across the way,  
Sobs out its ragtime melody;  
But in my heart it seems to play:  
A Wild Rose blows by Bermondsey!

And dreams of happy morning hills  
And woodlands laced with greenest boughs  
Are mine to-day amid the ills  
Of Tooley Street and wharfside sloughs.  
Tho' Cherry Gardens reek and roar,  
And engines gasp their horrid glee;  
I mark their ugliness no more:  
A wild rose blows by Bermondsey.

### Parody.

A soldier has parodied the well-known song, "Sing Me to Sleep," pluckily making fun of conditions where he sleeps, yet the pathos will "out." The bit is taken from "The Maple Leaf," the Magazine of the C. E. F. Pay and Record office.

Sing me to sleep where bullets fall,  
Let me forget the war and all;  
Damp is my dugout, cold my feet,  
Nothing but bully and biscuits to eat.  
Sing me to sleep where bombs explode,  
And shrapnel shells are "à la mode,"  
Over the sandbags helmets you find,  
Corpses in front of you, corpses behind.

Far, far from Ypres I long to be,  
Where German snipers can't pot me;  
Think of me crouching where the worms  
creep,  
Waiting for someone to sing me to sleep.

Sing me to sleep in some old shed,  
The rats are running around my head;  
Stretched out upon my waterproof,  
Dodging the raindrops through the roof.  
Sing me to sleep where camp fires glow,  
Full of French bread and "café à l'eau,"  
Dreaming of home and night in the West,  
Somebody's over-seas boots on my chest.

Far from the starlights I'd love to be,  
Lights of old London I'd rather see;  
Think of me crouching where the worms  
creep,  
Waiting for someone to put me to sleep.

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**Question**  
1st—Questions to "The Farmer's Advocate" in this department fr  
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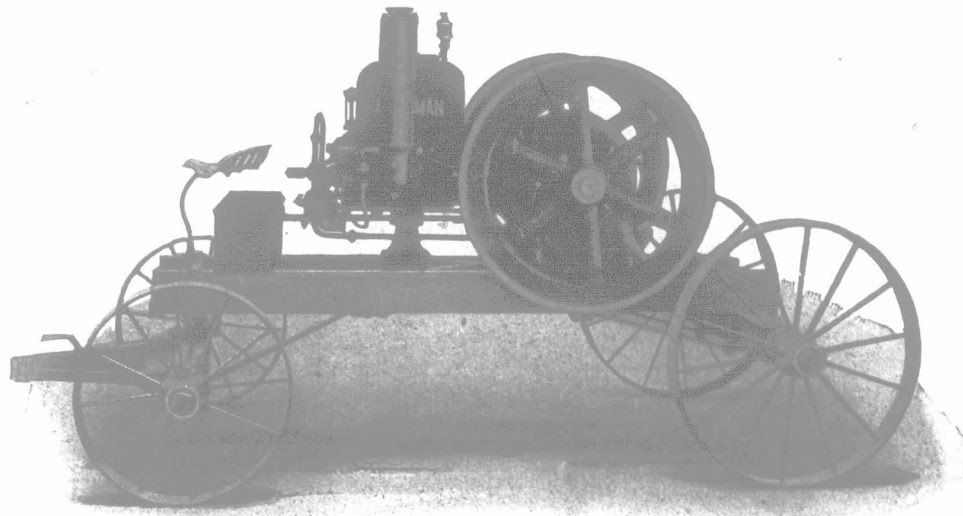
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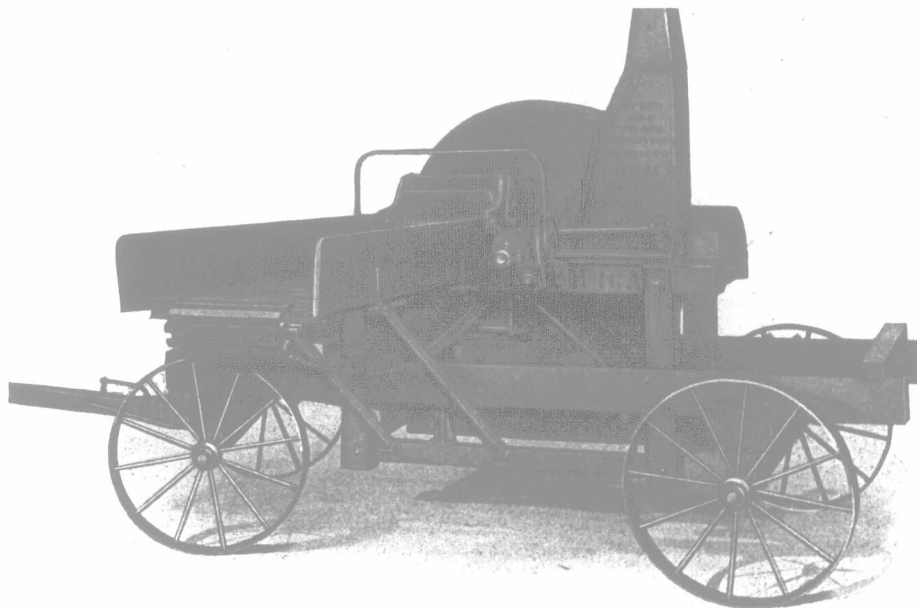
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1st—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.  
 2nd—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and 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.

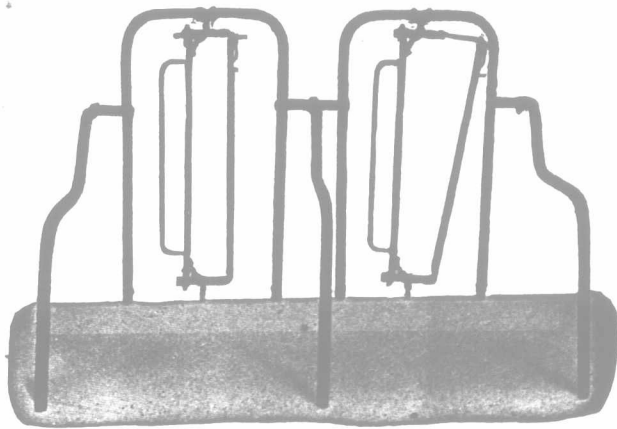
#### Seeing a Will.

An uncle of mine died April 20th leaving a large estate. I feel sure I was remembered but have had no notice to that effect. Can I see the will? What steps should I take to find out, and at what date? This property is in Quebec Province. My brothers are the executors, and say the place is to remain rented for some time at least. There is no satisfaction for me in any of their statements. Will was drawn by a notary.

J. E. A.

Ans.—You can see the will in the office of the court after it has been admitted to probate, or you might have your lawyer do so for you. He could, perhaps, obtain inspection of it in the meantime if you are averse to waiting.

## Mr. Farmer and Dairyman:



Buchanan's Stall. We use a positive steel lock to lock our stanchion. 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.

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

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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.

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.

## Italian Bees—Foul Brood.

1. Which are the better bees, the bright yellow or the leather-colored Italian?

2. I have some old racks or frames out of some hives that may have had foul brood. It is too much trouble to boil them. If I scrape them clean and singe them in the flame of a coal-oil stove would they be safe to use?

J. A. P.

Ans.—1. The yellow-banded Italians are usually considered the best.

2. When foul brood is discovered, the bees, hive and all accessories are generally burned in order to prevent infection spreading. While it may be possible to destroy all possibilities of spreading the disease, the safest method would be to destroy the frames and racks.

