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# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE  
SUCCEED  
FOUNDED 1887

Director Central Exp. Fair  
Dec 31, 1918

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

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Vol. LIII.

LONDON, ONTARIO, JUNE 13, 1918.

No. 1342



## June Air In January

Most any furnace will produce a dry heat—the kind used to dry lumber in a kiln.

But that kind of heat will ruin the health of your family and destroy your furniture.

What month is the balmiest, healthiest, sweetest, most delightful of all the year?

June, of course.

The Sunshine Furnace has been designed, developed and perfected to give to your home in January the same quality of air that you breathe out of doors in June.

The Sunshine Furnace by warming fresh air and charging it with the necessary exact degree of moisture, not only warms but ventilates your home with pure, soft, healthful air every moment of the day.

Above the fuel door of the Sunshine Furnace is a water pan designed with scientific exactness to vaporize into the warm air the precise quantity of moisture necessary to the health and comfort of your family.

In the Sunshine heated home there are no dry, hacking throats, no burning or wrinkling skins, no dust or gas—only pure, humid, balmy, healthful warm air.

**Engineering Service Free** McClary's own heating engineers are at your service when you buy a Sunshine Furnace, to give you free expert advice on your home-heating requirements. Write to the nearest McClary Branch and ask for particulars about this service. A booklet, "Comfort in the Home," makes clear all the things you want to know about furnaces, and it is sent free on request.

## McClary's Sunshine Furnace

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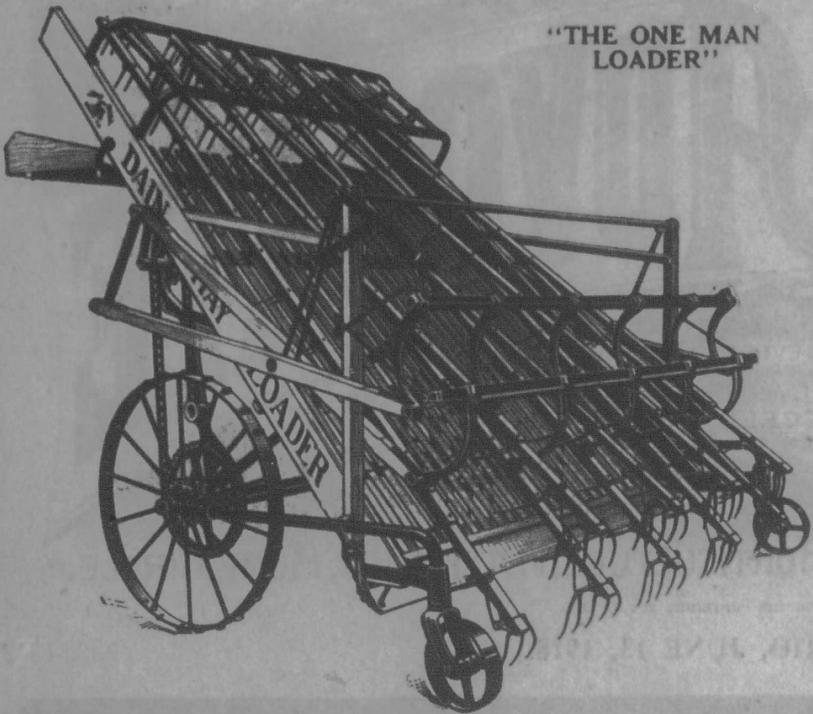
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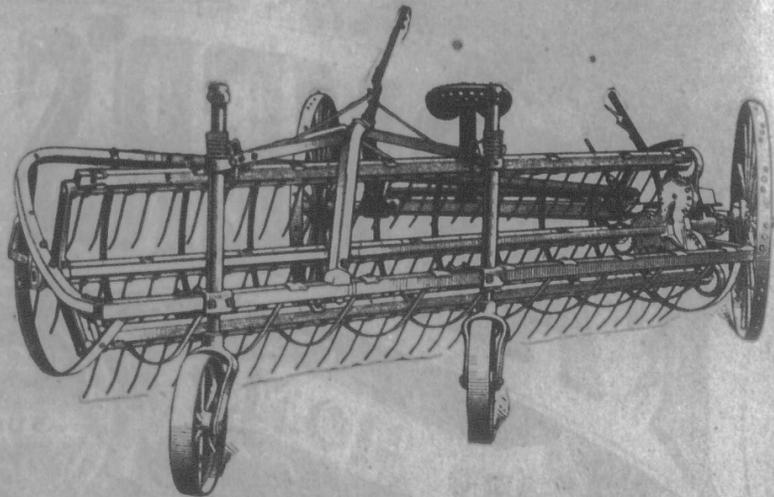
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66



"THE ONE MAN  
LOADER"



"MAKES BETTER HAY—NATURE'S WAY"

BACK of John Deere Dain Hay Tools is thirty-seven years of study—of experience in building hay tools. Built in a special hay tool factory, designed by hay tool experts, John Deere Dain Hay Tools give unusual service and satisfaction.

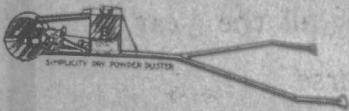
See Your Nearest John Deere Dealer, or Write Direct to—

JOHN DEERE PLOW COMPANY OF WELLAND, LIMITED WELLAND, ONTARIO

### Food Will Win the War

Serve your country and yourself by raising FOOD on the fertile plains of Western Canada. The Canadian Pacific Railway makes it easy for you to begin. Lands \$11 to \$30 an acre; irrigated land up to \$50; 20 years to pay. Loan to assist settlers on irrigated lands. Get full particulars and free illustrated literature from

G. A. Muddiman,  
Land Agent, C.P.R.  
Montreal, P.Q.



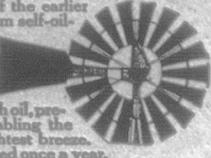
### The little Gun that Kills Potato Bugs

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

Illsley & Harvey Co., Ltd.  
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### THE SELF-OILING WINDMILL

has become so popular in its first three years that thousands have been called for to replace, on their old towers, other makes of mills, and to replace, at small cost, the gearing of the earlier Aermotors, making them self-oiling. Its enclosed motor keeps in the oil and keeps out dust and rain. The Splash Oiling System constantly floods every bearing with oil, preventing wear and enabling the mill to pump in the lightest breeze. The oil supply is renewed once a year. Double Gears are used, each carrying half the load. We make Gasoline Engines, Pumps, Tanks, Water Supply Goods and Steel Frame Saws. Write AERMOTOR CO., 2528 Twelfth St., Chicago



### DUNN CEMENT Drain Tile Machines

Drains all sizes, from 3 to 18 inches. Price, \$250. Cement Drain Tiles are here to stay. Large profits in the business. If interested, send for catalogue No. 2.

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World's Largest Manufacturers of Concrete Machinery



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WHETHER your separator runs hard or easy will tell in your profits. The easier it operates the less wear, the longer durability, the surer the returns on your investment.

Remember—it's the gears and bearings that take the wear. Lessen it with Standard Hand Separator Oil—made specially to reach and lubricate the revolving parts. Pure, highly fluid, non-gumming. As necessary as a special oil for your automobile.

Sold in pint, quart, half-gallon, gallon and 4-gallon cans; also barrels and half-barrels. By reliable dealers everywhere.

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BRANCHES THROUGHOUT CANADA

### Standard Hand Separator Oil

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For Sale

4-inch, eight feet long.  
f.o.b., Moffat, Ontario,  
(near Guelph) C. P. R.  
\$20 per hundred, sold  
only in car-load lots.

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### THE MARTIN DITCHER AND GRADER

DIGS YOUR DITCHES  
GRADES YOUR ROADS  
EASILY  
QUICKLY  
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DOES THE WORK OF 50 MEN  
SEND FOR FREE BOOKLET

The PRESTON CAR & COACH CO. Limited  
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### We Want to Demonstrate on Your Farm

We will send a Gilson Engine, any size, without charge, to any responsible farmer in Canada to try out on his own farm, at his own work.

Write for further particulars of free trial offer, catalogue, and special introductory prices.

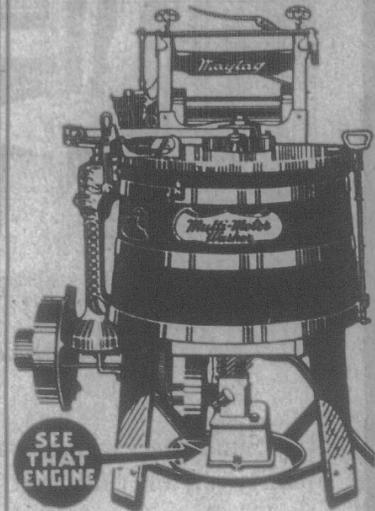


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The old MONDAY with its washday worries becomes a NEW DAY of pleasant work for the woman who uses a

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### GRAND TRUNK RAILWAY SYSTEM

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Offers you and all the family the outing of your life.

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Modern hotels afford city comforts, but many prefer to live in tent or log cabin—your choice at reasonable cost.

Secure your Parlor or Sleeping car accommodation in advance.

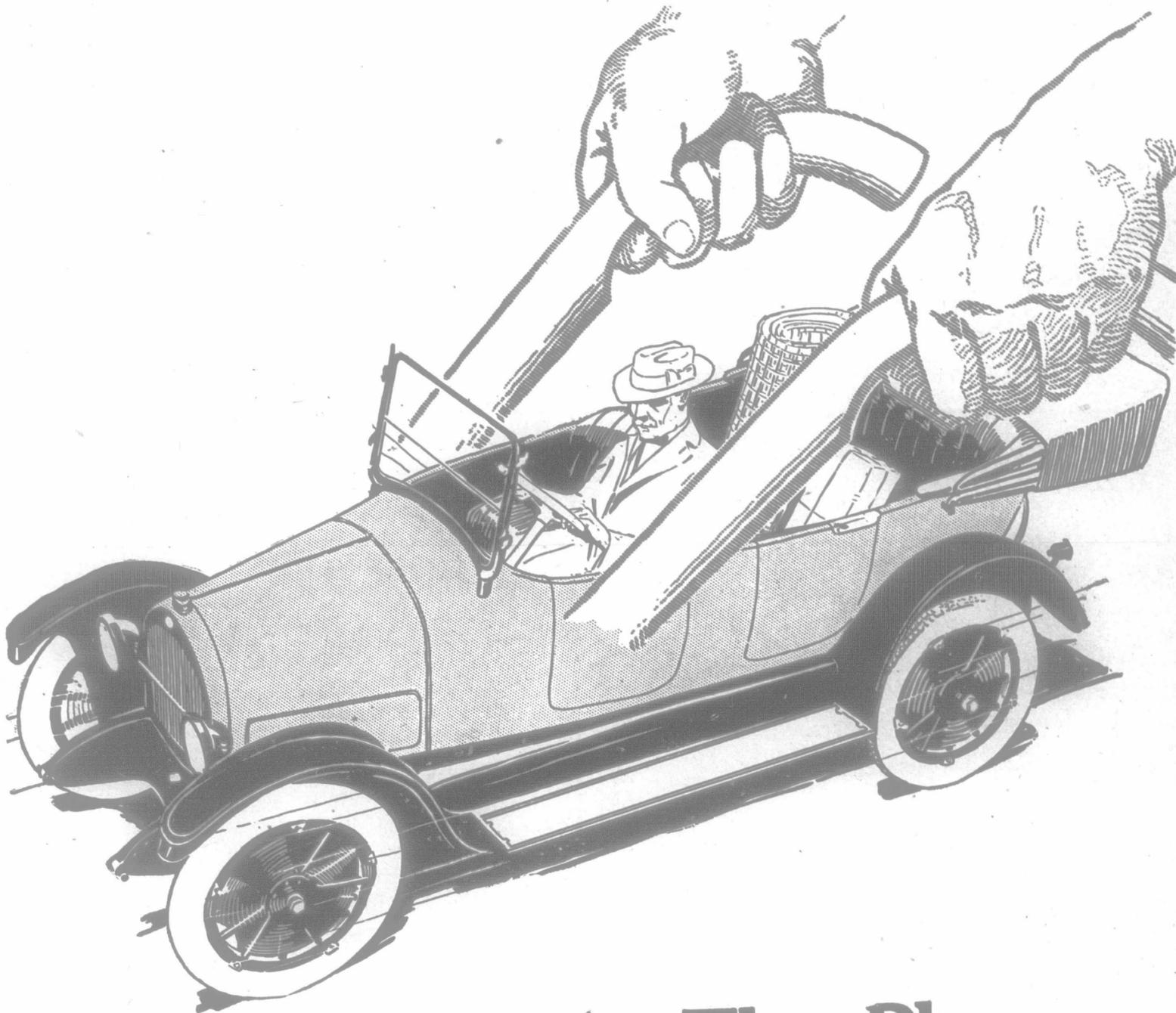
Full information from any Grand Trunk Ticket Agent, or C. E. Horning, District Passenger Agent, Toronto, Ontario.

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## Necessary As The Plow

Successful farmers everywhere demonstrate the *necessity* of motor cars for their *work*. They save time and money—do more in less time with less fatigue.

That the Overland is *completely satisfactory* for farmers is proved by the fact—

That *more than half* of all Overland cars built are taken by farmers.

It is not necessary to pay more than the Overland price—and complete satisfaction cannot be bought for less.

At a low first cost and for economical maintenance, Model 90 gives an abundance of power from its perfected, frugal-with-fuel motor.

It is simple to handle, has narrow turning radius, and easily operating clutch.

It is beautiful and comfortable, with spacious interior, wide seats, deep upholstery, rear cantilever springs, 106-inch wheel base, and large tires, non-skid rear.

It has electric Auto-Lite starting and lighting and vacuum fuel system.

To pay less is to risk the loss of efficiency, comfort, modernized improvements, beauty of design or long-lived service.

Order your Model 90 now.

*Five Points of Overland Superiority?*

**Appearance, Performance,  
Comfort, Service and Price**

Willys-Overland, Limited

Willys-Knight and Overland Motor Cars and Light Commercial Wagons

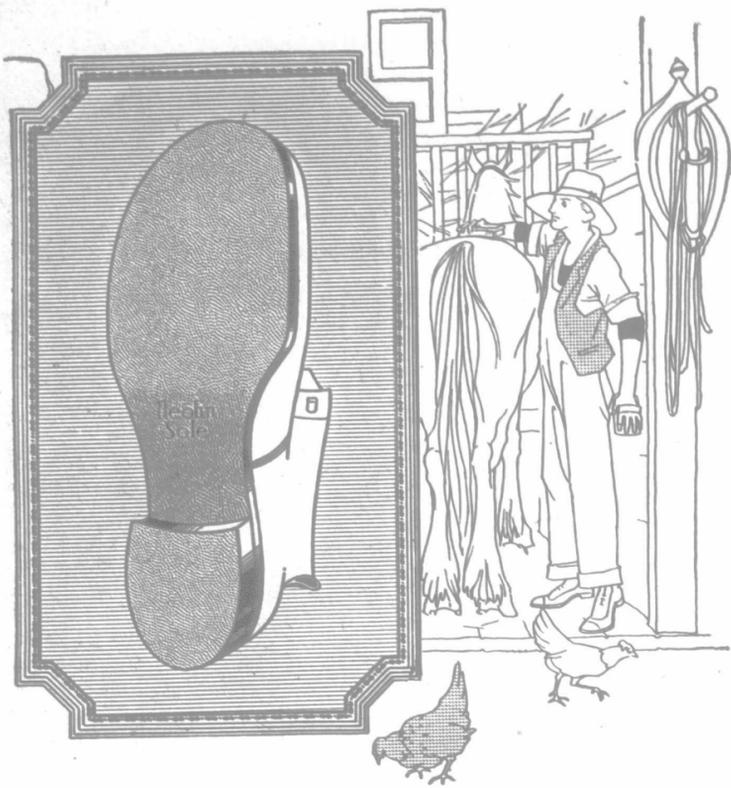
Head Office and Works, West Toronto, Ontario

Branches: Montreal, Que., Winnipeg, Man., Regina, Sask.

Catalogue on request. Address: Dept. 1209

Light Four Model 90

Touring Car



## Comfortable Neolin wears longer

**WORK** boots with Neolin Soles, the easiest boots to wear, lessen your year's shoe bills.

For Neolin wears longer than leather,  
—wears much longer than ordinary leather.

This has been proved on a million feet.

With those who have worn Neolin it is beyond argument.

They *know* how Neolin wears.

They buy Neolin to save money,  
—and to save feet.

Neolin soles make boots comfortable.

Neolin is pliable. It "gives" with the foot.

Neolin is waterproof—keeps out the wet.

For folks on their feet as much as farm-folks, Neolin comfort must make the day's work lighter. For the hard wear of the farm it must be the most economical sole. There are several thicknesses of Neolin Soles.

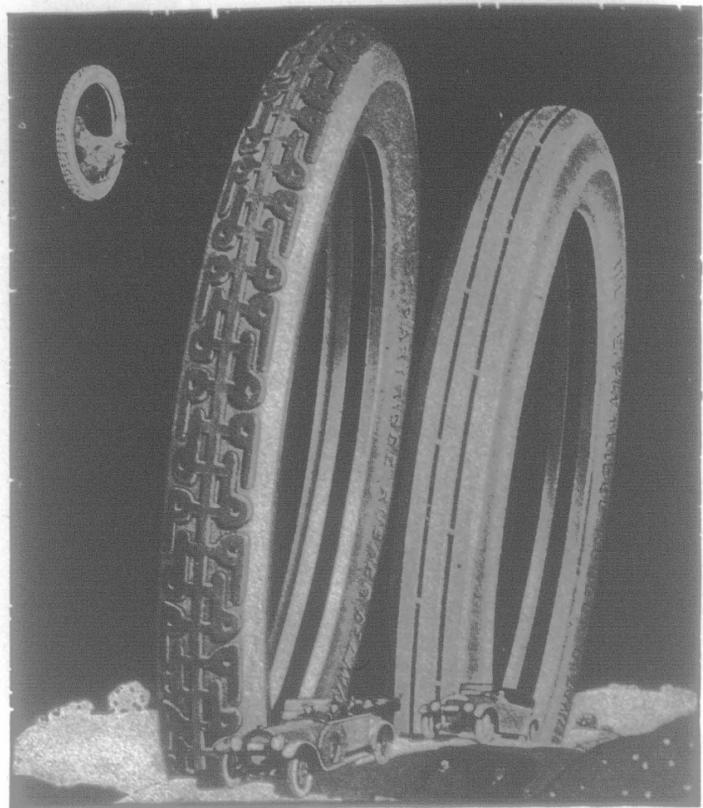
Buy work-boots with Neolin Soles. Save money and be good to your feet.

Neolin half-soles and new Neolin-soled work boots are sold in stores.

Watch closely for the name "Neolin" on the sole. Don't be fooled by substitutes.

The Goodyear Tire & Rubber Company  
of Canada, Limited

# Neolin Soles



## PARTRIDGE TIRES

RIDE EASIER · LOOK BETTER · LAST LONGER

**PARTRIDGE TIRES** ride easier because they are made of the purest of rubber which gives them the maximum of resiliency. They look better because the finish is perfect and is one of the most important parts of their manufacture.

The reason they last longer than ordinary tires is because they are made by hand of the very highest quality of material from start to finish.

If you want better looking, easier riding and longer lasting tires equip your car to-day with PARTRIDGE NON-SKIDS on the rear wheels and PARTRIDGE GUIDE TIRES on the front wheels.

Adjustments all last year on Partridge Tires amounted to less than one-half of one per cent. Every motorist knows that that percentage of adjustments is a record and absolute evidence that Partridge Tires are in a class by themselves. Partridge Tubes are of the same high quality as the tires.

For Sale at all Garages

MADE BY

The F. E. Partridge Rubber Co., Ltd., Guelph, Ont.