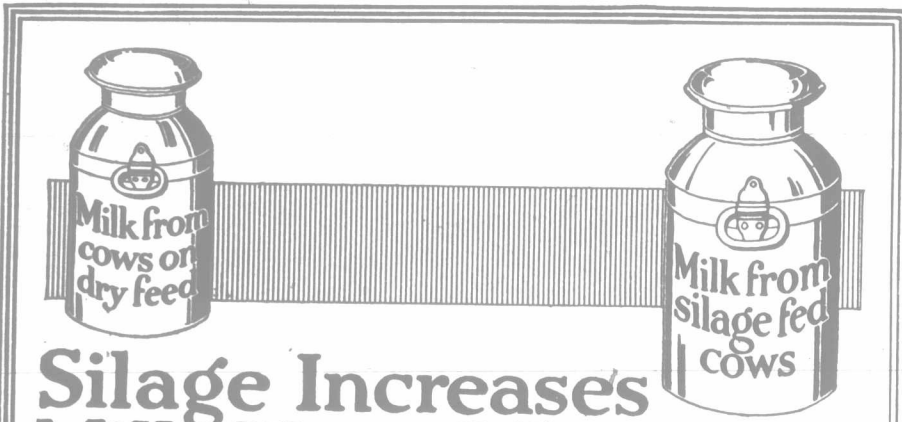
## Gossip.

### The Cooper Sale.

The sale of Jerseys, recently held by T. S. Cooper & Sons, Coopersburg, Pa., proved to be one of the most successful of dairy cattle on record. One hundred and twenty-six Island bred Jerseys sold for an average of \$641.19. The first fifty sold averaged over \$900, while first eighty-five averaged over \$800. Nineteen cows sold for sums over \$1,000, the top price being \$3,000.

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are increasing the profits of thousands of Canadian farmers. The men who use these silos are getting big returns because their cows are giving a large flow of milk during the winter months when dairy products bring the best price.

There is no question about the value of silage—GOOD silage. The only men who doubt the value of silage are those who bought cheap makeshift silos that produce a poor quality of silage. It does not pay to try to save a few dollars on the first cost of a silo. The loss due to spoiled silage is likely to amount to many times what you hope to save on the first cost.

Remember that you will get from 20 to 30 years' service from an Ideal and that it is a strong, tight silo that will protect your silage perfectly. In the better quality of silage you get, this silo saves each year more than the difference between its cost and that of an inferior silo.

Do you want proof of the extra value of the Ideal? Do you want to know just why it will give you the best silage and last longest? Then ask us to send you our large illustrated catalogue that shows every detail of this silo; how the parts are made and put together and the quality of material used. You can then judge for yourself. The crop you put in a silo is worth a lot of money. Don't take any chances on having it spoiled. You will save money by putting it in the best silo you can get. Ask for the catalogue. It will be gladly mailed you upon request.

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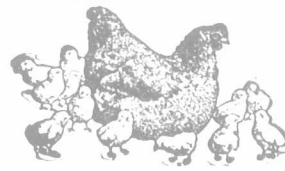
A Peerless Water System is a wonderful convenience—and so economical to install. The hand pump, or engine, pumps the water from your source of supply into the air-tight tank, where it is held under pressure ready for use in any room—simply turn on the tap and the water flows. Think of what comfort it means to have all conveniences in your home. The booklet tells all about it. Write to-day for it.

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### Questions and Answers. Miscellaneous.

#### Ants Bother the Bees.

1. Ants are troublesome in my apiary this spring; which is the best way to get rid of them?
2. Is it a mistake to set hives on wood blocks 8 inches thick cut from a tree two feet in diameter?
3. What makes the best roof? I have all kinds and find trouble with all except the flat, galvanized iron.
4. Is there any harm if grass is allowed to grow around hives?
5. At what price can I get the A B C of Bee Culture through your office?

Ans.—1. Where ants are troublesome it is advisable to destroy them in their nests. This can be done by making two or three holes in the nest with a stick or crowbar, then pour coal-oil, about three tablespoonfuls, in each hole. Hot water has had the desired effect, or bisulphide of carbon can be used. One tablespoonful to each hole would be sufficient.

2. There is a tendency for the bottom of the hive to be kept damp when sitting on a single block. A stand supported at the four corners is preferred.

3. A cover made of two or three boards tongued and grooved and set so as to give a slight pitch each way from the centre is found to give satisfaction.

4. It is advisable to keep the grass cut in an apiary, and especially so near the entrance to the hive. Bees laden with honey get down in long grass and have difficulty in making the entrance to the hive. Many place a board in front of the hive to assist bees in finding the entrance.

5. A B C of Bee Culture can be secured through this office for \$2.25 post-paid.

#### Bee Queries.

I have three colonies of bees. Can you give me plan to keep them from swarming? How can I get the mother bee and make the swarm come back to the box? What is the cause when bees fill up in the bottom box and don't swarm and don't store in the top box? They don't seem to want to work in the top box. Should there be a new queen put in the box after the colony is two or three years old?

Ans.—It would not be possible to explain in an answer to a question the method of swarm prevention. This is treated with in Bulletin 233, of the Ontario Department of Agriculture. The best way to get the "mother bee," as he expresses it, is to have the queen clipped in the early part of the season. Then when the swarm issues she is unable to fly, but will be found on the ground in front of the hive. She can then be placed in a queen cage on the entrance of the new hive prepared for the swarm. This new hive is placed on the old stand after the parent hive has been moved to one side. The change should be made as quickly as possible, as the swarm will be going back to look for the queen after a few moments, and if it finds the new hive in place with the queen cage on the entrance, it will enter the hive and become established there. As soon as the swarm has returned the queen is liberated and allowed to go into the hive with the other bees.

It is very difficult for anyone and practically impossible for a beginner to prevent swarming in putting on section supers. The bees refuse to go into the sections, because they do not like them, and it requires skilled management to induce them to store honey under conditions which are not agreeable to them. This, in a word, is the cause of the high cost of section honey. Beginners should produce extracted honey exclusively, using combs the same size as those used in the brood-chamber. When they become skilled they may take up the production of section honey if they choose.

It is customary to requeen colonies from time to time if they need it, but if this is not done by the beekeeper it is looked after fairly well by the bees themselves, as they have a habit of superseding a queen that fails from age or any other cause. I would strongly recommend every beginner to purchase some elementary text-book on beekeep-

ing and study it carefully; also if possible, take a beekeeping course at some college M. P.

#### Stiff-tooth Cultivator.

I have some fields badly infested with couch grass, and I intend to purchase a stiff-tooth cultivator. I was thinking of buying a 13-tooth cultivator, but was told that it would be too heavy.

1. Will two teams handle it all right? Can 5 horses be hitched to it? Or could 2 teeth be taken off at each end to make a 9-tooth cultivator out of it, in case it was too heavy in couch grass?
2. Are you using one on Weldwood farm? If so what size is it? W. S.

Ans.—1. We have used a stiff 13-tooth cultivator with 4 horses on heavy soil, and 3 horses handles it quite easily on loose soil. Five horses could be used by hitching one team ahead of the others. In a soil infested with couch grass it would, no doubt, draw rather heavy the first time or two. It is possible to take off a couple of teeth, but unless the soil was particularly heavy it would not be necessary.

2. Yes, a 13-tooth cultivator.

### Variety is Profitable and Essential.

EDITOR "THE FARMER'S ADVOCATE":

I read with pleasure in your issue of April 27 the article entitled "Variety in Farm Life," by Morley Louis Swart, and I heartily endorse Mr. Swart's statements. So many on the farm seem to lose sight of the fact that "variety is the spice of life." (This is especially true of some of the naturally most isolated communities), and to get the most out of this world and to make the best of our lives we must have recreation of whatever kind best suited to the individual. We owe this to ourselves, our body needs it, our brains crave it. We need recreation, mentally as well as physically. How true is the old school rhyme, "all work and no play makes Jack a dull boy."

If everyone attended strictly to this branch of our welfare there would be fewer nervous breakdowns and fewer inmates of hospitals for the feeble minded. Farming is an ideal occupation if we run the farm, not let it run us. I was pleased, in Mr. Swart's letter, to notice that he speaks of farming as a profession. I like that word; for surely the successful agriculturist is a "professor." He has a vast wealth of education in the necessary line, else he would never have overcome the many difficult problems with which he has been confronted. The fountains of knowledge have certainly been opened to him. We must not alone worship college education. Knowledge is power in whatever line of business in whatever walk of life, and the farmer is the most independent man on earth if he lives his life as he should, in fact lives up to the rules laid down by our Middlesex friend.

It is said that the Chinese consider the scholar as socially the highest of rank, while the farmer takes second place. It is not for me to judge as to which is highest, but I know farming is an ideal, a noble calling, and one by which the world is fed. There always have been and always will be agriculturists. From the beginning to the end there must be seed time and harvest.

We read that Xenophon, who lived from 434 to 355 B. C., said "agriculture is an art that renders those who understand it rich; but leaves those who do not understand it, however much they may labor in it, to live in poverty." Then Cato, who also lived before Christ, said, "keep the dry provender which you have laid up for winter, and think how long a winter it may be." A Flemish proverb has it, "without forage no cattle, without cattle no manure, without manure no crops."

In all the different vocations of life there are failures, all cannot be successful. Still it should be the aim of every farmer worthy of the name to make the most of his opportunities (which are many and golden) to inspire to the highest rung of the ladder of success. We may not attain the highest, but I believe we shall be rewarded according to our deserts.

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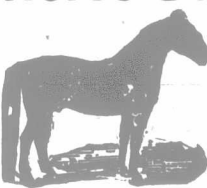
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**Questions and Answers.**  
Miscellaneous.

**Steel Cable for Hay Fork.**  
Is steel cable better than rope for a hay fork? What is the right size to get? Will it run on the same pulleys as rope? What will it cost per foot?  
H. H. C.  
Ans.—We have never seen steel used. Rope is in general use in Ontario and as a usual thing it ranges from 3/4 to 1 inch.

**Whitewash.**  
How is a whitewash, that will not rub off, made? Can it be applied to painted boards?  
M. E. E.  
Ans.—Slake one-half bushel of lime in warm water, keeping it covered during the process. Strain the liquid through a fine sieve or strainer, and add one peck of salt previously dissolved in warm water, three pounds of ground rice boiled to a thin paste, half pound of powdered Spanish whiting and a pound of dissolved glue. Add five gallons hot water to the mixture. Stir well and let stand for a few days, then heat and apply hot. One pint of this mixture will cover a square yard.

**Drainage Outlet—Hens Moulting.**  
I own two acres of orchard in the town. One man who lives to the east of the lot has a very wet garden, and for some time he has been at me to run a drain across my orchard and put a large box inside his garden. He promised to put on one man and do half the work, so we started on a Friday morning and run on an old drain right across the orchard which had been there for years but was blocked. After working at it two days we were not nearly completed. My neighbor came over and told me he had done his share, and said that I would have to fill in the rest of the drain and put in the box in his garden. Under these circumstances can he compel me to finish it as the drain is to his advantage?  
1. Can I fill in the drain and charge my neighbor for the time I am spending on the drain? Can he compel me to run a drain through my lot to drain his garden? Who is responsible for keeping this new drain in working order?  
2. Can a man drain his surface water on my lot where there is no water course? Should he not pay me part or all the expenses for a drain, as it is all for his own benefit?  
3. How can I get my hens to moult early? I would like to have them moult in July or August, before the eggs go up in price? I want them to begin early in the fall and keep it up all winter. What do you think is wrong with little chicks about three weeks old that get dull and droop their wings and in two days are dead? I cannot see any vermin on them. Please give cause and cure, also the best mixture to spray the hen-house to keep it clean.  
E. P.

Ans.—1. If the natural water course is through your orchard it is necessary for you to give an outlet, but the neighbor would be responsible for a share of the expense. If it is left to an award each party affected by the drain would have to do a certain amount of work, depending on the extent of benefit the drain is to his land. The upkeep of the drain would be apportioned in a similar manner. Not knowing the circumstances of agreement or lay of the land it would be difficult to say whether or not you could charge your neighbor for work you thought he left unfinished.  
2. Not unless it is the natural water course. An engineer would levy the expenses according to the amount of land benefited by the drain.  
3. Place the fowls on half the usual rations for 15 or 20 days. The effect of this treatment has a tendency to stop egg production and loosen the old feathers. At the end of 20 days resume full ration. A little linseed meal may be added to the mash. The chicks have symptoms of white diarrhoea, which may be caused by improper incubation, improper brooding, chilling, poor ventilation, poor food, filth or specific organisms. Diseased chicks seldom amount to much. House in clean, comfortable quarters; feed wheat, corn meal, shorts and bran equal parts mixed with buttermilk and give plenty of green feed. Coal oil is splendid material to apply to a poultry house to rid it of vermin. Whitewash with carbolic acid added is also good.

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**Gossip.**

**Canadian Shorthorns Sold in U. S. A.**

Of considerable interest to Canadian live-stock breeders are the results of the Shorthorn sale of Thos. Stanton, of Illinois, on June 7. A number of animals had been assembled for the auction, and the major portion of them were bred in Canada by our foremost Shorthorn breeders. Not only did this offering bred in Canada sell well but they eclipsed other sales up to that date and realized one of the best averages of the entire circuit of Shorthorn sales. Field Marshall, bred by A. F. & G. Auld, Guelph, and shown by them in the senior calf class at Toronto last year where he won first, sold at the handsome price of \$3,775. He was got by Bandsman's Commander and was out of Belmar Wimple. Commander in Chief, also by Bandsman's Commander, and bred at the Auld farm, went at \$1,400. Seven animals bred by Mitchell Bros., Burlington, 6 of which were got by Right Sort, sold for \$7,725, or an average of \$1,103.57. Victoria Pleasant Valley and Nonpareil 46th, bred by Geo. Amos & Sons, Moffat, changed hands for \$775 and \$1,600 respectively. Five lots were bred on the farm of W. A. Dryden, Brooklin, and they sold for a total of \$4,750. Other Canadian herds represented were those of Wm. Waldie, Stratford; Ontario Agricultural College, Guelph; John Miller Jr., Ashburn, and R. & S. Nicholson, Parkhill. The splendid prices realized by these Shorthorns testifies to the quality of Canadian stock and the esteem in which they are held by breeders at large.

**Questions and Answers.**  
 Miscellaneous.

**Shoe Boil.**

I have a colt with a lump on the front leg at the point of elbow. It is about the size of a man's fist and seems soft but a little feverish. What is the cause and treatment?  
 W. J. H.

Ans.—The lump is frequently caused by the shoe bruising the point of the elbow. Remove the cause and bathe the affected parts thoroughly.

**Probating a Will.**

I was appointed executor for my uncle's will, and I would like a little information on it. The boy is left the farm, stock and implements. The girls are to receive a certain amount of money to be paid in two, three and five years. The children are all agreeable to the way the will was left. Is it necessary to have the will probated? The children would rather not if it could be done in any other way. The will has never been registered. Is it necessary to have it registered or have anything done about it? The farm is clear of all debt. There is no one else to profit by the will, the children being orphans.  
 SUBSCRIBER

Ans.—In order to secure yourself and avoid any possibility of trouble in the future the will should be probated. A probated will is also registered.