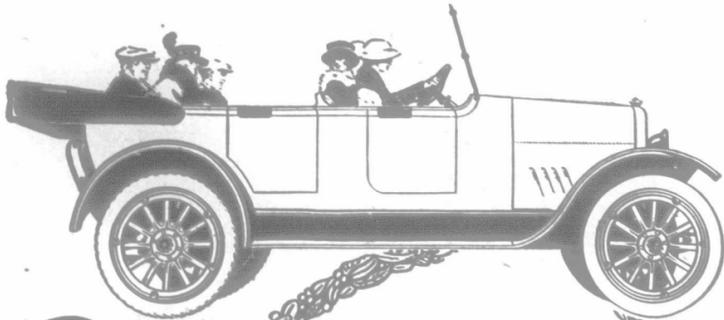
Since 1914 the price of Hogs, of Cattle, of Wheat has more than doubled. The price of

## MILTON BRICK

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THE CAR WITH THE HALF MILLION DOLLAR MOTOR

\$1095  
F.O.B. Brockville

A MOTOR that will give you all the speed you need—and that will cost, for operating, an insignificant "per cent." of the monthly charges involved in the ownership of a big car.

You cannot get Briscoe economy of 25 miles to the gallon—or the extraordinary Briscoe tire mileage—in any but a proved car like this, which has in two years demonstrated the wonder of the Briscoe design.

And there is no beauty in the light car class that matches Briscoe beauty of line and Briscoe finish.

## The Briscoe Motor Co.

LIMITED  
Factory: BROCKVILLE  
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The Massey-Harris Trademark  
Gives a feeling of security when Harvest Days draw nigh.



IF your Binder bears the MASSEY-HARRIS TRADE-MARK you can rest assured that your Harvesting operations will be completed ON TIME and to your entire satisfaction.

Harvest Days are busy days—every minute counts, and a delay in the completion of the cutting may mean serious loss. You can't afford to take chances—it's better to be sure than sorry.

## The Massey-Harris Binder

*is known the World over for its Reliability.*

This is no idle statement but is backed up by the experience of thousands of farmers all over the world, many of whom have Massey-Harris Binders which have been in use for from 10 to 20 years and are still giving the best of satisfaction.

*If you have never used one, ask your neighbor who has and profit by his experience.*

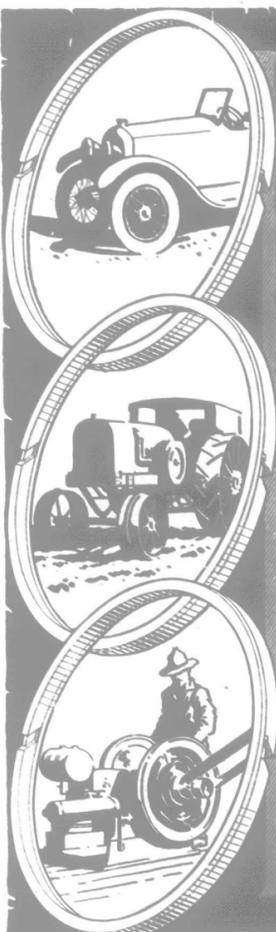
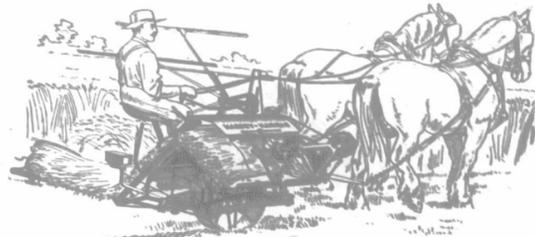
### Massey-Harris Co., Limited

Head Offices—Toronto.

— Branches at —

Montreal, Moncton, Winnipeg, Regina, Saskatoon, Yorkton, Swift Current, Calgary, Edmonton, Vancouver, Kamloops.

— Agencies Everywhere —



### A Size for Every Engine and Motor

Piston rings prevent escape of gas and power. They must fit exactly or there is compression leakage, excessive carbon, and power loss.

## McQUAY-NORRIS LEAK-PROOF PISTON RINGS

assures equal pressure all around the cylinder walls. They are made in all sizes to fit every model and type of engine, automobile, tractor, etc.—every size accurately gauged to fit the particular model of motor.

Your local dealer or garage has—or can get—our data book of piston ring sizes of practically every engine and motor made. This will tell exactly what rings you need. Complete size assortments are carried by more than 300 jobbing and supply houses all over the country from which you can be quickly supplied. Over 2,000 unusual sizes and over-sizes—all widths and diameters—are kept constantly on hand at the factory ready for prompt shipment anywhere.

### McQUAY-NORRIS Superoyl RINGS

A special ring for engines that pump oil. Used in top groove only of pistons to control excess oil, with McQuay-Norris LEAK-PROOF Rings in lower grooves to insure maximum compression and fuel economy.

SEND FOR FREE BOOKLET "To Have and to Hold Power"—a simple, clear explanation of piston rings, their construction and operation.

Manufactured by McQuay Norris Mfg Co., St. Louis U.S.A.  
Canadian Factory: W. H. BANFIELD & SON, Limited, 274 Pape Ave., Toronto

## War Prices

are being quoted our dairymen for their dairy products.

And with the increased demand and the higher prices you will all keep your "Milk Factories" working right up to the limit.

This, of course, doesn't necessarily mean that you, too, need be kept "on the jump" all the time.

Here's the point—Let a

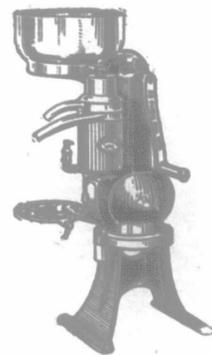
## B-L-K Mechanical Milker and a Simplex Cream Separator

help you take advantage of your opportunity.

A 1,100-lb. SIMPLEX will separate your milk with less work than 500-lb. machines of other makes, and one of the many big things in favor of the B-L-K is that the dairyman can easily produce Clean and Sanitary Milk in the ordinary dairy barn.

CLEAN MILK MEANS A CONSTANT DEMAND.

We'll gladly give you an estimate of just what it will cost you to put in a B-L-K Milking Machine to save you all the old-time hard work of milking your cows. Send us rough plan of your stable and tell us how many cows you want to milk.



D. DERBYSHIRE CO., Limited, Brockville, Ontario

# To Choose a Tractor

Consider the method of power transmission and drive, together with the weight and traction surface; also its adaptability as a general purpose machine. Compare specifications, rather than the numerous sweeping claims put forth in order to find a market.

To fill the bill for a dependable, economical, kerosene burning tractor, worthy of representing and upholding the reputation of

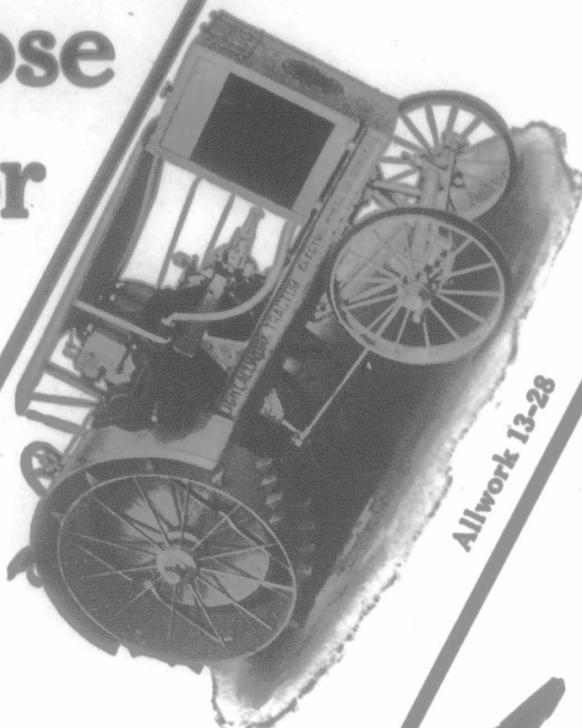
**"The First Quality Line"**

We offer

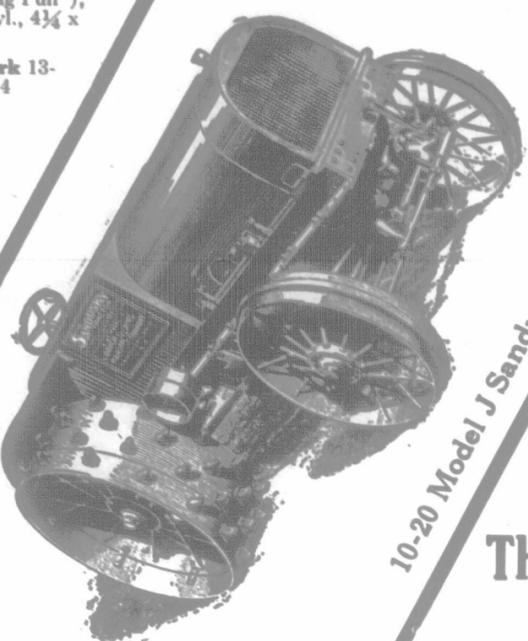
The Sandusky 10-20, (the "Little Fellow with the Big Pull"), motor, 4 cyl., 4 1/4 x 5 1/4, and

The Allwork 13-28, motor, 4 cyl., 5 x 6.

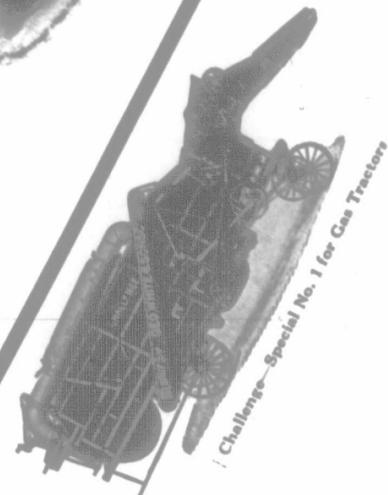
We know these are two of the best. You want them.



Allwork 13-28



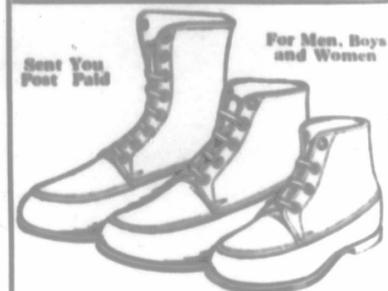
10-20 Model J Sandusky



Challenger—Special No. 1 for Gas Tractors

**The George White & Sons Co., Limited**

London Brandon Moosejaw Calgary



Sent You Post Paid

For Men, Boys and Women

## FOOT COMFORT

Proper boots ease the strain of a hard day's work—that's why every farmer should wear

### PALMER-McLELLAN CHROME-OIL FARM BOOTS

Light in weight, easy on the feet, wearing like iron, these boots meet the needs of the farmer better than any other boot on the market. Made in the general style of a moccasin, from selected hides, tanned by our FAMOUS CHROME-OIL PROCESS. The leather used in them is soft and pliable and gives with the movements of the foot. Built on right and left lasts, with counters and soles, they are neat and give utmost support to the feet. They are as nearly waterproof, too, as boots can be made, and the Chrome-Oil Process of tanning keeps the leather from shrivelling up, hardening or cracking.

They'll give you greater comfort, satisfaction and wear for your money than any other boot made.

Shipped postpaid at the following prices:

Men's 8-inch high, \$4.75. 9-inch high, \$5.25.  
 Boy's 8-inch high, \$3.75. 9-inch high, \$4.25.  
 Women's 8-inch high, \$4.25. 9-inch high, \$4.65.  
 Fitted with top sole, men's 70c. extra, boy's 60c. extra, women's, 60c. extra.  
 Waterproof Paste per tin, 25c.

In ordering, state size and height required, and address Dept. 8.

PALMER McLELLAN SHOEPACK CO. Limited, Fredericton, N.B.

**A BETTER SEPARATOR AT A LOWER PRICE**

**VIKING CREAM SEPARATOR**

The Viking Cream Separator is made of the finest materials. It is scientifically constructed by separator experts. The Viking skims to a mere trace, has greater capacity, is easy running, simple to clean, strong and durable yet lowest in price. Write for Free Separator Book.

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 WAREHOUSES  
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**BOB LONG UNION MADE OVERALLS SHIRTS & GLOVES**

My Dad wears 'em

Known from Coast to Coast  
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 20th Century Piano  
 made in Canada—used in thousands of Canadian homes—and is generally acknowledged to be, "Canada's Biggest Piano Value"  
 Write Dept. 18 for free catalogue "T."  
**THE SHERLOCK - MANNING PIANO CO.**  
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**DIGGERS**

For potatoes. All growers know that it pays to use diggers even on five acres—they save valuable time, save all the crop in good condition, at less expense.

**IRON-AGE DIGGERS**

Wheels 30 or 36 in. Elevator, 20 or 30 in. wide. Thorough separation without injury to the crop. Best two wheel horse truck. Right adjustment of plow, shifts in gear from the seat. Can be backed, turns short into next row. We guarantee our diggers to do the work claimed for them. Ask your dealer about them and write for booklet.

The Estman-Wilkinson Company, Limited  
 41 Symington Ave. Toronto Can.

**Steel Rails**

for Reinforcing Bridges and Barn Driveways.

CUT ANY LENGTH

JNO. J. GARTSHORE  
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**"AS GOOD AS THE WHEAT"**

Over 65,000 persons have arrived at the conclusion that the Great-West Life can give them the best possible value in Life Insurance—a "No. 1 Hard" Policy.

Not through lavish advertisement, or lapse of many years, has the Company attained its reputation, but solely through the attractiveness of its Policies.

Over \$155,000,000 of business in force is the record of low premiums, with HIGH PROFIT RETURNS as the standard of profitable Life Insurance. Great-West Policies are well said to be "as good as the wheat".

**THE GREAT-WEST LIFE ASSURANCE COMPANY**  
 Dept. "Z". Head Office, WINNIPEG

**NORTHERN ONTARIO**

Millions of acres of virgin soil, obtainable at 50c. an acre in some districts—in others, free—are calling for cultivation.

Thousands of farmers have responded to the call of this fertile country, and are being made comfortable and rich. Here, right at the door of Old Ontario, a home awaits you. For full particulars as to terms, regulations and settlers' rates, write to:

H. A. MACDONELL, Director of Colonization, Parliament Buildings, Toronto, Ont.  
 G. H. FERGUSON, Minister of Lands, Forests and Mines.

When writing please mention this paper

LIII.

ED

Protect the n from the pestifer

Haying equip season is almost

Don't belittl pigs; it is a spler

A man frequ field on a hot d

Live stock Visit them frequ

Buckwheat, with the expecta

The law in has been amend another departm

Unclean pail digestive trouble Scald all pails t

There are st the number of s not leave home Keep him home.

The standin laws under whic relation to the that the laws are

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June 30 is subscription circ Bureau of Circu subscription lab Farmer's Advoca in advance, plea

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Farmers hav concerning their come more or le of income tax a considered as do any system of bo actual profits, as conditions in C well taken up wi which Sir Georg through his mod wasted.

# The Farmer's Advocate and Home Magazine

PERSEVERE  
AND  
SUCCEED

ESTABLISHED  
1866

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LIII.

LONDON, ONTARIO, JUNE 13, 1918.

1342

## EDITORIAL.

Protect the milch herd and calves as much as possible from the pestiferous fly.

Haying equipment should now be in readiness; the season is almost here.

Don't belittle the importance of grass in raising pigs; it is a splendid grain saver.

A man frequently gets thirsty when working in the field on a hot day. How about the horse?

Live stock on pasture should not be neglected. Visit them frequently and see that all is well.

Buckwheat, millet, rape or sorghum can yet be sown with the expectation of yielding a profitable crop.

The law in regard to fruit packing and packages has been amended. See the comment regarding this in another department.

Unclean pails and utensils are a frequent cause of digestive troubles in calves during the summer months. Scald all pails thoroughly and expose them to the sun.

There are still too many bad dogs compared with the number of sheep we have. Even a good dog does not leave home after sundown on any useful errand. Keep him home.

The standing of the veterinary profession and the laws under which it is carried on in Ontario has a direct relation to the live-stock industry. Let us see to it that the laws are right.

The registration of man and woman power is coming too late to relieve the situation much during haying and harvest. Steps should be taken at once to make good hands available.

Opinion is unanimous in wishing to see our soldiers treated in an equitable manner in regard to pensions. The Colonel Labatt incident was only the occasion for an outburst of public sentiment.

June 30 is the end of our financial year. Our subscription circulation will be audited by the Audit Bureau of Circulations, of Chicago, July 1. If your subscription label on the cover of this issue of the Farmer's Advocate does not show that you are paid in advance, please remit at once.

The stand taken by the Prime Minister in Parliament in regard to titles was poor statesmanship. The honors conferred on the Canadian soldiers were merited indeed, but we already held these men in very high esteem. The bestowal of honors on the Premier's own brother and his former Secretary exposes the unjustness of the whole title business, and it will help wonderfully in eradicating this thing from Canadian public life.

Farmers have always been slack in keeping accounts concerning their business, but such a practice may become more or less necessary. In Britain, for purposes of income tax assessment, a farmer's profits are to be considered as double his rent. Where a farmer keeps any system of books the assessment will be based on the actual profits, as in any other business. Under present conditions in Canada, however, one's time is pretty well taken up with production, and even the extra hour, which Sir George Foster was kind enough to provide through his modern method of saving daylight, is not wasted.

## Veterinarians in Ontario.

For many years the veterinarians in the Province of Ontario have been asking for recognition on the part of the Provincial Government. Such recognition has not been forthcoming. We still have an antiquated Act on the Statute Books which permits of quackery and abuse, and men with spurious credentials are not prevented from practising. The live-stock assets of Ontario far surpass those of any other province, yet we are behind in the protection we afford them through a proper registration of practising veterinarians. In British Columbia, Alberta, Saskatchewan, Manitoba, Quebec and Nova Scotia, provincial legislation is in force requiring all practitioners to register in the Veterinary Association of the province in which they reside. The Veterinary Association in each of the provinces mentioned is an incorporated body with an official registrar. The registrar examines the credentials of the applicants, and if they have diplomas from recognized veterinary colleges they are permitted to take an examination held by an examining board. If they pass the examination satisfactorily they are allowed to register, after which they commence practicing. The Western Provinces have had this legislation for many years. In Manitoba it has been in force nearly forty years; in Quebec and Nova Scotia it was recently passed. "Can all these be wrong?"

Law, medicine and dentistry enjoy the advantages of the register system in Ontario, and yet the veterinary profession has been unable to obtain similar recognition. The three veterinary associations in this province should be amalgamated and recognized in such a way by an Act of the Legislature that the profession may be improved and our live stock protected against inefficient and untrained practitioners.

We have a good veterinary college, which is maintained by the province, yet the graduates are obliged to compete with the output of correspondence schools or any other kind of an institution which is clever enough to instruct its students how to evade the Ontario Act, and such evasion is not difficult. So long as one does not call himself a veterinarian or advertise himself as such on his cards, letter or bill heads, he cannot be molested; neither can a conviction be obtained unless it is proven that the accused actually paid for the printing of stationery using the title "veterinary surgeon."

One veterinary correspondence school, strongly entrenched in this province, sends information in the form of lectures through the mails, and after a few months of such tuition issues a diploma. The fee is \$40, on the installment plan, or \$25 at the beginning of the course. The graduates are instructed how to evade the Ontario Act and in what provinces they may safely practice. The system is so well organized as to enlist the support of livery owners, feed merchants and auctioneers who come in contact with farmers to whom the graduates may be introduced to the advantage of the quack and the institution which graduated him.

The course of instruction at the Ontario Veterinary College is extended over four years, and seven months of each year is devoted to the education of the students in the subjects taught and in the laboratories of the college. How apparent then must be the inefficiency of one who reads a few lectures mailed to him for his perusal and answers his examination questions from the printed material before him, rather than from his acquired knowledge of the science.

In many districts there are men who are not qualified veterinarians but who are, nevertheless, very expert in handling cases of difficult parturition, or perhaps some of the commoner diseases. In the other provinces these men are recognized under the Act, and live-stock breeders are not deprived of their services. The same principle should apply in Ontario, but for the sake of the veterinary profession and for the protection of the live-stock interests the Ontario Veterinary Surgeons' Act should be amended so as to eliminate quackery and inefficiency.

## Small Council Best.

Just what shape the proposed National Dairy Organization will take, is almost entirely a matter of conjecture at present. Recent problems connected with the dairy industry, wherein the efforts of dairymen have been to a great extent negatived, have emphasized the necessity of having some strong and representative dairy organization of a national character. This necessity has been felt keenly and negotiations, once begun, have gradually progressed to the point of imminent organization.