**Rheumatism.**

1. Have a cow raising two calves, she seems to be stiff in the hips and can't raise her hind feet up as usual, also her front feet seem sore. Her hair is quite wet in mornings, appearing like a sweat. She breathes a little faster and harder than usual, appetite fine.
2. Have a two-year-old steer in bush pasture, front legs seem swollen from knees up. They are quite large. No scars nor bruises on them.  
 F. McL.

Ans.—1. The symptoms indicate rheumatism. Keep her in dry, comfortable quarters. Bathe the joints with hot water, then rub well with hot, camphorated oil. Give 10 grains salicylic acid three times daily.

2. Symptoms indicate the disease known as blackleg. Read article on Blackleg in Eastern Counties in May 11 issue. It is advisable to consult your local veterinarian.

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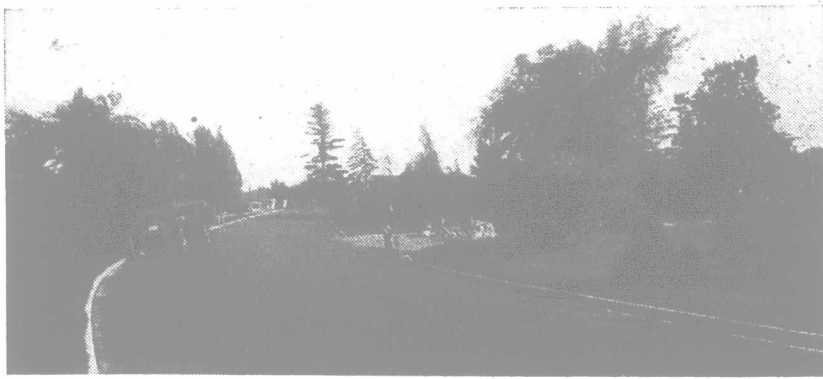
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**Questions**  
 Misc

**Drainag**

A B C and D ment with the the south side road and front of farms; the ratep for their benefit council one-half road. After wh whose land lies o road opposite application to through the road him sufficient out acres of his farm ment drain. No repair; this drain age and Water

1. Can A, B this drain clean it were under th Courses Act?

2. What step bring the drain and Water Cour

3. Now, as l acres of his land to pay his porti drain?

Ans.—1 and 2 giving satisfaction affected by the clerk of the mun to serve upon th of lands affected signed by him, a day and hour to the ditch at v meet and estim ditch and agree u of the work. F agreement an e to survey the d farm affected a cost.

3. Yes.

**Pump**

In "The Ad 17 your answer to questions I water from a w pump in separat pose I am usin would like to c hose through wh to a height of a in case of fire filling silo. If th style of pump s and where shoul How many horse be used to do the and milking mac My barn is 114 f to peak, separator located nearly in to silo. There is size above wh placed. This ro can be made fr advisable the p in this room w with barn floor.

Ans.—It is water would be force pump to be of fire, unless t acting, so as to gi The same would the silo. It is even steady stre secured direct fro wetting corn wh stream of water pipe at the cutt to be lifted abo force pump must could be connecto A 2-horse-power be powerful eno required. The ro be a good plac believe a pneum could be placed or in the basem be no danger fr more satisfactory quired. A tank hold a supply be of use in ca and the same siz pump the water tank is air tight, into it compress pressure sufficien any part of the



**Questions and Answers.**  
Miscellaneous.

**Drainage Problems.**

A B C and D enter into an agreement with the municipal council along the south side of a road between the road and front of the above ratepayers' farms; the ratepayers paying one-half for their benefit and the municipal council one-half for the benefit of the road. After which E, a ratepayer whose land lies on the other side of the road opposite C's property, makes application to have larger tile put through the roadbed in order to give him sufficient outlet to drain about 40 acres of his farm over into this agreement drain. Now the drain is out of repair; this drain is not under the Drainage and Water Courses Act.

1. Can A, B, C and D demand this drain cleaned out the same as if it were under the Drainage and Water Courses Act?

2. What steps must they take to bring the drain under the Drainage and Water Courses Act?

3. Now, as E wants to drain 40 acres of his land can he be compelled to pay his portion to help repair the drain? D. M.

Ans.—1 and 2. If the drain is not giving satisfaction any owner of land affected by the drain can file with the clerk of the municipality the requisition to serve upon the owners or occupants of lands affected a notice in writing signed by him, and naming therein a day and hour and place convenient to the ditch at which all owners are to meet and estimate the cost of the ditch and agree upon the apportionment of the work. Failing to arrive at an agreement an engineer can be called to survey the drain and levy on each farm affected a portion of the work or cost.

3. Yes.

**Pumping Water.**

In "The Advocate" of February 17 your answers appear in reference to questions I asked about bringing water from a well through pipes to a pump in separator room; for this purpose I am using 1½-inch piping. I would like to connect to this cistern hose through which water can be forced to a height of at least 35 feet for use in case of fire and when needed in filling silo. If this is practicable what style of pump should be used? How and where should connections be made? How many horse power engine should be used to do the pumping, run separator and milking machine—each separately? My barn is 114 feet long, about 40 feet to peak, separator room 11 by 14½ feet, located nearly in center of barn and next to silo. There is a room exactly same size above where water tank is placed. This room with little expense can be made frost proof. If thought advisable the pump can be placed in this room, which is on the level with barn floor. G. W. M.

Ans.—It is doubtful if sufficient water would be supplied direct from a force pump to be of much use in case of fire, unless the pump were double acting, so as to give a continuous stream. The same would apply in case of filling the silo. It is necessary to have an even steady stream which can only be secured direct from a supply tank. In wetting corn when filling the silo the stream of water is run into the blower pipe at the cutting box. If water is to be lifted above the pump level a force pump must be used and the hose could be connected to the pump spout. A 2-horse-power gasoline engine should be powerful enough to do the work required. The room mentioned should be a good place for the pump. We believe a pneumatic storage tank which could be placed in the pump room or in the basement where there would be no danger from frost, would prove more satisfactory for the purpose required. A tank sufficiently large to hold a supply of water that would be of use in case of fire, could be secured, and the same size engine would do to pump the water into it. The steel tank is air tight, and the water pumped into it compresses the air and gives pressure sufficient to force water to any part of the building.

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Two young bulls, Weldwood Roan Revelation, a dark roan out of Mina Gem, a big, strong cow with an official record of 10,340 lbs. of milk, 388 lbs. butter-fat, and Weldwood Red Victor, out of Lena of Northlynd, with an official record of 7,601 lbs. milk and 328 lbs. butter-fat. These bulls are both sired by College Duke = 85912 =. Also a few cows and heifers.

WELDWOOD FARM, The Farmer's Advocate, London, Ont.

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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 choice breeding, and especially suitable for foundation purposes.

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Two good young bulls for sale, one fourteen and one seventeen months old, also a couple younger. Intending purchasers met at station on request.

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Five high-class bulls, from 10 to 15 months, two sired by Real Sultan, others just as good. Am pricing them low, as it is getting late in the season. A few heifers and young cows to offer, some milking families. F, eight paid.

Stewart M. Graham, Lindsay, 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: THOMAS GRAHAM, R.R. 3, Port Perry, Ont.

**Burnfoot Stock Farm, Caledonia, Ont.** Breeders of heavy-milking dual-purpose Shorthorns. We offer now a handsome roan bull, calved Aug. 13, 1915, out of Jean's Lassie, the champion 2-year-old in the R.O.P., and sire as good. S.A. Moore, Prop., Caledonia, Ont.

**Shorthorns—"Pail Fillers"**—Our Shorthorns are bred and developed for big milk production. If you want a stock bull bred that way, we have several; also Clyde, stallion rising 3, won 2nd at Guelph the other day in a big class. P. Christie & Son, Manchester, Ont.

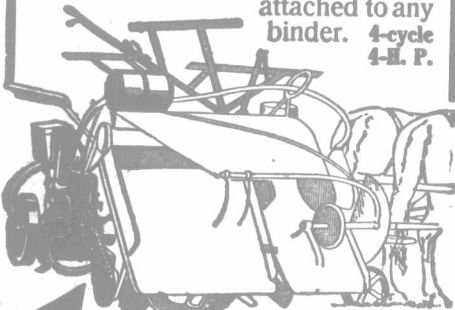
**Shorthorns and Swine**—Have some choice young bulls for sale; also cows and heifers of show material, some with calves at foot. Also choice Yorkshire sows. ANDREW GROFF, R.R. No. 1, ELORA, ONT.

**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.



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From 18 months down. Grandsons of "King Fayne Segis," "King Segis Pontiac," "Rag Apple Korndyke 8th—the best of the breed." Write us giving particulars as to your requirements.

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Herd headed by May Echo Champion, full brother of May Echo Sylvia, who made 24 lbs. butter in seven days. Females for sale from one year old upwards. Prices right for quick sale.

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R. W. Walker & Sons, R. R. 4, Port Perry, Ont.

**Questions and Answers. Veterinary.**

**Crippled Cow.**

Cow eats and milks well, but does not want to stand up. When she walks she goes very sore on her hind legs and tries to walk on her toes. When turned on pasture she returns to the barn and lies down after about 10 minutes.

N. P. W.

Ans.—The symptoms indicate foul in the hind feet. Keep her in a thoroughly dry, comfortable box stall; cleanse the hind feet thoroughly, especially between the clouts. Keep poultices of hot linseed meal to the feet until the acute soreness disappears. Then, if there are any raw surfaces dress them three times daily with carbolic acid 1 part, sweet oil 30 parts. V.

**Infectious Diarrhoea—Mammitis.**

1. For nearly a year we have had trouble with our calves taking diarrhoea when a day or two old, and dying.

2. During the last few years we have also been troubled with an apparently contagious udder trouble. A quarter will become affected and give curdled milk and we have trouble in preventing the teat closing with a scab at the point, or a lump within the teat.

3. Are the two diseases related?

H. G.

Ans.—1. This is an infectious form of diarrhoea, due to a germ that exists in the stable, entering the navel opening and gaining the circulation. Thoroughly disinfect the stable by sweeping and dusting thoroughly, and then giving a thorough washing with a hot 5-per-cent. solution of crude carbolic acid, or if whitewash be not objectionable give a thorough coat of hot lime wash with 5 per cent. crude carbolic. The whitewashing a few days after the washing gives more thorough disinfection. Get a solution of corrosive sublimate, 20 grains to a pint of water, and dress the navel as soon as possible after birth and 4 or 5 times daily afterwards until healed. If the calves are fed by hand, add to the milk one-quarter of its bulk of lime water. Mix 1 part formalin with 15 parts water, and if a case appears add a teaspoonful of the mixture to each part of milk taken.

2. We do not think the udder trouble is contagious. The predisposition to little tumors forming in the teats is to a great extent congenital. A cow that is troubled this way will produce heifers predisposed to it. The usual treatment for mammitis is the administration of a purgative of 1 to 2 lbs. Epsom salts and 1 oz. ginger and following up with 6 drams nitrate of potassium twice daily for 2 days. Bathe the udder well frequently with hot water, and after bathing rub well with camphorated oil. Milk four times daily until the milk becomes normal. If scabs form, dress three times daily with oxide of zinc ointment. If little tumors form on the teat a veterinarian may operate successfully with an instrument especially designed for the purpose.

3. The diseases have no connection. V.

**Miscellaneous.**

**Lame Colt.**

I have a three-year-old colt very lame when I take him out, and when I drive him a short distance he gets better. He is lame on the fore foot. He was lame when a foal the first year and got over that, and last winter he got bad again. I had the veterinarian examine him and he told me to blister him and I did, but it did him no good. What do you advise, or do you think he will get better. There is no swelling or heat to notice. D. McE.

Ans.—If the colt was examined by a qualified veterinarian it would be advisable to follow his advice. Blistering is the remedy generally applied for lameness of the leg or foot when the bone is involved. One application may not be sufficient it may be necessary to blister several times. From the symptoms given it is difficult to diagnose the case without seeing the animal.



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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. G. FLATT & SON, R. R. 2, Hamilton, Ont.

**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  
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**Dumfries Farm Holsteins**—Think this over—we have 175 head of Holsteins, 50 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, Ontario

**Lakeview Farm, Bronte, Ont.** Offer for sale, sons and grandsons of 100-lb cows; one is out of a 24.56 lb. 3-year-old daughter of Lakeview Rattler's 28.20 lbs., the latest Canadian champion 30 day butter cow 8 months after calving, and is half brother to L. D. Artis, 34.66-lb. Canadian champion senior 3-yr-old. Terms to suit purchaser.  
MAJOR E. F. OSLER, Prop. T. A. DAWSON, Mgr.

**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.

**Evergreen Stock Farm** High Class Registered Holsteins. We keep nothing but the attractive, profitable and producing kind. Just now we are offering a choice young bull 10 months old and ready for light service. The records of his dam and sire's dam average 25 lbs. butter in 7 days and 85 lbs. of milk per day. Moreover he is a show bull with just a little more white than black. First cheque for \$100 takes him.  
A. E. HULET, Bell Phone NORWICH, ONT.

**For Sale—Sons of King Segis Walker**  
From high-testing daughters of Pontiac Korndyke. Photo and pedigree sent on application.  
A. A. FAREWELL OSHAWA, ONTARIO

**Pioneer Farm Holstein Herd** Has only one ready-for-service son of Canary Hartog, whose three near dams, one of these at ten years old, average 30 lbs. butter in 7 days and 108 lbs. milk in one day. This fellow, 3 1/2 white, is a handsome son of Calamity Snow Mechthilde 2nd, a 22.86 lb. 3-yr-old daughter of Prince Aaggie Mechthilde, who has 7 yr. 2-year-old daughters averaging 14,800 lbs. milk in R.O.P.  
Walburn Rivers, R. R. No. 5, Ingersoll, Ontario. Phone 343 L, Ingersoll Independent.

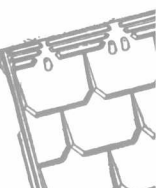
**For Sale** Only three bull calves from our senior herd sire and a few from the junior herd sire left. In these is combined some of the richest testing blood of the breed. Also females of all ages, 75 or 80 head from which to choose.  
M. L. Haley & M. H. Haley Springford, Ontario

**Hospital for Insane, Hamilton, Ont.** For Sale—Holstein bulls, varying in age from 1 to 11 months, from Merit dams, and the grand bulls, Sir Korndyke Wayne De Kol, grandson of Pontiac Korndyke, or Lakeview Dutchland Le Strange, a grandson of Count Hengerveld Fayne De Kol. Prices right.  
Apply to Superintendent

**FAIRVIEW HOLSTEINS** For Sale—two bulls, mostly white, one 15 months other 11 months, from tested dams. Six 2-yr-old heifers bred to freshen next fall and early winter. Nine yearling heifers not bred, also a few choice young cows. All bred in the purple and priced right.  
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Two yearling bulls  
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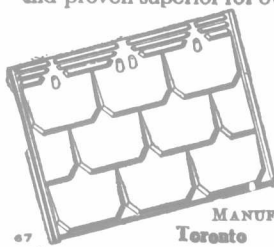
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### ALDERLEY EDGE AYRSHIRES

Two yearling bulls sired by Lakeside Day Star (Morton Mains Planet). Write for description. **J. R. Kennedy** Knowlton, Que.