During the progress of the development which this idea has taken during the last few months, it has been proposed that a great dairy association be formed, whose membership would reach from coast to coast and would embrace companies manufacturing dairy products, cheese factory and creamery managers, together with any or all dairymen or farmers who may lay claim to the ownership of a dairy cow. In fact, a constitution has been drawn up which appears to have been modelled after the style of the Canadian Manufacturers' Association, and which provides for a membership fee graduated according to the number of employees of a company or the amount of business done. Membership, however, would entitle the holder to only one vote, and in that respect we hold no difference of opinion with those who have prepared this constitution, no doubt at the cost of a great deal of time.

Why, however, should it be necessary to effect such an organization which might be likely to defeat the very purpose for which it was formed? It strikes us that such an association, even if truly representative of all the dairy interests entitled to representation on it, would become unwieldy and difficult to handle effectively. As recently stated in these columns, a small council of no more than fifteen men, carefully selected—or fewer if possible—would do more for the advancement of Canada's dairy industry, and in shorter time, than the largest membership it would be possible to construct. It is required that this body represent the dairy industry, or certain dairy interests, whatever may be decided upon. In what respect will 15,000 men be better than 15, carefully chosen? If an annual meeting were desired, where would it be held and how many would go from West to East, or from East to West to attend it? Each section of the country could swing the meeting, in all probability, every other year, and it is possible that producers would be much in a minority in either case. Given a small council of choice men, backed by organizations from coast to coast and it would be impossible to devise any stronger, more powerful, or more effective organization for the purpose.

## The Fruit Marks Act.

The recent amendments to the Inspection and Sale Act, concerning fruit and fruit marks, embody features which have been badly needed by the Canadian fruit trade for some years. It would be difficult to decide as to which of the many amendments made upon the recommendation of the fruit growers will have the most far-reaching effect. Possibly the progress that is shown by the standardization of the apple barrel, the apple box and other packages, marks the biggest single step forward projected by the Act.

Considerable credit is due Ontario fruit growers for their willingness to meet the wishes of the men from the other provinces in connection with some of these packages. We refer particularly to their deference to the wishes of the Nova Scotia growers, who were most desirous of adopting the standard barrel, and also to their ready yielding to the importunities of the growers from British Columbia in the matter of the Oregon box and the pint hallock. It must always remain a matter for regret, nevertheless, that it was not possible for all of the provinces to absolutely agree upon the question of the berry hallock. Unquestionably the square

## The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

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JOHN WELD, Manager.

Agents for "The Farmer's Advocate and Home Journal,"  
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London, Canada.

hallock used in British Columbia is a neater, more attractive and more desirable package, all things considered, than our somewhat ugly hallock with sloping sides and less stable appearance. We venture to hope that the fact that Eastern markets are accustomed to this package for berries will not always stand in the way of its elimination. An advertising campaign by the fruit growers of Ontario must soon mark another step in the history of the industry and it would be too bad if our packages were not of the most desirable stamp.

A distinct step in advance is marked by the legislation with reference to the marketing of immature fruit, a practice which in the past has checked the consumption of some kinds of fruit and has blasted the honest efforts of many fruit growers to win recognition on the markets for their product. No less important are the regulations regarding the pilfering, re-marking, re-packing and re-use of packages and the alterations made in the recognized grading standards. Here, too, is a matter for regret, in that it was deemed advisable to lower the high standard of the Act by the inclusion of a number three grade. No grade such as this should have been permitted, since to recognize it is to encourage its use. It is to be hoped that in thus urging the inclusion of this grade the Nova Scotia growers are not assisting in pushing the industry a step backward. Of greater justification, but less consistency, is the sandwiching of the "Domestic" grade between number two and three. In order to save the number three position for a grade which may contain everything but culls, so long as it is properly packed, it was necessary to mutilate the Act by the adoption of an altogether different grade name, and thus provide added cause for regret.

One other feature of the Act seems worthy of comment, and that is with regard to the penalty imposed for wilfully altering or effacing marks on packages which have undergone inspection. The penalty is reduced from \$100 to \$40, thus making it a lesser crime than heretofore to defy the law. It was, perhaps, too much to expect perfection in the Act, which on the whole is a decided improvement; so much so that the growers throughout Canada deserve commendation for the spirit in which they tackled the problem at the conference in March, while no less deserving of praise is the expediency shown by the Fruit Branch and the Minister of Agriculture in making effective the recommendations of the growers.

### Nature's Diary.

A. B. KLUGH, M.A.

#### Roads and Trails.

To many of us a road always has a fascination. As a child we looked along it and wondered whither it went; we looked and longed for the day when as a man we could set out on that road and go on and on and on—out into great world. We doubted not that out on that road the we should meet with fairy princesses to whom we could render most gallant service, with dragons to be fought and overcome, for was it not so in all our favorite books? In respect to the dragons our childish imagination was not so far astray, for upon the road of life we meet with enough dragons to fight—the only difference is that sometimes the dragons overcome us. And those of us who are fortunate have found our fairy princess. In the prime of manhood the lure of the road is still strong upon us. We have travelled hundreds of roads, smooth



Fig. 1.—A Road on Vancouver Island.

and rough, up hill and down dale, in the hot sun and fighting against the wintry blast—but there are still roads to travel. The old man, his once sturdy legs now no longer able to carry him forth on a long journey, settles down beside the road, and shades his eyes against the sun as he watches his children fade from sight along the highway, watches them and prays that the dragons may not overcome them. Many a road he knows, but he is back again to the condition of his childhood—the next road he will take leads into the unknown indeed.

The love of the road is strong in the Anglo-Saxon race. Is it not this very fact that has made it the greatest colonizing race that the world has ever known? Has this race not established roads on the ocean as well as on land? Is it not now fighting against stealthy dragons of the deep to keep these roads open?



Fig. 2.—A Road on Deer Island, N. B.

In Canada, with our vast expanse of territory, we naturally have a very extensive system of roads, some good, many bad, and the majority indifferent. A road is, of course, primarily a means of communication between one place and another, and to many the main consideration is the condition of the road-surface—that it be such as shall allow of quick travel. But to the artist and the naturalist this is not the main consideration, to him it is the beauty of the road that appeals. Many of our roads are atrociously, and often needlessly, ugly. But we have in Canada many truly beautiful roads. Look at the road shown in Fig. 1, a road on Vancouver Island, and at Fig. 2, a road skirting the Atlantic in New Brunswick. When travelling along such roads the eye is constantly delighted by the most beautiful vistas, and along such roads the naturalist finds a wealth of plant and animal life.

A trail is even more fascinating than a road. A trail is usually in a wild part of the country, it is often faint and taxes one's power of wood-craft to follow it. It is not a safe game for the amateur woodsman, this following of faint trails, and here let me give a word of advice to those who would try it. As you proceed break an occasional branch *backwards*. The wisdom of this course becomes apparent when you find you have to back-track, as then the paler underside of the leaves on the broken branches show up and guide you safely out.

I would most earnestly urge those who have anything to do with the upkeep of our roads to give a little attention to their beauty. Let them not remove trees unless it is absolutely essential, for they cast a most grateful shade on the traveller in summer and break the biting blast in winter, and at all seasons help to make the world more beautiful.

### Sandy Inspects the Crops.

BY SANDY FRASER.

I wis oot for a bit o' a drive yesterday, partly on business an' partly juist to see the crops an' the country tae find oot how ither peoples' business wis progressin'. Sae lang as ye dinna offer them ony advice the farmers willna mind yer takin' a look at their fields as ye pass by. They're what I hear the boys callin' "fed up" on information aboot how to grow big crops to feed mair cattle that will build up yer farm sae that ye can grow still bigger crops that will feed still mair cattle, and sae on, till they pit ye in yer lang box an' tak' ye off tae the graveyard by the church, wi' a' yer friends wipin' their eyes an' sayin', "puir chap, he juist killed himsel' wi' hard wark."

However, an' nevertheless, a wee bit o' instruction noo an' again has been known to do as muckle guid as harm, an' we're not sayin' a word against it. But we ken juist the same that action has got to follow this instruction or there will be neither crops nor cattle. And to judge by the looks o' things in the part o' the country I wis through yesterday the farmers there must be men o' action. Unless maybe Providence is in a mind to to give them one mair guid chance to raise a crop that they canna find an excuse to complain aboot. The auld counties o' Glengarry an' Prescott never looked better since I first set eyes on them, and that's some time noo, believe me. The fields o' clover that ye see, one after the ither, are a pretty guid indication that the coos will be weel fed next winter, whether the corn grows or not. And there seems tae be coos on every farm. Maistly ye wad see them lyin' doon chewin' their cud, juist as though the matter o' eatin' grass was o' no importance whatever. Na doot they'll think mair o' it before August, but at present ye have to look twice before ye can tell a pasture from a hay-meadow. They hae been tellin' us doon here, where there is a cheese-factory at ever second crossroads, that cheese is gainin' tae help to beat the Kaiser, sae I'm thinkin' that, by the looks o' things, we should gie him a black eye, onyway, this summer. The price o' the article wis raised again this year and although it's not high enough yet, according tae some, on account o' the cost o' grass and the increase in the wife's wages, still it's na worse than it wis a few years back when cheese sold for six cents, and three cents o' that went to the manufacturer.

But tae return tae my trip. There seems to be plenty o' corn gainin' intae the ground this year in spite o' the fact that a couple o' months ago they were tellin' us that seed couldna' be had and that in some places they were sellin' it at auction for fifty dollars a bushel. As a matter o' fact maist o' the corn that has been planted in this part o' the Province came from the Southern States, but it seems as though there wis always an over-supply in some part o' the country to mak' up for the shortage that there is somewhere else. The people that say they live by faith would seem to hae something to back them up in the doctrine they preach and na doot it's a' richt if ye ken the proper amount o' wark to mix in wi' it. Up tae the present time vera few people hae starved to death in this part o' the world and I'm inclined tae think it's because we hae the kind o' faith that makes us believe that we'll get oor wages if we earn them, but not unless. Onyway, as I said, the corn is gainin' intae the ground, whether it will all come up or not. In fields that were planted early aboot three-quarters o' the seed seems to hae sprouted an' maybe that's enough, for I'm thinkin' that we were inclined to pit in mair than wis necessary.

Grain o' all kinds is lookin' juist aboot the way it should for the time o' year. It wis a great spring for gettin' the seed intae the ground and since then the weather has been unco' favorable for growth. We had only tae ask for rain tae get it. As I heard one chap say "they must hae pit someone on the job this year that knows his business. We get rain juist when we're needin' it."

We've kind o' got oot o' the way o' growin' wheat in this part o' the Province but a guid mony farmers hae pit in a bushel or twa to please Borden and keep peace in the family. Oats is the main crop in the line o' grain, wi' maybe a little peas or barley mixed in for grinding.

Potatoes were a short crop here last year for the reason that the maist o' them rotted in the field, and as a consequence a guid mony farmers had to buy their seed this spring. However, there seems to be the usual amount o' ground planted again and na doot we'll hae better luck than last year. Ither roots such as turnips an' sugar-beets are not grown on what ye would call a vera large scale doon this way. Juist what can be thinned oot an' kept clean, without gettin' a sore back by it, is enough for the average farmer. It's easier to grow corn

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and pit it awa' in a silo than to be rootin' in a turnip field all yer spare time. That's what they seem tae think, onyway.

While I wis awa' yesterday I wis talkin' tae a chap that has a guid-sized farm an' a stock o' aboot forty head o' dairy cattle. I asked him if he found it onyways hard to get hired help to look after the stock and dae the ither wark that had to be done on a farm the size o' his. "Hoot", says he, "I've forgotten what a hired mon looks like. I've got a milkin' machine and wi' the help o' the young laddies I manage to keep things movin'. Between enlisting an' going on farms o' their ain and gettin' easier jobs somewhere else, the regular auld-fashioned farmhands are aboot as scarce as pansies in a poultry yard. I'm thinkin' we're in the same fix that the Israelites were that it tells aboot in the Bible, when auld Pharaoh put them to makin' bricks wi'oot straw. These chaps frae the city are all coaxin' us tae put in oor best licks for a big crop this year and at the same time they take away all o' oor help that they can get. I'm not kickin' though", he says, "It's every man for himself, the way it always was. If we can't get hired help we won't have to pay for it."

I left him, thinkin' the chap was something o' a philosopher in his way, and makin' up my mind that there wis twa sides to every question, even that o' hired help. If ye haven't got it ye don't have to pay for it.

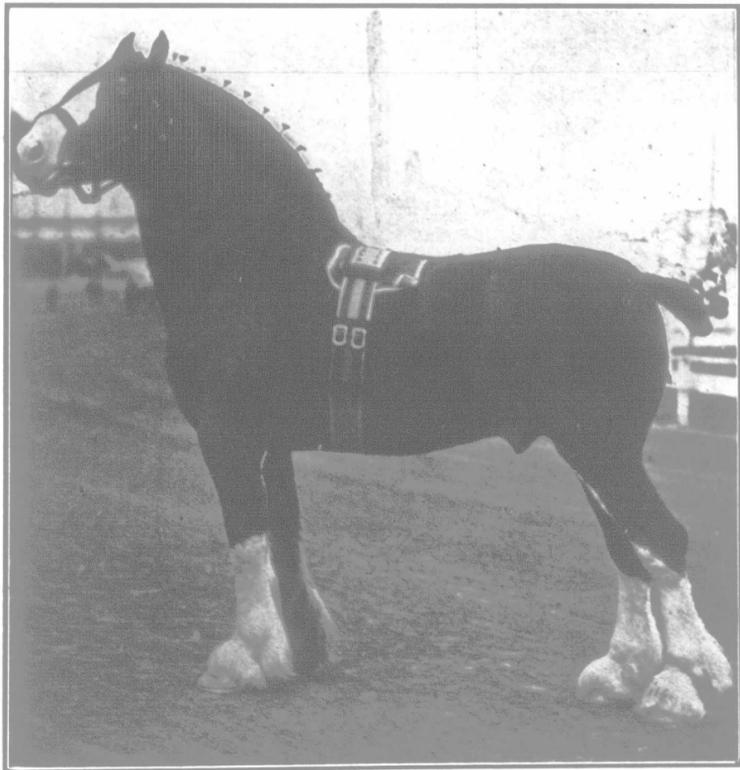
## THE HORSE.

### Feeding and Watering Horses in Hot Weather.

While it is advisable at all times to exercise care and regularity in feeding horses that are used for either fast or slow work, it is especially so in very warm weather. The food should be of the best quality and given in limited quantities. The quantity of bulky food should be limited in all cases when time is limited, and the horses are expected to go to work or drive shortly after eating. The stomach of the horse being a comparatively small organ, the majority of them will, if allowed, eat until it becomes distended. If an animal under these conditions be put to work on a hot day he will perspire freely, digestion is very liable to become partially arrested, and a case of acute indigestion is often the result. It is good practice to allow a horse to rest an hour or longer after eating a hearty meal, in order that digestion may be well advanced before exercise be given, but this is not practicable in many cases, especially on the farm. The only method, therefore, of avoiding danger of sickness, or if not an attack of illness at least discomfort to the animal for an hour or two, is to limit the quantity of bulky food given. The morning's feed should be from four to six quarts of oats, according to the size of the animal, and the nature of the work to be performed, and a small ration of hay; at noon, the same. In the evening it is good practice to give a little hay first, then the grain ration, and then more hay. As he will have several hours of idleness now, it is safe to allow him all the bulky food he will eat, but in no case should he be given more than he will consume. It is not only wasteful, but injurious to the animal to keep food before him all the time. In many cases farm horses are turned out on grass at night, but it is seldom that they will refuse a reasonable ration of grain in the morning, even after coming off good pasture. Where this practice is followed it is wise to allow them to stand an hour in the stable after eating their grain ration in the evening. (Of course under such conditions no hay need be fed.) By this time the juices of the stomach have performed their functions and the ingesta is in a fit state to pass into the small intestine, where digestion will be completed; while if the animals be turned on good grass immediately after eating they may eat so greedily as to force the grain out of the stomach before the said juices have acted properly upon it; and while it is not probable that this will cause any noticeable trouble or uneasiness to the animals, digestion is not as complete as it should be hence the horses will not receive as much benefit as otherwise. There is no doubt that crushed oats are more beneficial pound for pound, than whole oats. It is seldom, even in hot weather, that a horse is so warm

that it is unsafe to feed him grain. In cases where he has been subjected to long-continued severe exercise and has become excessively hot, it is wise to allow him to stand for a few minutes, and rub him down well before feeding, but conditions like this seldom occur. When the time that he will be allowed to stand in the stable is limited to from one to one and a half hours, as is the case at noon, even though the weather be hot and he is perspiring freely, it is better to give him his grain and allow him a few minutes after eating, than to allow him to cool off, then feed him and take him out to work so soon as he has finished eating. Horses that are kept in the stable should be given a feed of bran at least twice weekly, in addition to their grain ration, if at regular work. This aids digestion and tends to keep the bowels in a normal condition; but those that go to grass at night do not require this, as the grass is all that is required.

In hot weather horses probably suffer more from an injudicious system of watering. It would be well if horses could have access to clear, cold water at will, but of course this is impracticable; still, the popular idea that it is unsafe to allow a horse to have water when he is perspiring freely, even in hot weather, is unfounded. Of course, as in feeding grain, there may be times when it would be hurtful to allow all the cold water he would drink, such as cases in which he had been subjected to severe exercise and long abstinence from water. In such cases he would be allowed a few mouthfuls and after a few minutes a little more. When a horse is excessively warm, the introduction into the stomach of large quantities of cold water may cause such violent reaction as to excite gastritis, indigestion or founder. It seldom occurs that a horse used for either ordinary farm or road work is so warm that it is not safe to allow him all the water he will drink, unless a long period has elapsed since he had a drink. Theoretically, it is well to allow a horse water only before meals, but in practice we find it well to allow him to drink whenever he wants water. There are some horses so predisposed to colic that it is unsafe to allow water shortly after a meal, and such should be treated accordingly, but as a rule it is wise to allow a horse to drink as often and as much as he will. It is probable that the sense of thirst is as acute with the horse as with the teamster. When the latter is thirsty he "wants a drink" and usually manages to get one; the horse also "wants a drink" and the careful teamster will endeavor



Dunure Captain (Imp.) [14126] (16560).  
Ontario Government premium horse No. 4, at the head of the stud at Burdennet Stock Farm. Owned by A. G. Gornley, Unionville, Ont.

to give him one. It would be well if horses could be given at least one drink between meals in hot weather.

## LIVE STOCK.

Grass is reported to be good the Province over this spring and stock are doing well.

Market your wool through the co-operative association and get the manufacturers' price.

The herd or flock will not be improved if you continue to sell your best breeding stock.

It is estimated that the world's export output of frozen and chilled beef, mutton and lamb last year was 965,000 tons, as compared with 915,380 tons in 1916, and 800 375 tons in 1914.

It is claimed that the United Kingdom alone requires 2,500,000,000 pounds of beef and pork from abroad during 1918.

There is yet time to prepare a piece of land for rape to furnish fall feed for stockers, sheep and hogs. This crop has few equals as a fall pasture.

The herd bull and calves which are confined to the stable should be given fresh grass instead of dry hay. This entails a little extra work but it pays.

The census returns of last July accounted for 12,443,304 cattle, 10,586,594 sheep and 4,200,280 pigs in France. These totals compare favorably with those of 1916.

Cut the burrs and burdocks growing along the fences this summer and so make it impossible for the cattle and sheep to become matted with burrs in the fall.

The fence around the sheep pasture should be put in good repair early in the season. Once sheep commence going through, over or under the fence, it is almost impossible to stop them.

The fly season is with us again and the stock in stable and field are being tormented with these pests. It will pay to assist the stock in fighting them off. Applying some oily solution to the body and darkening the stable will help.

Canada's normal annual consumption per capita of beef and pork is estimated at 128 pounds. In Great Britain the normal per capita consumption of these products is 96 pounds. Practically double the quantity of fish is consumed per capita in Great Britain compared with Canada.

At the McCray sale of Herefords held on May 22, seventy-five head brought the large sum of \$204,175. Twenty bulls averaged \$4,228 and 55 females averaged \$2,175 thus setting a new record in price. All but two animals brought over \$1,000. The top price was \$10,300 for the three-year-old bull, Colbert Fairfax.

If the stock are pasturing in one big field, it may pay to run a temporary fence across it. While one part of the field is being cropped the other part will freshen up and more feed will be obtained during the season than would be the case were the herd to have free run of the entire field. It does not pay to crop the grass too closely.