**Jerseys for Sale**—I am offering two very fine Jersey bulls, age 10 and 12 months, also heifer calves from imp. sire and high-testing dams. To prevent inbreeding will sell my stock bull, De La Roche Duke (imp.). Prices right. **CHAS. E. ROGERS, Ingersoll, Ont.**

### Questions and Answers. Veterinary.

#### Skin Trouble.

The ears of my horse have some skin disease. There are several whitish patches on the inside of the ears. I have been able to rub off some of the patches, but the larger ones are sore to the touch.

**H. H. M.**  
Ans.—This is some form of eczema. Get an ointment made of 4 drams boracic acid, 20 drops carbolic acid and 2 oz. vaseline, and apply a little to the affected parts three times daily.

#### Rheumatism—Heaves.

1. Mare 13 years old suffers from rheumatism in muscles of both fore and hind legs.

2. Horse 12 years old has heaves. I am told that the administration of Fowler's solution of arsenic given regularly will enable him to do his work with ease. What doses should be given?

**N. B.**  
Ans.—1. As in man, rheumatism in animals is hard to treat successfully. Give her 2 drams salicylic acid three times daily. Bathe the affected muscles well with hot water three times daily, and after bathing rub well with hot camphorated oil. Keep in comfortable, thoroughly dry and clean box stall, and as far as possible avoid wet, or anything to cause chills.

2. The administration of arsenic has some action in temporarily relieving the symptoms of heaves, but in order that the action may continue it is necessary to continue the administration in gradually increasing doses, which causes fatty degeneration and disintegration of tissue, which soon renders the horse worthless. None but dishonest dealers practice it, in order to sell or trade the animal. Feed small quantities of bulky food and larger quantities of grain, in order to not overload the stomach. As far as possible avoid working him soon after a full meal; see that everything he eats is of first-class quality and dampen all he eats with lime water.

#### Gossip.

The manager of Grape Grange Farm, Clarksburg, Ont., where Aberdeen-Angus cattle are bred, writes that from their advertisement in "The Farmer's Advocate" they have recently sold six young females, all in fact they had to spare. They are still offering several choice young bulls from the imported sire Pradamere. They also report that the new head of the herd, Middlebrook Abbot 2nd, first senior calf at Toronto and Ottawa in 1915 is doing well. See the advertisement in this paper.

#### A Record Sale of Shorthorns in U. S. A.

On June 1, C. A. Saunders & Sons, Manilla, Iowa, sold 49 Shorthorns by auction at an average price of \$1,068. Up to and including that date it was said to be the highest average since the dispersion of the New York Mills herd about 40 years ago. A feature of the sale worthy of mention was the fact that all except two head were bred on the farm at Manilla. The major portion of them were their Cumberland strain of Shorthorns, and the popularity of this type was increased by the phenomenal success of the auction. The United States is breaking into the Argentine market, which for years has drawn from the herds of Great Britain, and if the breeders of this Continent can impress upon those live-stock men to the south of the Isthmus the excellence of our cattle, they will find a lucrative market there. Francisco V. Maissa, from Buenos Aires, purchased five lots, including the top-priced Gypsy Cumberland 3rd, which cost him \$3,030. Leslie Smith secured Gypsy Countess, with a bull calf at her side, a full brother to Cumberland's Type, for \$2,100. The highest-priced calf by Cumberland's Type was Type's Lord, a senior calf, which went to Bellows Bros., for \$2,600. Royal Type, by the same sire, was cashed for \$1,600. Ten yearling heifers by Cumberland's Type, a January heifer calf and 5 bull calves by the same sire sold for a total of \$18,250, or an average of \$1,140. The general average was \$1,094 on 36 females and \$994 on 13 bulls. Shorthorn breeders were elated over such a grand success.

### Gladden Hill Ayrshires

Laurie Bros.



**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.**  
THE WOODVIEW FARM  
**JERSEYS**  
LONDON, ONTARIO  
John Pringle, Proprietor

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.

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.

### 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, Ontario**

# FARMERS

## Have you had the Empire Mechanical Milker Booklet?

It is free, it is interesting—it is full of facts that every wideawake farmer and dairyman should know. Write for it to-day.

Empire Mechanical Milkers have solved the problem of milking. They free you from dependence upon hired help, and make it possible to keep more cows.

With one double or two cow unit, one man or a boy will milk 20 to 30 cows in an hour, and one man can operate two double units. See what a saving this would mean to you in wages if hired help does your milking; or in labor, bother and time if you do it yourself?

Read about it in the Booklet. Read the letters from satisfied users

# EMPIRE MECHANICAL MILKER

takes the Drudgery out of Dairying—cuts the wages bills—protects the milk from stable air, dirt and germs and usually induces cows to let down more milk.

You, or your Boy, or one hired man, and an "Empire Milker" could take care of a pretty large herd and do it easily. The Empire successfully imitates the action of a sucking calf and is easier on the cows than hand milking—it does its work thoroughly and well—milks evenly, smoothly and naturally—it is good for the cows—saves you money—increases your profits and makes you independent.

If you haven't had the Empire Milker Booklet, fill in the coupon and we'll send it to you. Do it at once.

Please send me The Empire Mechanical Milker Booklet. I have..... cows.

Name and Address .....

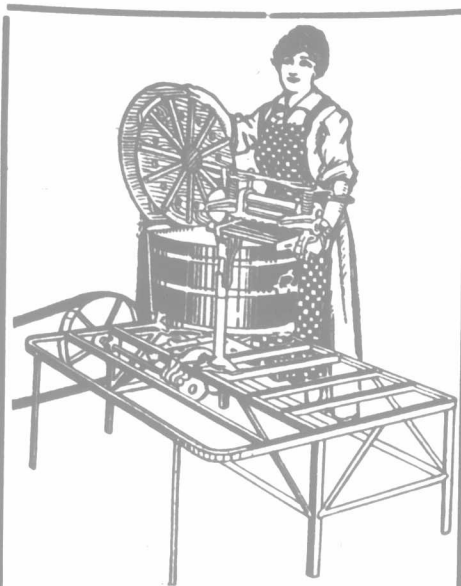
Dept. C.

**LANSDOWNE, ONT.**  
DEAR SIRS:—  
The two double unit milkers have given me excellent satisfaction. The cows' teats and udders were never in nicer condition. The Empire Milker is a boon to any farmer, as one man can milk my 22 cows in 35 minutes.  
**L. B. WEBSTER.**

**JASPER, ONT.**  
GENTLEMEN:—  
I purchased one of your milker outfits last spring. I would have had to dispose of my cows had I not bought it, as I had no help to milk. The machine is doing all you claimed for it and I believe it is the best on the market.  
**WILLIAM KING.**

**The Empire Cream Separator Co.**  
of Canada, Limited,  
**MONTREAL, TORONTO, WINNIPEG.**





Take the "blue" out of Monday

Hitch the farm engine to a

Page Power Washer

and immediately you take the drudgery out of wash-day. No longer need you toil for hours over a tub—here's a servant that will do the heaviest week's wash in less than an hour—and at a cost of about 5 cents per week. The "Page" is the simplest, strongest and most easily-operated machine of its kind—a combined washing and wringing outfit that washes clothes clean and without the slightest injury to delicate fabrics. Our belief in the Page Washer is shown by our willingness to let you have it to try, with a wide-open offer to take it back at our own expense if you are not entirely satisfied with it. Price \$32.50 delivered anywhere in Ontario.