It is usually the half-starved cur that is allowed to roam at large which causes depredation in the sheep lot. A good dog is an asset to the farm, but we fail to see a place for some of the canines seen on the streets of many of our villages and towns. Fewer dogs and more hogs might work to an economic advantage.

At P. J. Donhoe's auction sale of Angus cattle in Iowa, 52 head made an average of \$1,519. The sum of \$5,100 was paid for the two-year-old bull Emlyn. At the Angus sale of Tudor & Son of Iowa City an average of \$1,287 was made on 54 head, while at Rosenfeld's sale of Doddies the average reached \$926. The top price of \$3,000 was paid for Blackcap Beta, an eight-year-old cow.

Milking Shorthorns made a high average at the Glenside Dairy Shorthorn sale at Granville Center, Pa. The 38 females, the majority of which were heifers averaged \$1,008. Welcome Queen a two-year-old heifer went to the \$3,000 bid of Alexander MacLaren, Buckingham, Quebec. This heifer was sired by General Clay with thirty record of merit daughters and is out of Welcome Lass, a cow with a record of 14,734.6 pounds of milk. Mr. MacLaren also secured a yearling bull, Royal Signet, for the consideration of \$1,700.

### Canadian Exports of Meat.

Canadian stockmen have been doing their utmost to increase the output of beef, mutton and pork. The urgent need for fats and meat for overseas has stimulated the desire to stock as heavily as possible. The price has also had an effect and exports of meat to the war area will undoubtedly increase if transportation can be secured. Last year the export value of Canadian produce reached the formidable sum of \$172,743,881. The value of exports of animals and animal products from the Dominion of Canada for the fiscal year ending March 31, 1918, is as follows: Cattle and produce, \$27,565,817; sheep and produce, \$9,054,543; swine and produce, \$63,134,475; poultry and produce, \$3,675,960; dairy and produce, \$38,834,398; miscellaneous produce, \$37,602,975, making a total of \$179,868,168, but of this grand total, produce to the value of \$7,125,087 is credited to foreign produce re-exported. With an increase in live stock the exports should be considerably augmented this year which will aid in meeting the demand for meat in the war area.

The war is coming nearer home to this continent, and the closer it approaches the more determined and efficient will be the measures taken to defeat the common enemy. It is a mistake characteristic of the Hun to attempt intimidation through a departure from the ordinary and established rules of warfare, which in themselves are brutal enough.

**Meat Supplies on the Smithfield Market.**

The Smithfield Live Stock Market, of London, England, has long set the price for prime beef, not only in Britain but in the overseas Dominions. In the past years large quantities of prime cattle were shipped across the Atlantic, but of recent years this trade has more or less diminished. Lighter weight cattle are being placed on such markets as Toronto, Montreal, Winnipeg and Buffalo. However, even when marketed at home the Smithfield market is more or less of a regulator of prices on this side of the Atlantic. The prices and imports of frozen and chilled meats for the past few years have been compiled and charted by W. Weddel & Co. Ltd., of London. During 1917 there was considerable fluctuation from month to month in the price of chilled beef from the Argentine and North American continent, but the price of New Zealand and Australian lamb and mutton was uniform from month to month, owing no

proving the source of a large supply of meat, and is within shipping distance of the United Kingdom. According to a pamphlet compiled by W. Weddel & Co. Ltd., the quantity of meat of all description handled at Smithfield market in 1917 amounted to 282,936 tons, a decrease of fourteen and a half per cent. as compared with 1916. During the year the home supplies were maintained at about the level of the previous year. The Australian supplies were cut down by more than half, the South American by about seventeen per cent., while the North American supplies which included the Canadian meat increased by twenty-three per cent. The following table gives some idea of the different classes of meat handled, and shows a steady falling off in the quantity of meats of all kinds obtainable at this large market. In 1913, it was 432,112 tons; in 1914, it decreased to 425,404 tons; to 373,331 tons in 1915; to 331,051 tons in 1916, and to 282,936 tons in 1917; or about sixty-five per cent. of the total of 1913. This is an indication that much less meat is being consumed now than before the war at the capital of the empire.

Analysis of Supplies Marketed at Smithfield in 1916 and 1917.

Source of Supply	Beef and Veal		Mutton and Lamb		Pork & Bacon		Poultry, Game and other Provisions		Totals	
	Tons		Tons		Tons		Tons		Tons	
	1916	1917	1916	1917	1916	1917	1916	1917	1916	1917
United Kingdom	80,785	76,093	32,975	45,875	21,884	13,885	14,246	13,053	149,890	148,906
Australasia and South Africa	6,563	6,714	59,797	23,815	54	54	8,173	4,724	74,587	35,307
South America	60,443	50,399	12,271	10,148	1,102	648	28	41	73,844	61,236
North America	12,699	21,569	110	488	11,752	8,178	1,896	2,273	26,457	32,508
Continent, etc.	330	415	981	1,373	1,742	1,397	3,330	1,794	6,383	4,979
	160,820	155,190	106,134	81,699	36,534	24,162	27,673	21,885	331,161	282,936

doubt to price-setting. The highest price for North American chilled beef was reached in June, when the high level of one shilling three and three-quarter pence was reached. In July and August the price dropped one-quarter penny, while in October it went down to eleven and a half pence. Argentine beef went to one shilling two and a half pence in June, and to one shilling two and three-quarter pence in July, but dropped to the level of the North American beef during the fall months.

The chart giving the top prices for the past few years shows considerable variation. North American chilled beef always topped the market, with the Argentine a close competitor. Between 1898 and 1913 the price was fairly uniform, holding at from five and a half to six and three-quarter pence. Since the commencement of the war there has been a rapid rise in price. From eight and a quarter pence in 1915, the average top price for chilled beef rose to one shilling one penny in 1917. With the large population of the United Kingdom, the Old Land will, no doubt, furnish the leading market for Canadian meats when conditions again become normal.

At the present time there is a considerable risk in the overseas traffic, but in spite of this more meat was shipped to the world's market in 1917 than in 1916. The geographical location of Canada and the United States gives these countries an advantage in shipping over Australia and New Zealand. The Argentine is

**Shearing Sheep With a Power Outfit.**

Sheep return a double revenue and are as profitable a class of live stock as is kept on the farm. No elaborate buildings are required to house them, as they are quite content if their pen is dry, free from drafts and has a tight roof. They are not heavy feeders on high-priced grains, but for best results they must be judiciously fed from the time they are taken off the pasture in the fall until the following spring. Labor requirements are few, yet there has not been the increase in flocks that the price of wool and mutton would warrant. Dogs fences and pasture are reasons given for not keeping sheep, and a few claim that the work of shearing prevents them from going extensively into sheep raising. Shearing is no child's play, and care must be exercised in order to prevent nicking the sheep and yet make a neat, smooth job and get all the wool. Judging from the appearance of some flocks after the fleece has been removed, their owners take no pride in the work.

In some districts there are shepherds who make a business of shearing sheep every spring, and they are kept busy from early in April until well on in June. They charge so much per fleece, depending on the condition of the wool and the sheep. With a little practice a person becomes quite adept at using the sheep shears;

however, the hand shears are being substituted by the power clipper, which does the work more rapidly.

This spring the Government undertook to place shearing machines in several localities, and from all reports the step has been a satisfactory one to all sheep breeders fortunate enough to secure their use. The machine is operated by the Provincial Live Stock Branch, and is under the direct supervision of the District Representative of the county. The machines sent out are of the two-unit type and are run by a two and three-quarter horse-power gasoline engine. When the two units are run, two operators are required. The owner of the flock catches the sheep and assists in holding it and also aids in tying up the fleece. From twenty to forty sheep can be shorn with the power generated by a gallon of gasoline. This variation is due to the difference in the condition of the wool on the sheep. Where the wool is dirty and cotted, it takes much more power than if the fleece were in the proper condition. It is much more difficult to shear a thin sheep than a fat one. In a ten-hour day one man will get over about forty sheep and possibly make one move. The price of shearing is set at fifteen cents per fleece, and the flock owner is expected to board the men and to move them to the next place.

The machine which is under the supervision of R. A. Finn, District Representative in Middlesex County, had shorn between 1,200 and 1,300 sheep up to June 1 and had enough work on hand to keep it going for a couple of weeks. Those who have had work done speak favorably of the scheme. General satisfaction has been expressed on all hands, and several have stated that if they can be assured of a machine for shearing the sheep each year at somewhere near the price above mentioned, they would considerably increase their flocks.

As was to be expected certain difficulties cropped up which tended to handicap the work somewhat, but these will be overcome in the future. The undertaking being a new idea, it was rather difficult for the supervisor to arrange for the operator to have steady work with the minimum of distance between moves. Where the moves are a considerable distance, and the flocks number from ten to fifteen, a good deal of time is lost. Then, so few cared to shear their sheep before the tenth of May, and all wanted it finished by the first of June, thus crowding a lot of work in a short space of time. In the average spring, shearing might well commence at a considerably earlier date and, by the application for shearing being sent in to the District Representative early in the season, it would give him an opportunity to map out certain routes so that the operator would have the shortest possible moves. This would enable him to accomplish the maximum amount of work during the shearing season.

With the shortage of labor, these shearing machines have been a great help to the flock owner. The man with from ten to twenty sheep can scarcely afford to purchase an up-to-date power shearing outfit, but he can well afford to pay the fee charged for the use of these Government-owned machines. In communities where a number of flocks are kept, the owners might cooperate and purchase a machine of their own, and thus be able to do the work at the most suitable time. Unless stabling conditions are favorable, it is not well to shear too early, but there is a loss of wool if shearing is left until after the warm weather sets in. Shearing of sheep should not stand in the way of increasing the flock.

**Pedigree Stock Notes From England.**

EDITOR "THE FARMER'S ADVOCATE":

All world's records for pedigree pigs were established on April 30, at Docketing, Norfolk, England, when Hubert Groom sold 100 large Blacks for a general average of £40 14s. 7d. apiece, 50 yielding the princely (for pigs) aggregate of 3,879 guineas. Four gilts all from one litter made 105 guineas each, and a brood sow made 82 guineas, while a boar, an approved breeder, fetched 80 guineas. The previous record average in England was £35 15s. 5d. paid for 43 Berkshires bred and sold by Arthur Hiscock, at Motcombe. That same day Hiscock made £27 7s. 9d. each on 36 middle sized White Yorkshires. These large Blacks are hardy grazing pigs with length and depth of body, a 190-lb. carcass dead weight, at an early age, and have goodly hams. They are suitable for very hot suns and have found much favor in the continents of the Southern Hemisphere.

Two notable Hackney stallions in England have just "handed in their checks", to wit, Royal Davegelt and Garton Duke of Connaught, and both London champions in their day and generation.

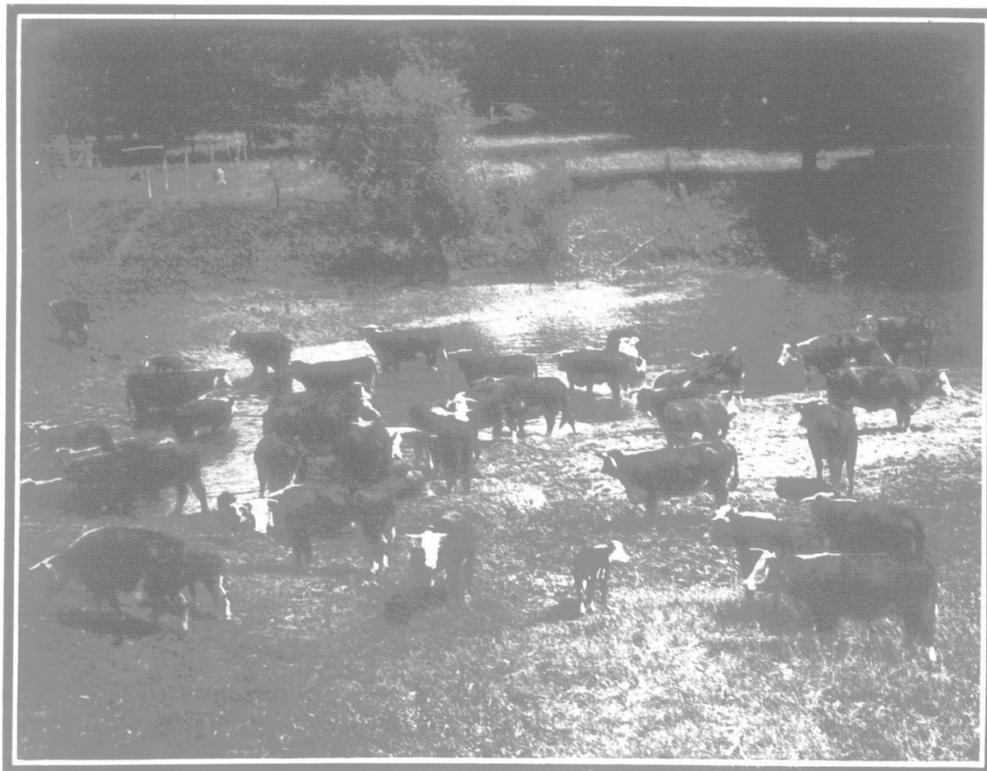
Big money is being paid in repository sales for Shire farm working horses. Mares have been costing 500, 390 and 350 guineas at Peterboro'; three-year-old fillies, 310 and 450 guineas; two-year-old fillies, 200 to 270 guineas; yearling fillies, 180 to 200 guineas, and stallions up to 300 guineas.

A Lincolnshire red Shorthorn bull made 700 guineas at the L. R. S. S. sale in Lincoln at the end of April. The L. R. is a dual-purpose Shorthorn with a "book" of its own, independent of Coates' Herd Book.

Dairy Shorthorns still continue to realize big money, 128 head averaging £93 2s. 11d. at Preston, in Lancashire, though it should be added that the 72 cows and bulls averaged £121 17s. 2d. apiece.

We are following you over here. Our Minister of Agriculture is getting passed into law a Bill to prevent unsound stallions from travelling the country. Practical horse breeders are unanimous in praise of the Bill; some few small men are dead against it. We are a funny race—to be sure.

ALBION.



A Satisfied Herd of Herefords.

With a crop of h... as to their stage. B loader an hay can l the slidin different form with main rack in groove is drawn is then p put on provided



Ordinary the load. of rack y exercised in quite eas load put end of the come into attaching. There is all the h this is al may thir half load case pro end raise illustrati I illustra hay or sh tion of t which r outside s rack. It back of t loaded. corner p ting out platform heavy, a top of r it can qu once ha the rack purposo view of t platform The rol platform shown i rollers v inch face half-inch bolted t portion i be used sloping s flat rack back to in conju haying t one man

We ha the date agricultu ourselves seventies with the Were th actually went un Lothians lost his By the

# THE FARM.

## Sliding Hay Rack.

With the present shortage of help and an abundant crop of hay promised many agriculturists are doubtful as to their ability to handle the hay crop at the proper stage. By using labor-saving devices, such as the hay-loader and sliding hay rack, the work of harvesting the hay can be reduced to the minimum. On many farms the sliding hay rack is coming into use. There are different styles, but the general principle is a flat platform with an extra platform, one-half the length of the main rack, on top. This is fitted with rollers which run in grooves on the main rack. The movable platform is drawn to the rear and the half-load is put on. This is then pulled forward and the remainder of the load put on. By this system one man can load the wagon, provided his team will follow the windrow. With an

The great wave of cheap imports was receding, and the British farmer was beginning to feel that possibly he was in for a cycle of higher prices, and that the worst was over. It was during these thirty years, from 1879 to 1909, that the great migration of tenant farmers from the West of Scotland took place. Many of them went south and took leases of the derelict lands in Essex. Others, with possibly more capital at their command, faced the better lands of Herts and Leicestershire. Those who migrated to Essex invariably took up dairying, and it was the introduction of West of Scotland dairying methods that made the regeneration of the agriculture of Essex possible. These great wheat lands were rendered unprofitable for cereal growing, because of the low rate at which wheat could be imported from the virgin soils of the Western prairies in Canada and the United States. The only native farmers of East Anglia who survived that competition were the few who were able to follow the lead of the Scots and devote their attention to dairying. For milk there is in

but of pure Scots descent. He was a clergyman of the Church of England, and for health reasons was compelled to live most of the year in the balmy climes of the south of England. But he visited his Scots estates every year, and made it a point to call on all his tenants. At the home of one of these he said: "I cannot understand why my Scots tenants are so happy and prosperous compared with my English tenants. Down south there is constant grumbling and heavy arrears of rent. On this Scots estate there are no arrears, and it is a great delight to come round and see you all. What makes the difference?" "That's easily understood," said the tenant, the late Mr. Robert Wallace, Chapelton, "your English tenants will dress for dinner; I hardly have time to wash my hands!" That explains much of the situation on which we have been commenting. Several of the best farms in Fifeshire are to-day occupied, and one of them is owned by representatives, in the third generation, of an honorable Ayrshire farmer who began life as a plowman, became what we call in Scotland a

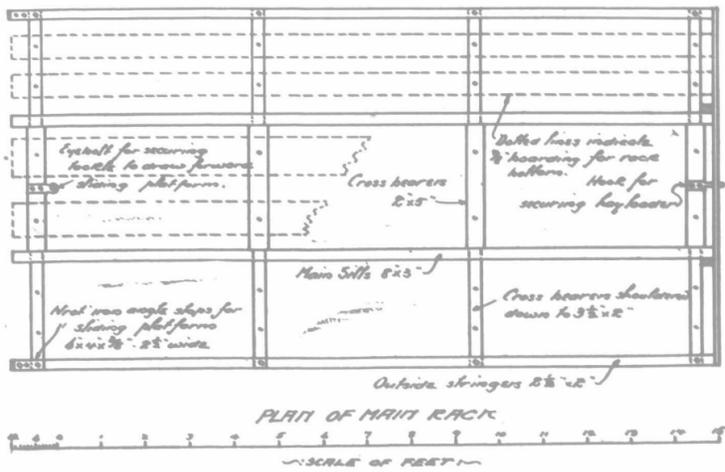


Fig. 1.

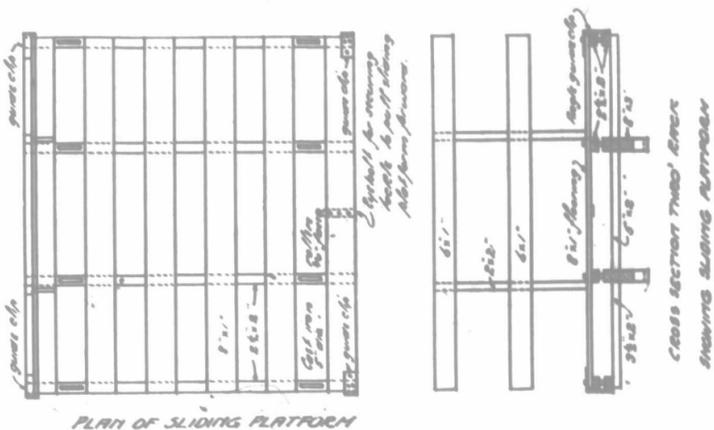


Fig. 2.

ordinary rack it practically requires two men to build the load. Some claim that when using slings this type of rack will not work. However, if a little care is exercised in arranging the rope, the two front bundles may quite easily be built first and then the rear part of the load put on. Of course care must be taken that the end of the rope from the bottom bundle does not become interchanged with the ropes of the upper one, when attaching the ropes to the unloading device in the barn. There is one advantage in using the slings, and that is all the hay is taken from the rack. With the hay fork this is almost impossible, especially with clover. Some may think that it will require a strong pull to draw the half load forward on the rack. This, however, is not the case provided the rack is properly made, and the rear end raised slightly above the level. The accompanying illustrations show in detail a sliding hay rack. Figure 1 illustrates a plain, flat rack that can be used for hauling hay or sheaves. Figure 2 shows the method of construction of the sliding platform. This is fitted with rollers which run on the sills and outside stringers of the main rack. It is fastened to the back of the rack while being loaded. Guide clips on each corner prevent it from getting out of place. As this platform is not particularly heavy, and simply rests on top of the main platform, it can quite easily be moved once haying is finished and the rack is required for other purposes. Figure 3 is a side view of the rack, showing the platform drawn to the front. The rollers on which the platform is supported are also shown in detail. Five-inch rollers with three-quarter-inch face have given satisfaction, and they run on a half-inch axle which fits into strips of iron that are bolted to the sills as a reinforcement. The sliding portion is entirely separate from the main rack, and can be used on a flat rack. Some prefer a hay rack with a sloping side, but once they become accustomed to the flat rack we do not believe that they would care to go back to the old kind. The sliding hay rack used in conjunction with a hay loader is a labor saver in haying time. It will practically take the place of one man.

## Our Scottish Letter.

We have had an unusually favorable seed time, and at the date of writing (11th May) the outlook for British agriculture is promising to a degree. Those who, like ourselves, can recall the prosperous days of the earlier seventies, and the disastrous thirty years which began with the awful season of 1879, are like men that dreamed. Were these thirty years a sort of nightmare, or did we actually live through them? Many a gallant farmer went under in these years. Many a farmer in the Lothians and the Merse, who kept his carriage and pair, lost his all and died in something approaching penury. By the year 1909 or 1910 the tide had begun to turn.

peace times an almost unlimited demand in what is called the east of London. The West of Scotland dairy farmers who went south set themselves to supply this demand. Although they were not all alike prosperous, we never met one of them who would have come back to Scotland. Even those who had found the battle stiffest admitted that they had succeeded better than they could have done in Scotland. The farmers who went to Herts went in for potato growing on a great scale, and some of them, like Mr. Samuel Wallace, carried on dairying in a vigorous and profitable way. Amongst patrons of what is now called the British-Friesian breed, no one is more popular as a judge than Mr. Samuel Wallace.

But it was not alone to England that west country farmers migrated during the lean years 1879-1909. Many of them went east and took up farms in the Lothians and Fifeshire, and almost invariably they prospered well. As a rule their sheet-anchor was dairying, but many of them were engaged in cropping on a

"bower," or one who rents a dairy from a farmer; next became a tenant farmer on his own, sent two of his sons into the ministry of the Free Church of Scotland, and placed at least three of them, of whom I have knowledge, on good-sized farms. Somehow a native of the West of Scotland feels inclined to boast a little, and perhaps the Shire of Ayr has better grounds for boasting than any other Shire in bonnie Scotland.

Great debates and discussions are taking place in these days on the costs of production of farm produce. Labor problems are also keenly exercising the intellects of farmers who do their own thinking, while all eyes are turned to the fields of France and Flanders where the recurring conflict between Free Institutions and Militarism is being fought, let us hope, to a finish. Every form of debate is more or less being colored by war conditions. Wise men are holding their breath, pious men and women are praying, while our peerless army and navy are guarding our seas and maintaining a home for a free people in a free State. There are heroes, however, whom we are sometimes prone to forget. I refer to the matchless heroes who go down to the sea in our merchant ships. And what about such men as Leslie Smith, of St. Cloud, Minn., who has just left our shores with something like 100 head of high-class Short-horns, and William Graham, of Claremont, Ont., who with as fine a bunch of Clydesdale mares as ever crossed the ocean, accompanies Leslie Smith. I do not much care for the name, the bull-dog breed, but I do admire the silent heroism of the Aberdonian and the Ontario Scot. A safe voyage to these grand specimens of a race which talks little but does things that count in the final reckoning.

The Farmers' Club in London has been considering recently the labor problem, as it affects men and women alike. It would seem as if in the days to come we might get rid of some of the noxious theories which have spelt disaster for some of our industries. On the part of employers there was the disposition to deal unjustly and cut down the revenues of the men when they were thought to become swollen, and on the part of the employees there was the deplorable policy known as "ca' canny." The reader of a paper on the Standardization of Labor at the Farmers' Club, said that in farming 1,000 acres in Ireland he had found labor to be his greatest problem. What he aimed at was the maximum of result with a minimum expenditure of time, and he hoped to secure this by adopting such methods as would give to the worker adequate recognition and reward for proficiency. He instanced the case of the American organizer of labor, who by the adoption of this principle increased the handling of pig iron in the Bethlehem iron-works from 16½ tons per man per day to 59 tons per man per day, and this without doing any injury to the men, but contrariwise. Mr. Ponsonby, who read the paper under review, favored the system of paying men and women wherever possible by results, i. e., as we say in Scotland, by piece-work, rather than by time. He spoke truth when he said that under a system of payment by time the employer gets the minimum results with the maximum of uncertainty, and the earnest proficient worker gets no better recognition than the inefficient dawdler. Regarding women labor on the land, a vast amount of nonsense has been talked. In the West of Scotland a large proportion of the work on the farms has always

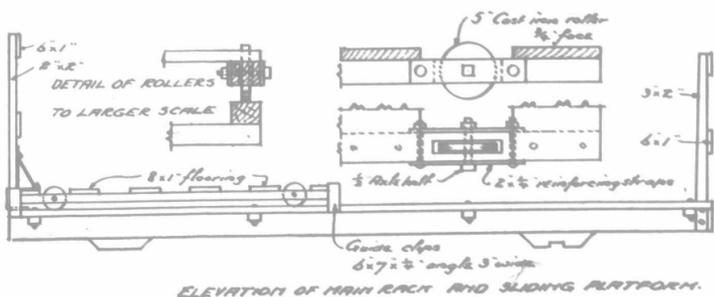


Fig. 3.

great scale. It is a curious and striking fact that a farmer who has faced his problems in the West of Scotland can usually farm successfully anywhere. One reason of this is undoubtedly his skill in dodging the weather. The climate of the West of Scotland is uncertain, and a farmer who can successfully harvest his crops in the majority of seasons in the West does not need much assistance when he goes east or southeast. In these regions the climate is much less moist and much more uniform, and I would be disposed to express the right view in the formula: "A man who is a successful farmer in the West of Scotland will, under normal conditions, be a successful farmer anywhere." Besides such considerations there is another which explains the phenomenon. The West of Scotland farmer and his family are trained to work. For generations they have been taught that in all labor there is profit, and that the only thing a human being need be ashamed of is idleness, laziness and debt. As a rule they put on no "side," and they do not take kindly to what, for lack of a better word, may be called "genteel" ways. During the days of agricultural depression a nobleman who owned estates in Kent and Dumbartonshire was visiting his Scots tenants. He was an ideal landlord, a thorough English gentleman (and when you get the right sort, there is no more desirable human breed than that)

been done by women. They have never regarded themselves as martyrs because it was so, and while everyone is grateful for what women have done to further the national interest during the War, the people who have done most have talked least about it. The lecturer on this subject said truly that women workers on the land were just like men workers, and subject to the same varying classification. Some are efficient, some are indifferent, a few are altogether incompetent. For myself I could name, I am sure, a score of widows in the West of Scotland carrying on farms who never knew what success and comparative financial ease was until they became widows. To their lasting honor none of them would say so, but the onlooker sees most of the game.

Disputes or debates regarding cost of production chiefly circle round the potato crop. The Government wants the farmers of the United Kingdom to grow 1,000,000 acres of potatoes this year. Returns made up to the end of April indicate that about 900,000 acres had then been planted. The Government has guaranteed the growers against loss, and has fixed a minimum price at which it will buy the crop at £5 per ton for England and £4 10s. per ton for Scotland. Naturally this differentiation in price between England and Scotland has raised discussion, and it does not admit of defence. The discussion, like most debates of the kind, has travelled wide of the mark. How difficult it is to state the costs of production in agriculture may be inferred from the fact that one writer says the average cost of growing an acre of potatoes is £41, another puts it at £34, and yet a third at £9 10s. The same thing is taking place in connection with the price of milk. Milk was the first article for which a controlled price was fixed, and there have been endless discussions as to the cost of producing a gallon of milk. The point is by no means easy to determine. Farmers in Scotland have to think in rotations, not in crops. Mixed farming is not a simple business. The subject has now been

complicated through the action of the Chancellor of the Exchequer in fixing the basis of assessment for farmers for income tax purposes at double their rent. Prior to the war a farmer's profit was assumed to be one-third of his rent. Since the War began it has been assumed to be his rent. Hereafter, unless the new Finance Act is amended, it is to be double his rent. The reason why farmers are allowed to get off in this easy way of accounting is that as a class they are not fond of bookkeeping. The Chancellor of the Exchequer gives them the alternative of paying either on double their rent as their profit, or on their profits as shown by actual bookkeeping the same as other trades. The issue will be that farmers will develop a talent for bookkeeping hitherto unsuspected, although a good many of them will lie low, "saying nuffin'." They will pay on double their rent as their profit.

Horse breeding is astonishingly brisk, and the Government Bill to prevent unsound stallions travelling has been read a second time in the House of Commons. The real difficulty about this sort of legislation is the immense power which it proposes to put into the hands of veterinary surgeons. Horse judges, as a rule, have a modified opinion of the capabilities of veterinary surgeons as judges of horses. Their view has been tersely expressed in the formula. "A veterinary surgeon is a man who knows a good deal about the inside of a horse but very little about his outside." The Bill as drafted proposes to withhold a license from any horse which is technically unsound, and also from any horse which has proved "inadequately fruitful," or any horse which is so deficient in individual merit as to be likely to damage the breed of horses. Breeders favor these conditions, but they claim that in regard to fruitfulness and individual merit the breed societies should be consulted and not the veterinary surgeon, but the Board of Agriculture after consultation with the breed societies as represented by a selected panel of judges, should determine whether a license should be granted.

This has been conceded by the authorities, and the breed societies are to be recognized in the matter and their advice taken.

A keen discussion is going on in some quarters regarding the merits of different breeds. Lord Lonsdale and Mr. Overman, a Norfolk farmer, have introduced Percheron stallions from France. The former has taken his stallion into Cumberland, and the latter has taken his into East Anglia. In the former case the gauntlet has been thrown down to the Clydesdale and to a less extent the Shire, and in the latter to the Suffolk. The main thing is for the home breeders to breed the best and not waste their time writing letters to the newspapers.

An important subject is the relative fruitfulness of sires. An interesting essay on the subject was recently published. It chiefly concerned Shires but the figures were interesting. A large number of horses were dealt with. The best return was 75 per cent. of foals, the next best, 72 per cent., and the third, 65.5 per cent. The lowest was 28.2 per cent., and the average was 50.4 per cent. Various theories were advanced as to the causes of sterility, and emphasis was laid on over-feeding of both stallions and mares for show purposes. The owner of a large stud of Clydesdale stallions has been tabulating the results from members of his own stud for several years. He has found the same wide margin of difference, but his opinion is that the personal equation in respect of the efficiency of the groom has a great deal to do with the varying results. It is quite certain that some horses give very poor results with some grooms, while with others they do all right. Among Clydesdales, Dunmore Prince Charlie (634) the sire of the world-famed Moss Rose 6203, was a notable case in point. He was almost a total blank with anyone but Alexander Scott, who on that account became his owner at a "thief's bargain" and made plenty of money out of the horse.

SCOTLAND YET.

## Automobiles, Farm Machinery and Farm Motors.

### Internal Combustion Engines.

BY PROF. W. H. DAY.

The invention of the steam engine by Watt in 1768 revolutionized the world, both as to industry and transportation. The steam engine furnished power in large units. An equal revolution is now being wrought through the gasoline engine by providing power in small units. They differ radically in principle. With the former the fire is outside or external to the engine, but with the latter, it is inside, hence this type are called "internal combustion" engines. This idea is 90 years older than that of the steam engine. In 1678 Abbe Hantefeuille proposed a motor driven by gunpowder. In 1862 M. Beau de Rochas, a French engineer, laid down the true principles of internal combustion engines, and in 1876 Dr. N. A. Otto, following these principles succeeded in building the first commercially successful engine of this kind, and which to-day are almost universally called gasoline engines, because that fuel has been more extensively used than any other. Now that they have been modified to burn kerosene satisfactorily those so adapted are coming to be called kerosene engines. Some burn heavier oils and are called oil engines. Alcohol has not yet proven satisfactory as an engine fuel.

#### General Principles.

There must of necessity be several steps in the operation of an internal combustion engine; first, intake—the fuel must be admitted to the cylinder, and not only the fuel, but air also, for the fuel will not burn without air. In order to get power from the fuel it must be fired. This requires heat and a spark, but the spark itself will not produce enough heat to light the charge—this requires a temperature of several hundred degrees. How can this be secured in the engine? By compressing the charge. Did the reader ever feel how warm the pump is after inflating a bicycle or automobile tire? Compressing the air produces heat. Hence the second step in the operation of the internal combustion engine is compression. This heats the fuel mixture up near its ignition point, which makes it very easy to fire. Then the electric spark comes along and ignites the mixture, which burns, and expands rapidly, thus producing power, which is the third step. This combustion leaves the cylinder full of burned gases, which must be exhausted, the fourth step, before a new charge can enter. And now we are back where we started, ready for intake again. These four steps, intake, compression, power, exhaust occurring in the order named constitute a "cycle" which recurs over and over again as long as the engine is in operation. Some engines are so constructed that they require four strokes of the piston for a cycle. They are called "four-cycle" engines which really means they require "four strokes to complete the cycle". Others just take two strokes to complete the cycle and hence are called "two cycle" engines.

#### Four-Cycle Engines.

Figures 1, 2, 3 and 4 with their legends show the distinctive characteristics of four-cycle engines. In No. 1 the piston is moving downward on the intake or suction stroke. As soon as this begins the gases in the cylinder have more room than before and consequently do not press so heavily on the intake valve inside the cylinder. This reduction, usually called suction, allows the air pressure acting on the stem and through the mixer to force the intake valve open. In many engines this valve is opened by a push-rod and cam. While it

is open the air rushes in through the mixer carrying some gasoline with it. At or near the outer dead centre the intake valve closes.

In No. 2 the piston is moving upward on the compression stroke. Both valves are closed. The gas is compressed till the pressure is possibly five or six times as great as the atmospheric pressure—in ordinary engines anywhere from 60 to 85 pounds per square inch, depending on the design of the engine. At this stage the temperature due to the compression is probably about 900 degrees F. Just before the piston reaches the top the charge is fired.

In No. 3 the piston is moving outward on the power stroke. The gasoline vapor has burned producing a temperature for the instant of possibly 3,000 to 4,000 degrees just when the piston is at inner dead centre. This intense heat immediately raises the pressure up to 250 or 300 pounds per square inch. Hence a four-inch cylinder would have a pressure on it of between a ton-and-a-half and two tons, other sizes in proportion! No wonder the engine generates "power" on this stroke. Before the piston reaches outer dead centre the exhaust valve is opened by a push rod and cam, allowing the greater bulk of the burned gases to escape by their own expansive power.

In figure 4 the piston is again moving upward, this time with the exhaust valve open, and most of the remaining gases are forced out. Indeed this valve is held open a short time after inner dead centre in order to give the gases every possible chance of escaping, but sufficient remain to adulterate the next charge and render it only about 80 per cent pure.

Before leaving the four-cycle engine we should note that the base is open.

#### Two-Cycle Engine.

The two-cycle engine is in sharp contrast with the four. It has no valves, but simply ports which are covered and uncovered by the piston, the base of the engine is air tight; and the mixing valve is attached to the base instead of to the cylinder.

Since the four steps—intake, compression, power, exhaust—are to take place in two strokes of the piston it is evident that two steps must be occurring at once during some stage of the operations. Note figure 5 which shows the up stroke of the piston during which:

1. The mixture in the cylinder is being compressed.
2. Fresh mixture is being drawn into the base by the so-called "suction" of the piston as it moves upward.

When the piston has almost reached the top, the charge is fired and the piston starts on its downward stroke, which is illustrated in figure 6. Here also two things are occurring:

1. Power is being produced by the expansion of the burning gases.
2. The fuel mixture in the base of the engine is being compressed.

Now note figure 7. The cylinder has moved downward till the exhaust port E is partly uncovered, but the intake is still closed. The cylinder is now open to the atmosphere, and the high pressure due to the heat forces most of the burned gases out. Next note figure 8 in which the piston has moved a little further down thus uncovering the intake port, and again we have two operations taking place at once:

The compression in the base forces a new charge of the mixture up into the cylinder. It cannot go

straight across and out the exhaust port because of the deflector D which deflects it upward into the cylinder.

2. The incoming mixture tends to drive the remainder of the burned gases ahead of it and out the exhaust port.

While this has been going on the crank has been rounding the outer dead centre and the piston beginning to move upward. The position and size of the ports should be such that the exhaust port is finally closed just as the first of the fresh charge reaches it, and all the exhaust gases are expelled. This sounds well in theory, but it is not borne out in practice. It is found that sufficient of the burned gases remain behind to render the new mixture only 50 to 70 per cent. pure.

This is the stage of the cycle at which the most time is gained. Since the mixture in the base is under compression the intake from the base to the cylinder is almost instantaneous, as is also the exhaust, consequently two strokes of the piston are saved.

#### Two and Three-Port Two-Cycle Engines.

In figure 5-8 the mixing valve or carburetor might be attached to any part of the base. A check valve V admits the mixture when suction occurs, but prevents escape backward during the downward stroke of the piston. Thus there are two ports and a check valve, and this type is called a two-port engine. Figure 9 shows another type. The carburetor is attached at a port in the bottom of the cylinder, and the mixture is drawn into the base through this port when the piston is at the top of its stroke. This type is called a three-port engine.

#### Efficiency of Two-and Four-Cycle Engines.

From the above descriptions it will be seen that the four-cycle receives a power impulse once in two revolutions, while the two-cycle receives an impulse every revolution, i. e., twice as many as the four cycle in the same time. From this it was expected that the two cycle would have the higher efficiency, develop more power and do more work per gallon of fuel than the four-cycle. But this has not been borne out in practice, chiefly because the mixture is only 50 to 70 per cent. pure, while in the four cycle it is about 80 per cent. pure.

The net result is that the four-cycle gives considerably higher fuel economy than the two-cycle.

There is, however, a practical advantage in the two-cycle for some conditions. Since it receives an impulse every revolution the fly-wheel can be made about  $\frac{1}{4}$  to  $\frac{1}{3}$  as heavy as in a four-cycle of the same horsepower. Hence smaller crank, lighter bearings and lighter parts all round may be used. This makes the two-cycle particularly adapted where lightness and compactness are required, e. g., in motor boats using one or two cylinders of moderate engine speed.

In automobiles and aeroplanes where four or more cylinders are used the same end is secured with four-cycle engines. Since there is a power impulse every half revolution or oftener the fly-wheel may be made correspondingly light, and other parts light in proportion. Indeed some aeroplane motors weigh only about five pounds per horse-power.

#### Diesel Engine.

The treatment of internal combustion engines would not be complete without mention of the Diesel engine. Reference has already been made to the fact that compression increases the temperature of the gases

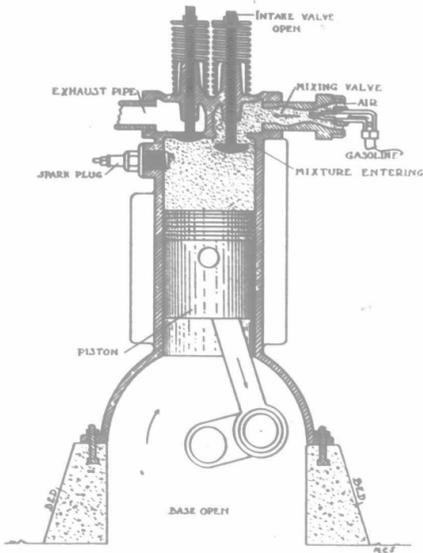


Fig. 1.

Intake stroke of four-cycle engine. Intake valve open. Piston moving down. Mixture being drawn in. The intake valve may be opened by a push rod or by suction.

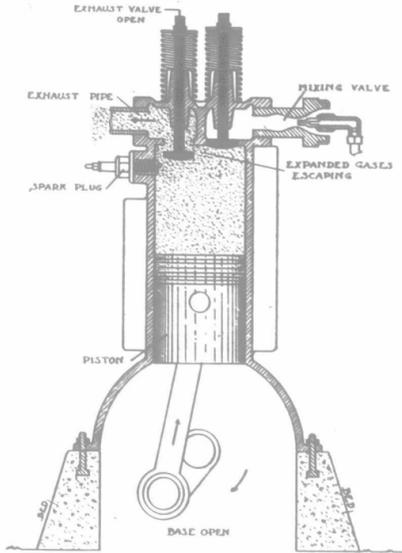


Fig. 4.

Exhaust stroke of four-cycle engine. Exhaust valve open. Piston moving up. Expanded gases being expelled. Exhaust valve opened by a push rod.