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

Good Luck

- COTTON SEED MEAL
- CALF MEAL
- OIL CAKE MEAL
- FLAXSEED GLUTEN MEAL
- POULTRY FEEDS
- SEED POTATOES
- SEED GRAINS

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

**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.

**Townline Tamworths** We can supply young Tamworths of both sexes and any desired age of superior quality. Also Leicester Ram and Ewe lambs, Pekin ducks, Langshan cockerels and pullets. Write us your wants. T. Readman & Son, Streetsville, Ont. R.M.D.

**Pine Grove YORKSHIRES** 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.

**Lakeview Yorkshires** If you want a stock boar of the greatest strain of the breed (Cinderella), bred from prize-winners, for registration back, write me. A very nice lot of all ages.  
JOHN DUCK, Fort Credit, Ontario.

**TAMWORTHS**  
Young sows bred for September farrow and some nice young boars. Write for prices.  
JOHN W. TODD, R.R. No. 1, CORINTH, ONT.  
Morrison Tamworths and Shorthorns Bred from the prize-winning stock of England. Tamworths, both sexes. 12 sows in farrow, 11th and August. Choice Shorthorns of the drooping strain. Cyclesdale station, 3 1/2 mi. S. of a dandy. Chas. Currie, Morrison, Ont.

Questions and Answers.  
Miscellaneous

Fern Ball.

Do you know how to grow a fern ball? I got one 5 inches in diameter but no directions came with it. What size and shape dish should it be set in? Will a plate do to keep it on or should it be hung up and kept wet?

J. K.

Ans.—A wire hanging basket lined with sphagnum moss is frequently used as a container for fern balls. The moss holds moisture which must be applied frequently.

Plucking Geese.

I have charge of the poultry here, and the lady informs me it is the custom among the people here (French) to pluck the breasts of the stock geese. They claim the geese are better for it. To my mind it seems a cruel practice, and I would like to get your opinion on it before it is done.

H.F.

Ans.—Plucking the breasts of geese to secure the feathers is frequently done in the regular moulting season. When done at the right time it is not so cruel as it would appear.

Registering an Animal.

A sells B a cow and offers to have her registration papers transferred in his name for eight dollars extra, but B did not want them. B sells the cow to C. Is A entitled to register this cow for C, as C agrees to pay all expenses?

J. J. C.

Ans.—If C bought the cow for a pure-bred and paid pure-bred prices for her he can force B to give him registration papers. As it is claimed B does not have them he is obliged to get them from A, if he purchased the cow as a pure-bred in the first place.

Elevated Water Tank.

I would like to build a cement tank large enough to hold about ten or twelve hundred gallons of water. I would like to have it outside away from the buildings, and about eight or ten feet up from the ground so that I could have the water on tap in the house and for washing rigs, etc.

1. Could I build one so that frost would not break it in the winter time?
2. If so, give plans, etc., in your paper as soon as possible.
3. Could you suggest anything better and not too expensive?

H. H. B.

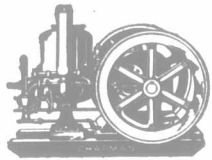
Ans.—1. A concrete tank properly built on a good foundation should withstand attacks of frost.

2. The walls would either have to start from the ground or else rest on a firm base supported by trustle work. A slight give in the foundation might cause the cement to crack. We have seen elevated tanks built by starting the construction the same way as for a silo, and then put heavy iron beams across at the desired height to support the floor, which should be made of concrete. The pipes to and from the tank connect in the centre of the floor. The space from floor to ground is frequently used as a milk house. To hold 1,200 gallons of water would require a tank about 5 feet in diameter and 9.8 feet high. If the tank is 6 feet in diameter it will only need to be about 7 feet high. For tank 6 feet in diameter and 7 feet high and a floor for same about 5 cubic yards of gravel and 4 barrels of cement will be required, provided the wall is 8 inches thick. If 7 feet of concrete were used from the ground up to the tank bottom twice the amount of material less one floor would be used. A board or concrete roof could be built over the tank. A door and possibly a window should be put in the lower part. Wooden tanks are generally used if the structure is to be supported on trustles. The pneumatic storage tank, which may be placed in the cellar out of reach of frost, is gaining in favor. Water is pumped into the steel tank against air pressure. This is sufficient to force water to any part of ordinary buildings.

"Barn Chores a Quick Job-Easy Work"

This is the best time to figure on complete barn equipment to save labor. It may be impossible to get hired men in the future. Our latest improved equipment of feed and litter carriers, pumping systems water basins, etc., will take their place. Many a farmer has found hired men unnecessary where he had the O. W. E. & P. Co.'s labor-abolishing, barn equipment. Ask for descriptive catalogue.

The two principal reasons why installing Barn Equipment PAYS are—the comfort and sanitation for the cattle, and the thoroughness and speed with which the equipment enables one man to do a lot of work. Most of the chores like pumping, grinding, sawing, cutting, and turning of all kinds, require a Gasoline Engine. Write for descriptive catalogue of the "Chapman" and "Toronto" Engines.

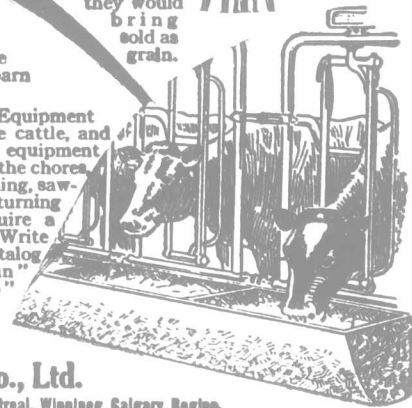


Ontario Wind Engine & Pump Co., Ltd.

95 Atlantic Ave., TORONTO Branches—Montreal, Winnipeg, Calgary, Regina.



The Toronto Windmill runs in a lighter breeze than any ordinary windmill. It will do your pumping day and night. We can supply you with a complete water supply outfit, including air motor, tank, force pump, water basins.



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 & 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

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

**Cherry Lane Berkshires and Tamworths** In 1915 we made a clean sweep at and Tamworths; we have for sale both breeds of any desired age, winners in the West. First and third prize Berkshire boars at Guelph, first and champion Tamworth boar at Guelph.  
S. DOLSON & SON, Norval Station, Ont.

ELMHURST LARGE ENGLISH BERKSHIRES

From our recent importation of sows, together with the stock boar, Suddon Torredor, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed.  
H. M. VANDERLIP, Breeder and Importer R.R. 1, Brantford, Ontario  
Langford Station on Brantford and Hamilton Radial.

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 & NEPIEWS, Burford, Brant Co., Ontario

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

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 boar in keen competition at Toronto in 1915.  
W.M. MANNING & SONS, WOODVILLE, ONTARIO

**Duroc Jersey Swine, Jersey Cattle**—In Duroc Jerseys we have either sex of any desired age, bred from winners and champions for generations back. In Jerseys we have young cows in calf, and young bulls, high in quality and high in producing blood.  
MAC. CAMPBELL & SONS, Northwood, Ont.