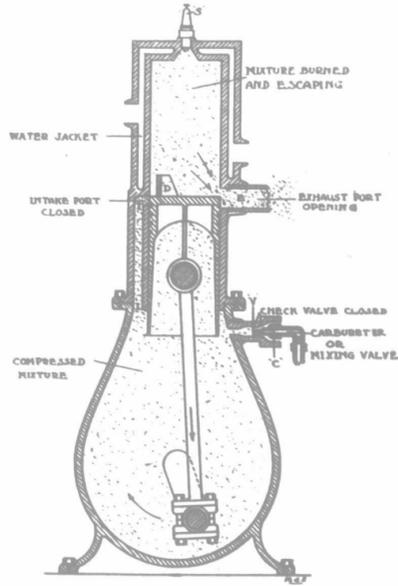


Fig. 7.

Two-cycle engine with exhaust port beginning to open. Exhaust occurring by expansion.

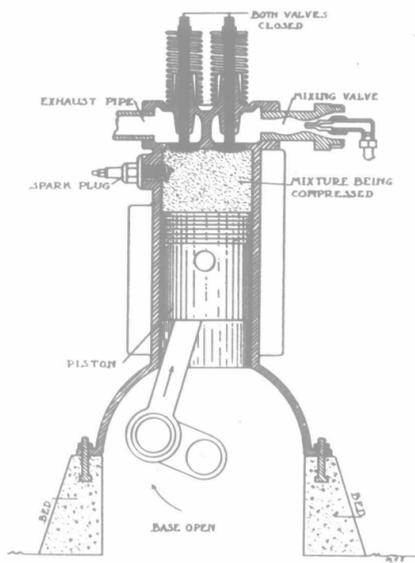


Fig. 2.

Compression stroke of four-cycle engine. Both valves closed. Piston moving up. Mixture being compressed.

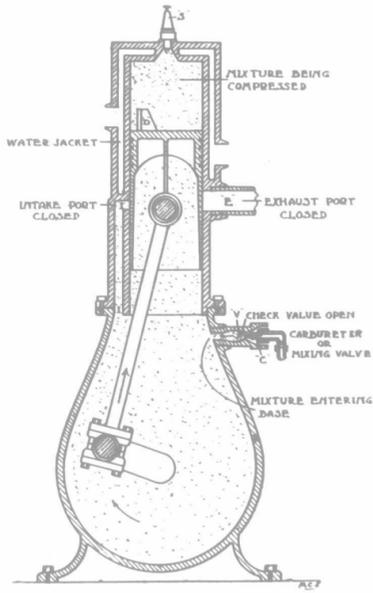


Fig. 5.

Up-stroke of two-cycle engine. Compression in the cylinder, mixture taken into base. Intake and exhaust ports closed.

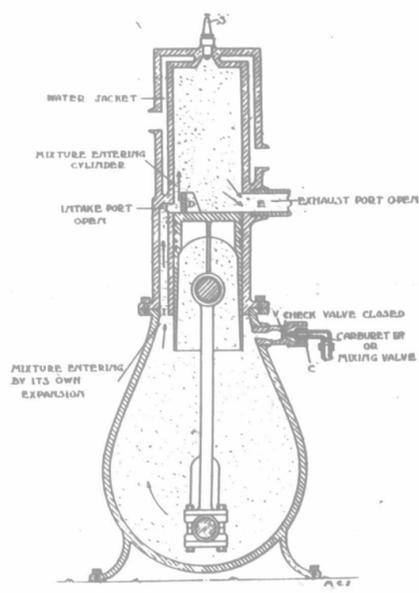


Fig. 8.

Two-cycle engine, with exhaust port and intake port both open. Mixture entering cylinder by expansion from base. Exhaust and intake occur together and almost instantaneously.

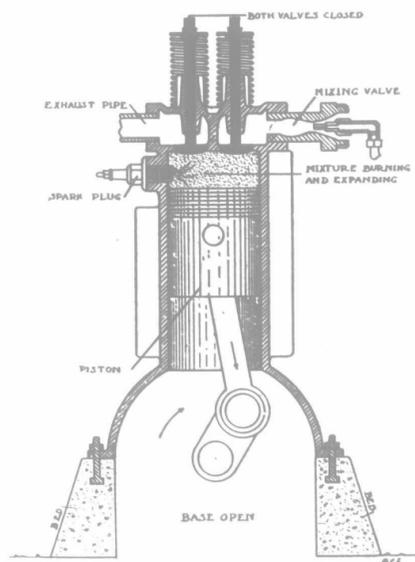


Fig. 3.

Power stroke of four-cycle engine. Both valves closed. Mixture burning and gases expanding because of heat, thus driving piston down.

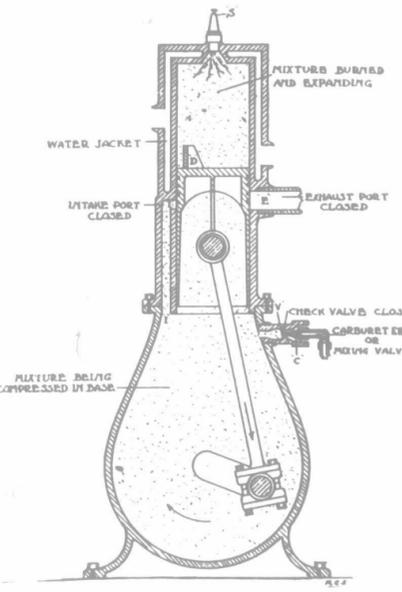


Fig. 6.

Down stroke of two-cycle engine. Power developed in cylinder. Mixture in base compressed.

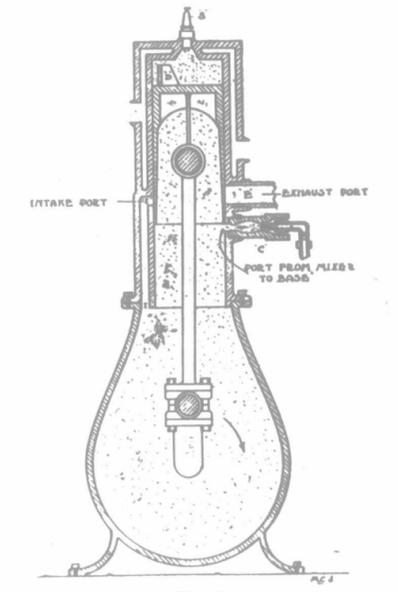


Fig. 9.

Three-port two-cycle engine, mixture enters base through port at mixing valve.

compressed. Diesel made use of this principle by designing an engine with such high compression (400 or 500 pounds per square inch) that when fully compressed the mixture is fired by the heat of compression, thus doing away with the need of spark plug, battery, magneto etc. And besides, the Diesel or modifications thereof, known as the Semi-Diesel, are the most efficient internal combustion engines made—they get more work per gallon of fuel than other types. And what is more, they will run on practically any kind of oil. The drawbacks are that the high explosion pressure consequent upon the high compression requires a very heavy engine to withstand the explosion, and these heavy parts make the engine so hard to turn over and get up speed to carry the piston past the first explosion that it is only the smaller sizes that can be started by hand. For the larger sizes a starter has to be provided, e. g., an electric motor, a gasoline engine, or a compressed air motor. However, during recent years there has been a move along semi-Diesel lines among Ontario manufacturers, and some development may be expected in the near future.

### Some Summer Suggestions.

If you are on a tour this summer and you discover that your car has developed a bad squeak, it will be well to know some simple measures by which to locate the noise. A very troublesome condition arises when the shackle bolts are loose and free from lubrication. When these bolts become noisy you can easily determine the cause by grasping the bumper or the front of one of the springs, and shoving it back and forth. Body bolts have been known to become loose and create exasperating sounds upon rough roads. You should have some idea as to where the offending bolts are located. If any of your springs should create rattles that are difficult to eliminate,

it is well to remember that after the springs have been thoroughly oiled, it is a good idea to bind them very tightly with electric tape. This prevents the lubricant from escaping, and it does not detract from the appearance of your car. We know a number of prominent motorists who never purchase a new machine without first issuing instructions that the springs shall be thoroughly lubricated, and bound with tape. It is not usual, but nevertheless there are often cases where different joints have failed to hold oil or grease. In such instances it is a good policy to make a little leather boot or covering for the affected part. Such a contrivance keeps the lubricant in place, and prevents the accumulation of foreign matter.

If you are out on the road on a dark night, or your head lights suddenly cease operation, look and see if your connections and contacts are all right. This is the first step and maybe all you need to take. If the connections are in place and the lights still refuse to burn, clean the terminals. It is always possible that they may have become fouled from a number of different causes. We are presuming of course that nothing has happened to the bulbs in the head lights. It is an easy matter to test them by taking them out and attaching them to some terminal that is in operation.

A little soap is a valuable thing to carry in your repair kit. Sometimes gasoline leaks through the gauge or the intake pipe in your storage tank. If soap is liberally applied to the threads the leaks can be stopped. You must remember that soap cannot be dissolved by gasoline. One of the most troublesome accidents that can be experienced is a break in any of the pipes conducting fuel from the storage tank to the cylinders. Sometimes a heavy winding of tape will enable you to get home without assistance, but this is not always effective. Soap will never fail you. It can be poulticed on a break or it can be applied to a thread or string, and in that manner made to cover up any opening that

is causing a gasoline leak. If the break in the pipe is such as to cause bending do not forget to keep the pipe straight by means of a piece of wood. A great many gallons of gasoline leak through poor threads. Some careless motorists screw on caps that are not perfectly level, and if the thread is broken something is bound to escape sooner or later. In such a case as in many others, a little prevention proves more valuable than a great deal of cure.

Felt can be used to excellent advantage to stop some squeaky noises that may seem almost incurable. Occasionally a rasping sound arises because two pieces of metal are in contact without being equalized. In such a predicament a piece of felt pressed between the parts will stop the sound, and eventually spread them apart until they cannot longer assault the gear.

Most cars are equipped with a water pump which contains runners or impellers, which force the water through the cylinder jackets to the top of the radiator. When the runner or impeller becomes broken, the circulation of the water ceases to a vast extent. If you find that your engine is heating, and you suspect that it is on account of the water pump, you will find that the lower part of the radiator is cool, while the upper part will be extremely warm. You will understand that this clearly indicates that the pump which is located at the bottom part of the motor is not forcing the water around. There is only one remedy for this, and that is to take down the water pump and re-set it. Speaking of radiators it might be well to mention that a solution of ordinary soda in clean warm water will clean the radiator of all scale and sediment. Such a solution should be used once every six months. After you have filled the radiator with this mixture start the motor in order that complete circulation may take place. When you are positive that all scale and sediment has been removed, drain the radiator and wash it out thoroughly with clean water.

AUTO.

## Canada's Young Farmers and Future Leaders.

### Farm Organization.

It is a recognized fact that the farm is a family institution. Every member of the average farm family is closely identified with, and performs some part of, the farm work. In the old days it was the business of the farm to provide a living for the family and every member contributed his or her share toward securing this living. The farm is still a family proposition, dependent largely upon the work of members of the household to contribute their share in tilling the soil and looking after the crops and live stock.

It is because of this well known characteristic of the farming industry, that farms regularly pass from father to son, in spite of the changed conditions which modern developments have brought about in our industrial life; conditions which have been slower to affect agriculture than other industries but which have, nevertheless, exerted a very marked effect. There is developing, however, a marked tendency to depart from the normal practice of handing down the farm from father to son, which implies that there are a greater number of farms changing families than used to be the case. Why should this be so? It is not our purpose to discuss this question fully, since it would require that we enter too fully into a discussion of agricultural economics, a task which space would not permit us to attempt, even though we felt equal to a fair treatment of the subject. Several considerations, however, seem to be worthy of note in this connection and have, we believe, a very distinct bearing upon the important question under discussion; and in no small degree are bound up with what people are usually pleased to call "our rural problem".

Let us suppose that there are three children on a good farm of 100 acres, which we believe to be about the average size of farms in the Province of Ontario. These children are Tom and Dick and Mary. We are concerned at present only with Tom and Dick, because as one farmer said in consideration of a similar problem in his own family, "As for Mary she will grow up and get married and that will take care of her future." Mary has her part to play in the solution of difficulties in connection with our rural life too, but it is not exactly within our province to discuss them here. It is obvious that Tom and Dick must come to some decision as to what they are going to do about staying with or leaving the farm. Both may leave, one only may leave, or both may stay. As often happens Dick may be the younger and because of this fortunate position may have had a better opportunity to be educated than had Tom, who had been forced by circumstances to remain out of school a great deal to help his father, who would otherwise have had to hire help or do all the work himself. Very often the Toms have not had an opportunity of doing more than pass their entrance examinations, which is of itself no discredit to Tom, but frequently puts him at a disadvantage as compared with Dick.

Where this occurs it is only natural, perhaps, that Dick should have more decided preferences for life

away from the farm than Tom, who may, as often happens, conclude that he is better fitted to farm than anything else, and because the farm is too small to provide a living for three men and, ultimately their families, consents to remain on the farm while Dick seeks a livelihood elsewhere. This eliminates Dick from our farm scheme except as he may figure later as one of the heirs, and he follows the trail to the city as did George in last week's story. Tom remains with his father and as often happens, works for him as a hired man. The farm is pretty small but still they manage to get along until Tom marries and then it begins to get more difficult. When the father dies, the estate is up for consideration and Tom then has his choice of retaining the farm and paying off Dick and Mary, or seeking something to do elsewhere. Right here is where the chain is often broken. Tom's unwillingness to assume the obligation of paying off the other heirs is stated as the most common reason that farms change families and it presents a serious problem because it may mean that Tom is better fitted to farm than anything else.

The organization of the farm as a business proposition is a serious problem because it seems almost necessary that our farms continue to remain family propositions. It may happen, and frequently does, that the case of Tom and Dick is reversed and Tom leaves home to buy a farm elsewhere, or take up other work because there is not sufficient work for all, including the younger brother who may be growing up. The problem has been solved in individual cases where the prosperity of the farm would stand it, by establishing sons upon farms of their own as they reached the age where they wanted to go into business for themselves, or, in other cases by some form of agreement whereby the son or sons acquired a share in the management of the business. In the former case it is frequently necessary to mortgage the old farm and this may mean a severe strain upon the father. We know of several cases where forms of business partnerships have been entered upon between father and son and successfully carried out. The great obstacle in the way of this most satisfactory solution is the size of the average farm business. Studies in farm management have shown the advantage of large farms and experience has many times proven the difficulty of making more than a bare living from farms of small or medium size devoid of any form of specialization.

Farming is the one remaining great industry that has not been organized so that a single enterprise, such as the business of a single farm, may remain continuously in existence, as is the case with corporations. No matter who dies or drops out of a corporation, it still goes on so long as it remains solvent.

It would be quite possible to apply the corporate idea to the farm business, but it is doubtful whether many cases could be found where this has occurred. In any event, it seems evident that to make farming permanently attractive for the sons of farmers, it is necessary that some new form of business relationship be adopted which shall give the son a greater interest in the enterprise. There are a goodly number of graduates from our agricultural colleges who do not get back to the farm from which they came because the father is not willing to relinquish the management of the farm, or enter into a satisfactory business arrangement. Agriculture is too important a factor in our national welfare for us to evade a thoughtful consideration of this problem.

### Junior Farmers Carry On.

Notwithstanding the fact that a very large percentage of the junior farmers in the Province of Ontario are joining the army, the work of the various local associations has been progressing steadily during the last couple of months, according to our reports. In the County of Peel, the Streetsville Junior Farmers and the Junior Institute prepared a play entitled "Back to the Farm," which was given in different places throughout the County with the idea of raising money for patriotic purposes. It is estimated that this one association has been instrumental in raising from four to five hundred dollars in this manner, the play having been given for the last time at Eldorado, where nearly fifty dollars was taken in. Incidentally, we learn that out of twenty-six members of the Streetsville Junior Farmers' Improvement Association, only three are now left. This has been duplicated in many parts of the Province; the membership of some associations having been practically wiped out because of the need for men in the army, some associations having suffered in a similar manner to the Streetsville association and others having lost from twenty-five to fifty per cent. of their number.

A recent meeting of the Prescott Junior Farmers' Improvement Association was addressed by a member of a nearby association on how he won out in the dairy profit competition two years ago. At this same meeting some films of motion pictures were run off and the District Representative gave a talk on "Herd Record Work", with the result that six of the boys—five of whom were members of a Short Course held last winter—decided to weigh their milk and take samples regularly for testing. We understand that they have already procured the necessary sample bottles and scales.

A report also comes from Kenora that the boys and girls in the high and public schools are becoming very much interested in poultry raising, many of them having gone into gardening and the raising of chickens this year in order to assist in the campaign for greater production. Some of the school rooms have organized to crop vacant lots during the summer, and at a recent address by the District Representative on the subject of poultry raising, about 350 boys and girls were present and took a very large part in the meeting.

This is being duplicated in hundreds of the public schools throughout the rural district, where, according to one of the District Representatives, "all of the pupils view the work this year from the viewpoint of national need, rather than local competition. All are resolved to do their very best to produce something which will be of value as a food." From Wellington County comes the report that the Junior Farmers' Association have put on a Home Garden Contest among themselves; fourteen of them having entered. In order that the garden may receive the very best of care they have put the contest on a really competitive basis and have chosen sides, with seven junior farmers on each side, in order to see which team can produce the best garden.

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## THE DAIRY.

### "Holstein" a Misnomer.

It has been recently announced that the name Holstein, as applied to Black and White cattle in Great Britain and New Zealand, has been officially dropped in these countries. The big Black and White cattle are now known simply as Friesians, while in South Africa they have always been called "Friesland cattle". Mr. Trevor Williams, President of the British Friesian Cattle Society, stated in a recent letter to the Secretary of the Holstein-Friesian Association of Canada: "At the last General Meeting of this Society it was decided to eliminate the word 'Holstein' from our title, and this Society will henceforth be known as the British Friesian Cattle Society."

"I have been asked by the general body of members to communicate this decision to you, and to express the hope that it may be possible for your Association to take action of a similar nature. A letter on this subject has also been sent to the Holstein-Friesian Association of America."

"The organization in New Zealand has already adopted the course suggested, and other colonies will no doubt follow suit."

"The original name of our Society was the British Holstein Cattle Society. We added the word Friesian some few years ago, not only to accentuate the predominant type in our herds, but to come into line of uniformity with the great associations of the American continent. Now that the two mother countries and the Empire are fighting together against a common enemy, of which the word 'Holstein' is a suggestive irritant, we would much like to see the uniformity maintained, by your Association adopting the course which I put before you. If you can see your way to bring the matter for consideration before your governing body, I shall be deeply grateful."

The statement is also made that the name Holstein has been a palpable misnomer ever since it was inflicted upon the Dutch breed by a few early United States importers." It may be interesting to lovers of Black and White cattle to examine the origin of this breed very briefly, in order to see, if possible, whether there is any real excuse for the implied Holstein origin of this breed, since it is only logical to assume that the name of a breed should reflect its origin as accurately as possible.

The first record to which we have access is found in Volume I of the Holstein-Friesian Herd Book, issued by the Holstein-Friesian Association of Canada in 1892. This Volume contains a chapter on the origin and early history of "Holstein Cattle", possibly written by Mr. D. E. Smith, of Churchville, Ontario, then Secretary and Editor of the Herd Book. We find in this chapter the following: "According to tradition, all that is certainly known upon the subject is that for an indefinite period anterior to the records of history there existed in the Duchy of Holstein a superior race of cattle, and that thence the finest cattle on the North of Europe has been derived. The present large, improved Black and White cattle of North Holland, Friesland, and Oldenburg, which all possess the same general characteristics, yet present in different localities some slight dissimilarity and have perhaps been brought to the highest degree of perfection in the first-named Province, undoubtedly descended from the original stock of Holstein." A little later we read: "As it is known that Holland was indebted to Holstein for its superior breed of dairy cows, it is obvious that the origin of the Holstein cattle must be assigned to a period still more remote", while farther down we see that "although this race of cattle has been most fully developed and attained to the greatest consequence in North Holland the original stock was by no means bred in Holland, but in Holstein, whence it spread itself over the north of Germany and Holland, even to England, and contributed much to the improvement of the native stock of that country."

These statements would appear to indicate what we believe to be contrary to the truth, that the name "Holstein" properly belongs to this breed. The present German Duchy of Schleswig-Holstein was taken from Denmark by Germany and, according to our best information, has no claim to recognition in connection with the Black and White cattle. Five years after the publication of Volume I, of the Canadian Holstein-Friesian Herd Book, a publication entitled "Holstein-Friesian Cattle," by Frederick L. Houghton, Editor of the Holstein-Friesian Register and Secretary of the Holstein-Friesian Association of America, appeared. In this book it is stated that the ancestry of this breed may be traced unalloyed for more than two thousand years. We are inclined to accept this and the following summary as being more nearly correct than those quoted from Volume I of the Canadian Herd Book, because of the fact that they show evidence of more extensive investigation and possession of a larger volume of facts. The history of the Netherlands goes back three hundred years before the commencement of the Christian era, when that portion of the country bordering on the North Sea was called Friesland and extended over the present Provinces of North Holland, Friesland, and Groningen, and over the German border between the River Ems and the middle arm of the Rhine. From the earliest accounts of these people they have dwelt upon the shores of the North Sea and possessed herds of cattle from which they derived their chief means of support. It is not known from whence they came, but there is a tradition that their progenitors came out of India and that the mother of the race was as white as snow. It is possible that

they brought their cattle with them from Central Asia, journeying Westward to the shores of the North Sea in search of pasturage.

Two hundred years later a German tribe came out of Hesse, a district on the Upper Rhine, where they were living in hostility with their neighbors, and settled near the Friesians on the shores of the North Sea, occupying first an island to which they gave the name of Batavia. They, also, were breeders of cattle, but it is not known whether they brought their herds with them or obtained them from the Friesians. It has been suggested that they brought their cattle with them and that these cattle were black; that the Friesian cattle were a pure white and from the cross of the two the foundation of the present so-called Holstein-Friesian breed was laid. Caesar spoke of these two tribes as using their cattle in traffic with one another and giving them as dowries to their children. It appears that the influence of Batavian and Celtic blood has been much more pronounced in West Friesland, a division having occurred in the country, and among the cattle breeders also, in 1282, as the result of a decisive inundation which produced the Zuyder Zee. From this account it would appear that the honor of having originated the famous Black and White cattle lies rather with the Province of Friesland than with the Province of Holstein, now part of the Duchy of Schleswig-Holstein.



**Lakeview Dutchland Artis.**  
Canadian champion 7-day butter cow: 654 lbs. milk and 43.06 lbs. butter. Her sire is Dutchland Colantha Sir Mona, and she is owned by Lakeview Farm, Bronte, Ontario.

The "double-barrelled" name now in use arose out of the formation of two associations for the promotion of the breed in the United States about 1870. The first herd book of the breed was published by "The Association of Breeders of Thoroughbred Holstein Cattle" in 1872. In 1875 a herd book was published in the Netherlands, the original home of the breed. Five years later another herd book was published by the "Dutch-Friesian Association" in America, who objected to the name Holstein as did the European breeders. In the same year a herd book was issued for the Province of Friesland where the breed has been guarded for ages. Since then, herd books have been published in Belgium, Germany and other countries. In 1885 the two American associations united and compromised on the name "Holstein-Friesian" which has stuck and has since been adopted by the Canadian Association.

### Canadian Cheese and Butter in England.

Those interested in the cheese and butter export trade of Canada will be interested in the report of the cargo inspectors at London and Bristol, which has just been received from Mr. J. A. Ruddick, Dairy and Cold Storage Commissioner, Ottawa. This report covers the work of these officers of the Federal Department during 1917. Space does not permit the publication of the full report, but the essential parts are covered herewith:

Except for about half a dozen shipments of cheese, at the beginning of the season, the bulk of arrivals at London were hooped with two bands of thin, flat iron of about three-quarters of an inch in width, passing at right angles vertically around each box. The bands were passed under the outer rim of the lid, and short, wide-headed nails secured them to the boxes. In former years, cheese for the War Office authorities had been packed in expensive and rather heavy square boxes, but for the purpose for which the cheese was intended it would be difficult to imagine methods which would enable round boxes to be landed in London in better condition than by the use of these iron hoops. Occasionally the outer edges of the lids were torn and frayed, but, generally speaking, breakage in the boxes has been very materially reduced. It is of course quite true that for commercial purposes this banding would probably make too permanent a package, and would, moreover, not facilitate inspection and testing.

The small quantities of cheese received at the port of London for civilian use, and imported to the Order of the British Board of Trade, were not sorted by mark, as in former years, but were stacked in piles of white or colored cheese, irrespective of the shipper's mark, and buyers were compelled to take delivery just as they came. There were more frequent shipments of heated cheese at the port of London than in previous years, and during August and September some were in a very bad way. This was often due to extra exposure during the summer months because of shipments being docked at the mouth of the Thames, and the fact also that few ships arrived which were fitted with cold or cool-air chambers. On one occasion cheese had been stowed

under grain and delay in discharging the grain brought the cheese out in bad condition. At the port of Bristol there were no large quantities of heated cheese, and the inspector has received no complaint from the trade in general. At the latter port only American cheese was available in the early part of last season. This upset the merchant's business somewhat, since he became entirely dependent upon what supplies he could obtain from week to week. This lasted until after the Government had taken over the control of Canadian cheese. Cheese shipped to Bristol in ordinary boxes showed no improvement, breakages remaining as high as previously. Only one shipment of boxes, banded as referred to above, was received at Bristol and this certainly was a success with very few of the boxes in any way broken. Small numbers of breakages were also recorded where the stave boxes were used, and this is reported as an improvement over the ordinary type of box.

A new type of box made of fibre is reported from both Bristol and London. From London the report is that this box has been tried in a few small trial consignments but did not receive very favorable comment, there being a lack of stiffness in the material which made it dangerous to pile or stack four or five cheese. From London also comes the report that these fibre boxes did not seem to be proof against moisture, and some were seen in which the contents had been badly heated, with the result that the whole package lost shape. Packages of this type which were sent to Bristol were considered very suitable as a carrying package; the chief defect being with the covers, which are frequently lost, particularly if the band around them was torn off. On the other hand, this box does not split readily and consequently does not present, when slightly injured, such a wrecked appearance as the ordinary type.

Only about 1,400 packages of butter arrived from Canada at Bristol. Early in the year supplies were fairly maintained but later on there was a great scarcity, and margarine and other substitutes consequently became in great demand. This demand continues up to the present time, particularly since supplies from Holland and Denmark, the only remaining continental source of supply, are small. New Zealand and Australian stocks of butter have been purchased but are still awaiting shipment. While some large stores of butter are held in Denmark, on account of the high values ruling, the authorities are not purchasing.

## POULTRY.

### Advantages of Colony Houses.

Probably the most desirable method of housing growing stock on the average farm is by the use of the portable colony house. These small houses are valuable as labor savers, for the reason that they can be moved readily from time to time, merely by hitching a team to one end of the house, on the way to or from the field.

There are several notable advantages of the colony house system for summering the flock, and these are very excellently summed up in the following paragraphs from bulletin 247, prepared by Professor W. R. Graham, O.A.C., Guelph, and which contains a large quantity of useful information stripped of unnecessary explanation:

"1. There is no loss of time in teaching the chicks to go from a small coop to a larger one. Movable brooders are used inside the house, and when no more heat is required these are taken out. About this time, low, flat perches are put in the house; the chicks soon commence perching, and thus prevent crowding. One hundred chicks can be put in a house. This house will accommodate fifty chickens of about four or five pounds weight; or until large enough to be fattened or put into laying quarters. Usually some birds are sold as broilers, hence there is not much overcrowding.

"2. The chickens can be reared on a portion of the farm where a full crop, as well as a crop of chickens, can be grown. This usually means new land each season for the chickens, which in turn means stronger and better birds reared with less grain. It also may mean the destruction of many injurious insects. We use the corn fields, pasture fields and orchards, or any similar condition under which a crop of chickens and an additional crop can be obtained from the land during the same season. Chickens grown on the same land year after year do not thrive as well as those grown on new ground each year.

"3. Should the chickens at any time become destructive they can be moved. We have raised chickens in tomato fields, and if they develop the habit of destroying ripe tomatoes, all that is necessary to avoid further trouble is to shut the chickens in at night, and next day draw the house to a new field and open the door. The chickens will come home to the colony house to roost.

"4. Where there has been considerable grain shelled on the field during harvest, the chickens can be easily moved to the field, and there they will gather the grain.

"5. Any vermin that might worry the chickens at night can be easily kept out by shutting the door.

"6. During rainy or bad weather, the chickens have a place for shelter. This is very important early in the spring and late in the fall."

Keep the eggs cool while holding them for market. Sixty degrees or less is a suitable temperature.

Good eggs for preserving purposes should be clean; not washed clean but laid clean. Eggs laid now will keep better than those laid later in the season.

## HORTICULTURE.

### Fruit Marks Act Amended.

Readers will remember the report of the conference of fruit growers held at Ottawa March 26, 27, that appeared in this paper. At this conference several recommendations were passed for the consideration of the Minister of Agriculture, relative to the standardization of fruit packages, clearer definition of grades of fruit and other matters regarding which amendments to Part IX of the Inspection and Sale Act (better known as "The Fruit Marks Act") were urged.

For years these amendments have been needed, and while it is scarcely likely that the Act will be considered perfect even as it is now amended, marked improvements have been made which should mean the elimination of many of the handicaps that have hitherto confronted the honest fruit-grower and packer. No grower of good fruit who tries to give the buyer an honest pack need feel concerned about the stringency of any legislation which has for its object the marketing of good fruit. If everyone were perfectly honest, and if every fruit-grower realized the value of uniformity and quality in packages that reach the consumer, there would be no need for either legislation or the inspection for which it provides. It is always the unscrupulous or the careless person who is inconvenienced by legislation of this kind.

There was some doubt as to whether the recommendations of the conference would be incorporated into the Act during the session of the Dominion Parliament which was recently closed, particularly since the session was pretty well over before the Hon. Mr. Crerar introduced the Bill in the House. The former Minister of Agriculture, while favorable to the legislation during his incumbency of the office, was of the opinion, we understand, that such matters were better left until after the termination of the war, but it is gratifying to all interested to see that the improvements so long needed have at last been made, and means provided whereby the Canadian fruit industry may take another step forward.

Bill 108 of the last session was passed on May 20 as an Act to amend the Inspection and Sale Act, and deals with fruit, fruit marks and potato grades. By this Bill sections 319, 320, 320A, 321, 322, 328 329 and 332 of the old Act as last amended in 1912-13, are repealed, and sections 325 and 326 will be repealed and cease to become effective after June 1, 1919. These sections are replaced by amendments included in the new Bill, together with such of the provisions of the old Act as were considered satisfactory.

Among the numerous amendments made are several which are of importance, including some definitions necessary to the interpretation of the Act, the marking of packages, definition of grades, and the standardization of packages. Because of the importance of the matters enumerated we shall endeavor to explain rather fully the changes which have been made relative thereto.

#### Culls and Immature Fruit.

Section 319, as now constituted, contains an amended definition of culls by which such fruit is described as meaning, "fruit that is either very small for the variety, is seriously deformed or has fifteen per cent. or more of its surface affected by any of, or by the combined injuries caused by, apple scab (*Venturia pomi*), insects, cuts, bruises, or other causes, or the flesh of which is not in an edible condition, or the skin of which is broken so as to expose the tissue beneath." A much-needed pronouncement as to the type of fruit which may be called "immature" is also given, and reads as follows: "Immature fruit means fruit not ripe enough for dessert purposes, and which will not attain such condition after being picked from the tree, bush, plant, or vine." This definition does not preclude the very necessary practice of picking plums or other fruits a little on the green side in order to insure their arrival on the market at the proper stage of ripeness. It does aim, however, at preventing the marketing of grapes or other fruits in such a state of immaturity that the fruit will never attain its full perfection in flavor, simply to secure an extra few cents per package because of the earliness with which these varieties are put on the market. In aiming legislation at this very injurious practice, it is to be hoped that the references to immature fruit in the Act will be effective.

Section 320, as revised, contains some alterations and some new clauses. Instead of half-inch indelible markings on closed packages, the markings are to be three-quarter inch, and the grades to be marked are revised somewhat drastically. Fancy grade is done away with so that now, number one fruit is the highest grade recognized by the Act. The last five parts of this section deal with new matters introduced into the Act, and are briefly as follows: 2. All fruit repacked in closed packages and intended for sale must bear the words "repacked by," followed by the initials, surname and address in full of the repacker, together with the proper grade mark of the contents, in letters  $\frac{3}{4}$  inch in length. 3. Fruit packed in open packages must be marked in a similar manner in letters  $\frac{1}{4}$  inch in length before it is taken from the premises where packed, except for the grade mark, but it is provided that in the case of co-operative associations or large dealers, their name and address will suffice if the package also bears some mark or number, approved by the Minister, whereby the original packer may be identified. 4. Fruit repacked in open packages must be marked in a similar manner to 3 in letters  $\frac{1}{4}$  inch in length before it is removed from the premises where repacked.

5. Every person packing immature peaches, plums, pears, prunes or grapes, intended for sale, must mark each package with the words "immature fruit" in letters  $\frac{3}{4}$  inch long before taking from the premises where packed. 6. Every person re-using any standardized package as determined by the Act, must efface any mark required by the Act which it may already bear, before re-using.

#### Fruit Grades Revised.

Section 321 contains the revised grades and the definitions of the same. The quantity of "fancy" fruit packed hitherto under the Act has been so small that it was thought useless to encumber the Act with an extra grade and definition. For a long time, also, endeavors have been made to improve the definition of No. 2 grade. Much dissatisfaction was created and discrimination in favor of certain varieties cropped up under the old definition of this grade, so that it has now been revised to read: "Such fruit includes no culls and consists of specimens of not less than nearly medium size and some color for the variety; sound and not less than 85 per cent. free from scab, worm holes, bruises and other defects, and properly packed." The next grade appears rather ludicrous and incongruous, inserted as it is between grade number 2 and grade number 3. It is labeled "Domestic," and is designed for purely domestic and culinary use in seasons when very fine fruit of high quality, good color and size may be barred from entrance to the better grades because of slight infection of scab or other defects of immediate minor importance. The grade is defined as fruit that "includes no culls and consists of fruit not less than medium size for the variety, sound and not less than 80 per cent. free from worm holes (but may be slightly affected with scab and other minor defects) and properly packed."

Number 3 grade is anything that is too good for culls but not good enough for either "domestic," or number two. It was inserted to meet a demand for fruit for which a trade has been worked up by Nova Scotia growers, and will not be used by other provinces to any extent. Under ordinary circumstances fruit grading as low as number three should not be marketed any place except through an evaporator. It is defined as fruit that "includes no culls and is properly packed." The remaining provisions of this section are new. They provide for overfacing, allowing only 10 per cent. difference between face and contents instead of 15 per cent. as formerly; that fruit diseased, wormy or so depreciated as to be unfit for consumption shall not be sold or offered for sale and for proper filling of all packages offered for sale, whether the fruit is as originally packed or repacked.

#### Branding.

By the provisions of section 322, inspectors are given power to stamp the words "over-faced" upon any package in which the face or shown surface falsely represents the contents of the package as mentioned previously, and also to mark the words "below grade" on any package falsely marked, or, he may efface the false markings and properly mark the packages in the latter case. Formerly, under the provisions of the old Act, the inspector might, in the case of false representation mark "falsely packed" upon the package and "falsely marked" upon a package marked above grade, but he could not reduce the fruit to its proper grade. The increased latitude given the inspectors of the Fruit Commissioner's Department implies a trust in their fairness on the part of the fruit growers, which is a credit both to the inspectors and the Department.

#### Standard Packages.

The provisions for further standardization of fruit packages, such as the barrel, box, climax basket and berry hallock, are among the most needed of all, although not, perhaps, of greater actual importance to the industry. The fact, however, that the several provinces have been able to come together in the recommendations for the various packages is worthy of note since marketing methods, packs and the character of the industry in the East, West and in Ontario, differ radically on some points. Some little points of difference still remain, particularly in respect to some sizes of the berry hallock, notably the two-fifths quart, so that it was not possible to standardize this package except as regards volume of contents; and the same holds good with regard to the four-fifths quart. The British Columbia growers use a square hallock with straight sides, while the hallock in use in Ontario and Quebec presents an altogether different appearance and has sloping sides. However, B. C. fruit-growers do not use the four-fifths quart size, but the fact that only one shape of hallock could not be standardized gives cause for regret. All of the provisions found in sections 325 and 326 with respect to fruit packages do not come into effect until June 1, 1919. This is to allow growers and manufacturers who are carrying considerable stocks of material or made-up packages at the present time, to get rid of them.

The new barrel standardized in Canada is the standard U. S. barrel, the dimensions of which are: head diameter, 17 $\frac{1}{2}$  inches; length of stave, 28 $\frac{1}{2}$  inches; distance between heads, 26 inches; circumference at bulge, 64 inches; contents, 7,056 cubic inches. At the present time Ontario and Nova Scotia are using two entirely different sizes of barrels, the latter, the minimum size allowed by the old Act and the former, a barrel about one-half bushel larger. Nova Scotia cannot ship apples to the United States in the small barrel because it does not comply with U. S. regulations and desired to use a barrel that would, so the barrel described above was recommended and is now standardized for the whole of the North American Continent.

The old standard Canadian apple box was stated to be fast becoming obsolete, and since the Western

fruit men do not use the barrel but do use the box extensively, their recommendation was taken with regard to it. The new standard box, therefore, is the one popularly known as the American or Washington apple box, and measures 18 x 11 $\frac{1}{2}$  x 10 $\frac{1}{2}$  inches, inside measurement. It is provided, however, that where the export trade requires a box of different dimensions, such a box may be used. The box herewith described applies only to apples for sale in Canada but the barrel applies to apples, pears and quinces, wherever sold by the barrel as a measure of capacity. It is provided, moreover, that whenever trays or fillers are used in conjunction with boxes or barrels, in order to meet some special condition in the trade, the provisions of the act are not to apply. An apple crate is standardized, of the same size as the apple box but with slats at least  $\frac{3}{4}$  inch apart. Other boxes packed and for sale in Canada which are standardized but which are not of such general utility are the following: Pears and crate apples, 18 x 11 $\frac{1}{2}$  x 8 $\frac{1}{2}$  inches with a content of 1,760 cubic inches; peaches, 18 x 11 $\frac{1}{2}$  x 4 $\frac{1}{2}$  or 18 x 11 $\frac{1}{2}$  x 3 $\frac{1}{2}$  inches; plums or prunes, 18 x 11 $\frac{1}{2}$  x 3 $\frac{1}{2}$  inches; cherries, 18 x 14 x 5 $\frac{1}{2}$  inches; four basket crate, 15 $\frac{1}{2}$  x 15 $\frac{1}{2}$  x 4 $\frac{1}{2}$  inches; baskets for four-basket crate, top, 7 $\frac{1}{2}$  x 7 $\frac{1}{2}$  inches; bottom, 6 $\frac{1}{2}$  x 6 $\frac{1}{2}$  inches; depth, 3 $\frac{3}{4}$  inches.

#### Packages for Berries and Currants.

Section 326 deals with standard packages for berries and currants, including the various sizes of hallocks above referred to and the climax basket. Berry boxes are standardized in three sizes, four-fifths quart, full pint and two-fifths quart. The full pint is the only one of the three the dimensions of which are specified, since this hallock is in use only in British Columbia where one shape is used. Strawberries are the fruit used in it. Ontario uses the four-fifths quart, while Quebec and British Columbia each use the two-fifths quart, the latter for raspberries only, but of a different shape from the Quebec hallock. The B. C. pint must be 4 $\frac{3}{8}$  x 4 $\frac{3}{8}$  x 1 $\frac{1}{8}$  inches.