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WM. S.  
25 MADISON



# WANTED

## Young Men to Learn Shoemaking

Good wages paid at start. Guaranteed steady employment all the year round. The shoe trade gives employment twelve months in the year. Think it over, and make your application in person or in writing to

**J. W. Hewetson Co. Ltd.**  
Brampton, Ont.

"SECURITY FIRST"

# EXCELSIOR

Life Insurance Company



ASSETS

Over Four Million Dollars

An Excelsior Policy will wipe out that mortgage on your farm

HEAD OFFICE: TORONTO

GET ONE TO-DAY

# 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

We are prepared to pay the best price for cream at all seasons of the year. We pay express charges and furnish cans. Write for particulars.

**WESTERN DAIRY, LIMITED**  
ST. THOMAS, 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.

# NITRATE OF SODA

is necessary for big crops. Send post card for free literature to **WM. S. MYERS, Director**  
25 MADISON AVE., NEW YORK

# Free gasoline for thirty-three hundred miles—the Ford owner's saving in one year

The light, economical Ford with its smooth running engine averages about twenty-five miles on a gallon of gasoline.

Compare this with the gasoline consumption of the Sixteen-Miles-To-The-Gallon car.

Then figure the difference, having an eye on the present price of gasoline.

Six thousand miles is a fair season's travel. The Sixteen-Miles-To-The-Gallon car, going six thousand miles, burns up one hundred and thirty-five more gallons of gasoline than does the Ford going the same distance.

This means that the Ford owner saves enough during a single season to pay for his gasoline for an additional thirty-three hundred and seventy-five miles.

You can travel a year and a half in a Ford for what it costs you to travel one year in the Sixteen-Miles-To-The-Gallon car.

*Ford Motor Company*  
OF CANADA, LIMITED.

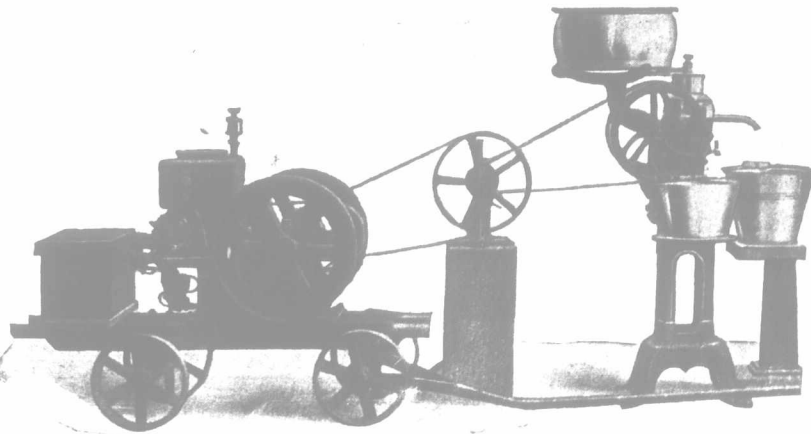
FORD, ONTARIO

Ford Runabout - \$480  
Ford Touring - 530  
Ford Coupelet - 730  
Ford Sedan - 890  
Ford Town Car - 780  
f. o. b. Ford, Ontario



All cars completely equipped, including electric headlights. Equipment does not include speedometer.

16



## SOLVING THE "HIRED HELP PROBLEM"

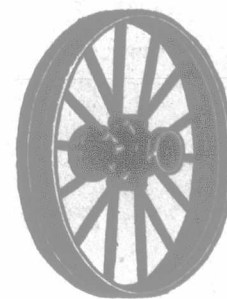
This MONARCH 1 1/2 h.p. Engine attached to our Intermediate Friction Clutch Pulley solves one of the problems for hired help. No counter shaft needed with this attachment. The machine driven is always given its speed automatically, and needs no special attention from the operator. We also make special pulleys to fit separator.

Get our catalogue. It's free for asking. We make all sizes of engines, from 1 1/4 to 35 h.p., Ensilage Cutters, Grain Grinders, Pump Jacks, Saw Frames, Friction Clutch Pulleys.

**Canadian Engines, Limited**  
DUNNVILLE, ONT.

**FROST & WOOD**  
Smith's Falls, Ont.  
Selling Agents East of Peterboro

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



## 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, LIMITED,**

1143 King Street West,  
TORONTO



SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Supplying Coal for the Dominion Buildings," will be received at this office until 4.00 P.M., on Wednesday, June 28, 1916, for the supply of coal for the Public Buildings throughout the Dominion.

Combined specification and form of tender can be obtained at this Department and on application to the caretakers of the different Dominion Buildings.

Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted cheque on a chartered bank, payable to the order of the Honourable the Minister of Public Works, equal to ten per cent. (10 p.c.) of the amount of the tender, which will be forfeited if the person tendering decline to enter into a contract when called upon to do so or fail to complete the contract. If the tender be not accepted the cheque will be returned.

By order,  
**R. C. DESROCHERS,**  
Secretary

Department of Public Works,  
Ottawa, June 7, 1916.

Newspapers will not be paid for this advertisement if they insert it without authority from the Department.

## 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 BUY** until you know what we can do for you. Write today. **HYSLOP BROTHERS, Limited**

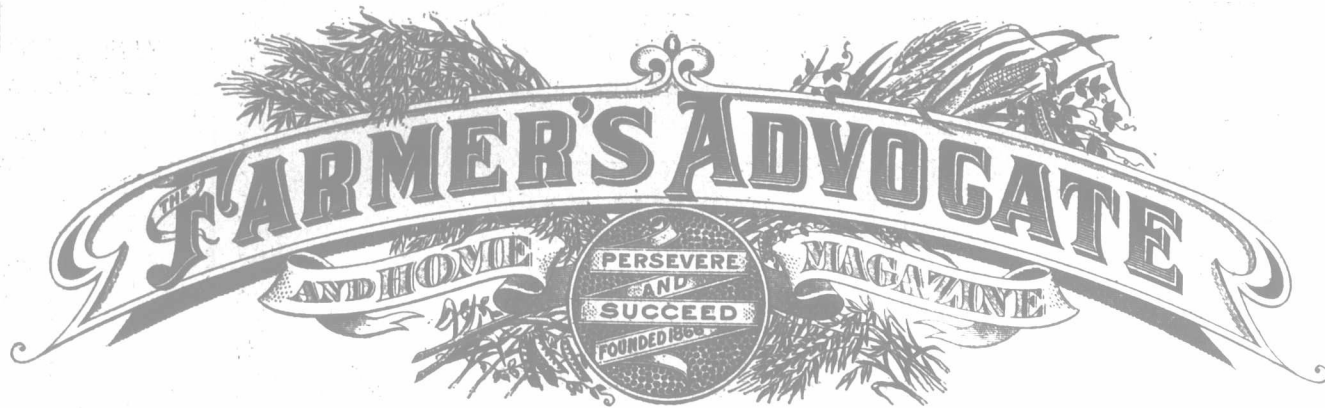
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# The Proof of Quality

The men who pay \$1.50 per year for a farm paper read it. The readers are the buyers. They have the money to purchase a good article and pay cash for it. They are the cream of the country. You reach them through Canada's oldest and best agricultural journal,



the paper which has a price, sticks to it, gets it, is valued by readers over the Dominion because it is solid, substantial, and frowns on fakes. An advertisement in "The Advocate" will sell anything a farmer needs or has for sale. Try it.

Send for Sample Copy, Rate Card and Circulation Statement

## The Canadian Weld Co., Limited

LONDON, CANADA

THE AUDIT BUREAU OF CIRCULATIONS

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