Wood veneer baskets are standardized in four sizes: one bushel, eleven quarts, six quarts and three quarts, but baskets other than of wood veneer are confined to the latter three sizes. For two years Ontario growers were trying to find a way out of the jumble of styles among eleven-quart baskets and baskets of similar size which were frequently mistaken for them. Various sizes were thought to be necessary by some growers in order to pack peaches of different sizes and varieties. It was pointed out, however, after several trials of new designs, that the difficulty was probably one of packing rather than of baskets. It was desired to get a basket which would permit of satisfactory packing, would have a strong handle, be well built, and would nest well. Moreover, it was desired to provide a basket which would eliminate in a satisfactory manner the multiplicity in sizes. Whether the new baskets will do so remains to be seen, but in any event they should be better than the old. The dimensions of the eleven-quart basket are: veneer, six inches deep, cut 14 to the inch; handle, 25 $\frac{1}{2}$  inches long and 1 $\frac{1}{2}$  inch wide. Other dimensions are specified in detail as regards thickness of bands, bottoms, etc., but a special form has been built and approved by the fruit growers, which was designed to meet all objections. Similar preparation has been made for the six-quart basket, whose given dimensions are: veneer, 4 $\frac{1}{2}$  inches deep and cut 16 to the inch; handle, 21 $\frac{1}{2}$  inches long, cut 8 to the inch, besides full details of length, width, etc.

Penalties are provided for persons evading or obstructing the Act, and also for destroying the work of an inspector. A new penalty is provided for pilfering, amounting to not more than twenty-five dollars. This will be of great assistance to shippers who suffer heavy losses annually from this cause.

An important amendment made to the Inspection and Sale Act deals with the establishment of potato grades. At the present time there are no standard grades for potatoes, and they are urgently needed. Our potato crop is a large one annually and represents a large sum of money. Careful grading would mean that farmers would put a uniform product on the market, and more satisfactory prices should be secured by the good grower. The grades as established for potatoes are found in section 337A, and read as follows:

"No person shall sell or offer for sale any potatoes represented to be of, (a) Number 1 quality, unless such potatoes consist of specimens which are sound, of similar varietal characteristics, which are practically free from dirt, or other foreign matter, frost injury, sunburn, second growth, cuts, scab, dry rot and damage caused by disease, insects, or mechanical means. The minimum diameter of potatoes of the round varieties shall be one and seven-eighths inches, and of potatoes of the long varieties one and three-fourths inches. In order to allow for variations incident to commercial grading and handling, five per centum by weight of any lot may be under the prescribed size and, in addition, three per centum by weight of any such lot may be below the remaining requirements of this grade. (b) Number 2 quality unless such potatoes consist of specimens which are sound and practically free from dirt or other foreign matter, frost injury, sunburn, second growth, cuts, scab, blight, dry rot, and damage caused by disease, insects or mechanical means. The minimum diameter of potatoes of the round varieties shall be one and seven-eighths inches, and of potatoes of the long varieties one and three-fourths inches. In order to allow for variations incident to commercial grading and handling, five per centum by weight of any lot may be under the prescribed size and, in addition, three per centum by weight of any such lot may be below the remaining requirements of this grade."

"This section shall not apply to seed potatoes.

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'Practically free' means that the appearance shall not be injured to an extent readily apparent upon casual examination, and that any damage from the causes aforesaid can be removed by the ordinary processes of paring without appreciable increase in waste over that which would occur if the potato were perfect. Loss of the outer skin (epidermis) only shall not be considered as an injury to the appearance. 'Diameter' means the greatest dimension at right angles to the longitudinal axis."

It will be noticed that there is no difference between number one and number two grades, except that the former must be "of similar varietal characteristics." It does not appear compulsory either, to grade all potatoes that are sold, but potatoes sold as number one or number two, must comply with the grade requirements.

The amount of sugar which will be available for the preserving season will depend largely upon the consumers and the amount of saving that will be effected.

Winter injury has been common among apple orchards east of Toronto and severe frost has been experienced in British Columbia and Northwestern States.

Fruit reports from Ontario and Nova Scotia reverse to some extent the prospects as compared with estimates made before blossoming time. Nova Scotia promises a lighter crop and Ontario a heavier crop than was expected.

## FARM BULLETIN.

### Developments in Regard to the Draft.

While Ontario has taken the initiative in presenting to the Government the protest of the agricultural population, the provinces are in full accord and willing to endorse the appeal. All along we have advised moderation in public utterance and close co-operation between all branches of the industry in presenting the case. A few leaders with the people behind them, as

the people were behind them would, we believe, have received a more sympathetic hearing than did the large deputation. However, action was necessary, and new light has been thrown on the whole matter. The feeling of unrest is growing, and lack of confidence is becoming more widespread. The spirit which induced men to work as they never worked before has been broken. Abandoned and under-manned farms in Canada, where we lead the world in production of foodstuffs per capita, are further evidence that a mistake has been made. The number of men already training in the United States and the transport question have led people to doubt the wisdom of calling still more men from production in this country. The attitude of the Minister of Militia in regard to this important question, and the manner in which the draft order is being administered at the various headquarters, have given rise to a fear of a military autocracy being established right here in Canada. The stand taken by the Prime Minister concerning titles did not help the situation at all, and the apparent lack of any desire on the part of the Government to effect reconciliation and take the people into their confidence regarding the draft has alienated rural public opinion to such an extent that the result cannot be anything but bad unless matters are adjusted. The facts have been gathered together; we now know the feeling throughout Canada, and the time has come when a very few men should be given authority by the agricultural interests to place the situation before the Government. The Cabinet should in turn be frank with the agricultural delegates and reveal to them the extent of the crisis which has made such drastic regulations necessary. We do not know the facts and the conditions which prompted the Call, and we fear the Government does not realize what the draft will mean to agriculture and production. Secrets of military importance need not be made public, but we earnestly believe that some agreement should be brought about whereby the morale behind production may be strengthened. An understanding should be arrived at now for the good of Canada and the Empire. It is now a time for thought, consideration and a harmonious agreement between the Government on the one hand and the producers of foodstuffs on the other. Agitation and unrest have gone far enough; let us have an understanding. Surely this can be brought about through the medium of a few acknowledged agricultural leaders.

Burnaby, President of the United Farmers' Co-operative Company, asked the audience to back up their request by pledging themselves to a certain amount of stock in the new paper. Cards were distributed and \$27,700 were subscribed. In regard to the launching of a paper, Peter McArthur advised them to move slowly, because there were many pitfalls and difficulties which had to be overcome. He had no desire to discourage the new enterprise, and he believed the time was opportune when farmers should organize on lines never before attempted.

Some discussion arose during the meeting on Friday over the statement made that leave would be granted to the only son of a farmer, who was in Category A and between nineteen and twenty-five years of age. A telegram concerning this was sent to the Hon. T. A. Crerar, Minister of Agriculture, who replied: "Message just received. Order-in-Council May 25 modifies provisions of Order-in-Council April 20, and provides where a man drafted is the sole support of widowed mother or invalid father, or other helpless dependents, leave of absence may be granted by military authorities. All applications for leave pursuant to provisions of this order must be sent by man himself to Commanding Officer at Depot Battalion, after he reports for duty." Several stated that the order was not carried out to the letter in their respective localities.

At the meeting on Saturday morning the Resolutions Committee submitted the following to be presented to the Government, which was approved:

1. "That because of the working of the Order-in-Council of April 20 relating to the M. S. A., many farms have been left without a man on them, the stock is not being cared for, and an alarmingly large number of farms will soon pass out of cultivation.

2. "That farmers knowing the seriousness of the situation are losing confidence in the Government, and a serious condition of unrest is prevalent in the country, and is growing.

3. "That the Order-in-Council modifying provisions of the Order-in-Council of April 20 is not working out satisfactorily."

Several resolutions were carried at the meeting on Friday afternoon. One asked for the abolition of all titles in this Dominion of Canada, in order that government of the people, by the people, for the people may be secured for the coming generations. Another asked that an industrial reorganization committee be formed under the Department of Trade and Commerce, consisting of agricultural, manufacturing, labor, financial and transportation representatives. A third resolution deplored an official attempt to deprive us of our sacred rights through the curtailment of the freedom of speech and of the press, and the same resolution asked that the people be trusted, believing that they can fully depend upon every man to do his duty in this day of great national tribulation. A fourth resolution suggested provincial advisory committees, to be selected by the organized farmers in each province, with whom the Government may consult in matters pertaining to agriculture and the draft. A fifth resolution pledged the audience to return home to their respective neighborhoods and promote and encourage organization to the end that the agriculturists of this Dominion may receive the recognition which the greatness of their calling justifies. The resolution concerning an official organ read as follows: "Therefore, be it resolved that this mass meeting of the farmers of Ontario approve of the immediate establishment of an official organ by means of a subscribed amount of stock consisting of shares of \$50 each, fifty per cent. payable on allotment and the balance to remain on call, and that a subsidiary company of the U. F. O. be formed for the purpose of operating this official organ.

The feeling of the Convention was well expressed in the following resolution.

We would recommend that this Convention request the Government to secure:—

1. "That all owners or practical managers of farms be exempted to carry on their work, and that in cases where they have already been drafted they be granted extended leave of absence for this purpose.

2. "That enough skilled agricultural labor be exempted to supply one skilled man for each one hundred acres or major part thereof in general farming districts, and a similar requisite number in districts devoted to special production.

3. "That following British precedent which at late date as the Royal proclamation of April 20th of this year, recognizes the need of maintaining sufficient skilled agricultural labor to efficiently cultivate the farms, and which has since the beginning of the war consulted the representatives of the farms as to the needs of agriculture, we would ask our Government:

(a) "To create an Advisory Board in each Province, said Board to be constituted of men actually engaged in Agriculture and nominated by whatever general farmers organization may exist in that Province with whom the whole situation, both from the standpoint of military and productive needs may be taken up, and who may make such recommendations from time to time as the needs of the whole situation may dictate.

(b) "That whereas under the most recent Order-in-Council given to the press on May 24th by which officers have been specially detailed to deal with applications for leave of absence we recommend, that again following British precedents appeal tribunals shall be created to deal with extreme cases as developed under the recent Order-in-Council, and that practical agriculture be represented on the personnel of these tribunals.

4. "That the food-producing operations of our country be accorded the same consideration by our Government as is given by the Government of the United States to food production in that country."

## Farmers Meet in Toronto.

The mass meeting of Ontario farmers, held in Toronto on Friday and Saturday, June 7 and 8, threw more light on the operations of the Military Service Act and how it is affecting agriculture and the morale of the Canadian people. On Friday afternoon Massey Hall was filled, and, while owing to warmth, statements were made and words spoken that perhaps should not have been given utterance, the addresses showed only too plainly that agriculture is suffering a severe blow and the situation is critical indeed. R. H. Halbert, President of the United Farmers of Ontario and chairman of the Convention said, in the course of the deliberations, that they wanted the whole Province behind them in this thing. Events should be very encouraging in this regard. The under-current in Western Canada is very strong and the situation is even more critical there than in Ontario. Eastern Canada feels strongly that the Government is not in touch with agriculture and does not realize how badly the draft will affect it. The purpose of these meetings as we understand it, is not to get the farmers' sons exempted so much as to impress upon the Cabinet and the people of this country that a mistake has been made. In too many cases urban people and the daily press have not considered the matter in its true light and have taken advantage of certain remarks, not altogether to the point, in order to discountenance the action of the rural population. That is not fair; there is a principle involved and upon its merits alone should the matter be decided. Farmers take the stand that they must farm or fight but cannot do both. Abandoned farms are unproductive and agriculture requires labor.

Space will not permit of a detailed report of the two days' convention so we have tried to sum up in the preceding paragraphs, the opinions voiced and give expression to the drift of thought running through the meeting.

G. W. Gurney, a member of the committee left at Ottawa after the deputation of May 14, gave a report and explained how unsympathetically they were received on every hand. The action of the committee was commended and ratified.

The telegram from Alberta, which was so damaging to the cause of the delegation on May 14, was explained by H. W. Wood, President of the United Farmers of Alberta. The President of the Alberta organization while away from home had endorsed the resolution, but he did not expect that it would be exactly in the form in which it appeared. He said furthermore that Alberta had given more in proportion to her population than any other Province in Canada. There had been more young men on the farms between the ages of 20 to 22 in Alberta than anywhere else. "Our interests are absolutely identical", he continued. I don't propose to discuss whether or not the Government has acted wisely. The most serious problem that we will have to face will be when the war is over. Don't let any mistakes that we have made hinder the development of the organization, he pleaded. There is talk in Alberta of forming another farmers' organization. We

are fighting to make the world safe for democracy, but let us first make the democracy. Mr. Wood said that Ontario is no more deeply sympathetic in the success of the Ontario organization than is Alberta. "We realize that if there was any mistake made it was ours, and we are therefore most anxious that that breach should be healed, and any assistance that we can give you, we are willing to give at any time."

Roderick Mackenzie, Secretary of the Canadian Council of Agriculture, dwelt largely with organization and said that farmers had not paid enough attention to it. He also voiced the opinion that there are thousands of young men in the cities who, if physically fit, would make as good men at the front as the boys on the farm, but no man will suggest that they will be as good on the farm as the boys who have been raised there. Mr. Mackenzie said that the Order-in-Council would have the same effect on Western farmers as on the farmers in Eastern Canada.

C. J. Thornton, ex-M. P. for Durham, said that any man familiar with conditions in Ottawa can sympathize with the farmers when they go up against the politicians and capitalists of this country. He also recalled the Premier's statement on May 14 in regard to the men who had gone overseas, showing in contrast what labor has accomplished in the matter of furnishing men for duty in the trenches. "If the Prime Minister had wanted to be fair," said Mr. Thornton, "he could have shown that the great majority of skilled and unskilled men who enlisted had come from the farms." Mr. Thornton also expressed the opinion that the Cabinet did not know anything about farming conditions in Canada. He moreover, opined that we will feel the effect of this drastic order this year, but not to the same extent that may be expected next year.

Theodore Ross, of Prince Edward Island, brought greetings from his Province and said that the first thing his people wished was that the Government become acquainted with the situation, for they were sure that the Cabinet did not understand what the Order-in-Council of April 20 really meant to agriculture.

In the course of discussion it was suggested that the organization approach the Governor-General and ask him to order a dissolution of Parliament, similar to an action taken in 1874. W. L. Smith said that instead of asking the Governor-General to dissolve Parliament, the farmers of Canada would accomplish more by organizing and making life a burden for the men who had misrepresented them in Parliament. The action of the Government would set back the development of the farming industry in Canada for many years to come. Farmers, he said, had already disposed of their stock and had been forced to sell their farms that had taken them a lifetime to get together.

Considerable discussion arose over the suggestion of the United Farmers of Ontario publishing a farmers' daily or weekly newspaper. J. J. Morrison, Secretary of the United Farmers of Ontario, said that their cause had been ridiculed and misrepresented by the daily press. This statement was enthusiastically endorsed, and the farmers assembled thought the time particularly ripe for launching a publication of their own. R. W. E.

# Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending June 6.

Receipts and Market Tops.

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

	CATTLE						CALVES					
	Receipts			Top Price Good Steers (1,000-1,200)			Receipts			Top Price Good Calves		
	Week Ending June 6	Same Week 1917	Week Ending May 30	Week Ending June 6	Same Week 1917	Week Ending May 30	Week Ending June 6	Same Week 1917	Week Ending May 30	Week Ending June 6	Same Week 1917	Week Ending May 30
Toronto (Union Stock Yards)	3,187	3,797	3,725	\$16.00	\$12.10	\$15.75	1,475	938	1,591	\$16.00	\$14.50	\$16.00
Montreal (Pt. St. Charles)	359	631	378	15.75	12.00	15.50	2,398	1,342	2,202	13.50	13.25	15.00
Montreal (East End)	594	677	363	15.75	12.00	15.50	657	1,722	1,549	13.50	13.25	15.00
Winnipeg	2,344	2,836	1,393	16.50	12.50	17.00	154	228	146	16.50	13.00	17.00
Calgary	1,217	1,148	2,850	15.50	9.50	16.30						
Edmonton	632	309	568	14.25	10.00	12.25	20					

	HOGS						SHEEP					
	Receipts			Top Price Selects			Receipts			Top Price Good Lambs		
	Week Ending June 6	Same Week 1917	Week Ending May 30	Week Ending June 6	Same Week 1917	Week Ending May 30	Week Ending June 6	Same Week 1917	Week Ending May 30	Week Ending June 6	Same Week 1917	Week Ending May 30
Toronto (Union Stock Yards)	5,082	8,631	5,280	\$20.00	\$16.50	\$20.50	526	379	398	\$22.00	\$16.00	\$22.00
Montreal (Pt. St. Charles)	377	1,303	853	20.75	16.50	20.75	155	326	155	*14.00	*10.00	*12.00
Montreal (East End)	514	856	565	20.75	16.50	20.75	197	275	187	*14.00	*10.00	*12.00
Winnipeg	6,558	6,897	5,669	19.00	15.15	19.50	64	25	56			18.00
Calgary	2,171	2,374	3,481	18.60	14.50	19.60		24				
Edmonton	614	511	613	17.60	13.60	19.00	16					

\*Each

## Market Comments

### Toronto (Union Stock Yards).

Receipts of live stock at the Yards during the week were comparatively light, the lower quotations of the previous week being effective in curtailing shipments; also the market was fairly bare of choice killing cattle, a condition which afforded the abattoirs an opportunity to dispose of the supplies which had accumulated in their coolers. An improved tone in the market followed, resulting in an advance amounting to 75 cents per hundred, thereby bringing prices back to the level of two weeks ago. Outside abattoir buyers were operating, and three hundred and fifty head of butcher cattle were shipped to outside packing houses, while two hundred head of feeders went to Lancaster, Pennsylvania, U. S. A. Indications are for an active demand for next week's offerings. Of the thirty-two hundred cattle on sale during the week, twenty-three hundred were on the Monday market and of these many were of extra good quality. Trading was active, fifteen hundred being sold by noon and the balance before the close of the market. One load of heavy steers of thirteen hundred and fifty pounds sold at \$15.40 on Monday, while on Wednesday, one steer weighing twelve hundred and fifty pounds sold at \$16.60; two other steers of about equal weight and quality realized \$16.50, while seven head averaging over seventeen hundred pounds, including two or three head of Holsteins, realized \$15.20. Of steers between the weights of one thousand and twelve hundred pounds, thirty-nine head of eleven hundred pounds sold on Monday at \$15, twenty head averaging ten hundred and fifty pounds, at \$15.15, and nine head of eleven hundred and seventy pounds at \$15.10. On Wednesday the top quality load, which weighed eleven hundred and sixty pounds, sold at \$15.65; a number of other sales were made at \$15, while most of the animals in these weights moved from \$14.25 to \$15 per hundred. Of the steers and heifers under one thousand pounds, a few baby beef sold during the week from \$15 to \$16. One load of twenty-three head of cattle averaging nine hundred and sixty pounds, sold at \$14.75, nineteen head of nine hundred and fifty pounds at a similar figure, twenty-two head of nine hundred pounds, at \$14.25, while most of the sales in this class were made from \$13.50 to \$14.25. Medium steers were weighed up from \$12.50 to \$13.25, and common stock of dairy breeding sold from \$9 to \$11 per hundred. Cows and bulls were active in sympathy with other grades. Choice cows sold generally from \$11.50 to \$12.25 per hundred; one or two sales were made at \$12.50. Cows of good quality realized from \$10 to \$11, and common cows from \$8.50 to \$9.50. Choice bulls sold from \$11.50 to \$12.50, one or two bringing the latter price, good bulls from \$10.25 to \$11, and bologna bulls from \$8.50 to \$9.50. Owing to the increased demand from the abattoirs for butcher cattle most of the feeder stock offered was absorbed for slaughtering purposes, only a few shipments being made to Ontario points. Choice feeders sold from \$12 to \$12.75 and choice stockers from \$11 to \$11.75 per hundred. Calf receipts

CLASSIFICATION	No.	TORONTO (Union Stock Yards)				MONTREAL (Pt. St. Charles)			
		Avg. Price	Price Range	Bulk Sales	Top Price	No.	Avg. Price	Price Range	Top Price
STEERS									
heavy finished	101	\$15.50	\$15.00-\$16.50		\$16.50				
STEERS									
good	325	14.80	14.25-15.50		16.00	50	\$15.50	\$15.25-\$15.75	\$15.75
1,000-1,200 common	4	13.25	13.00-14.00		14.25				
STEERS									
700-1,000 good	914	14.41	13.75-15.25		15.50	63	13.25	12.75-14.00	15.75
common	155	12.62	12.00-13.50		13.50	22	12.60	12.50-12.75	12.75
HEIFERS									
good	324	14.61	14.00-15.50		15.75	7	13.25	12.75-14.00	15.75
fair	186	12.56	11.75-13.25		13.25	8	10.75	10.50-11.00	11.00
common	1	10.75	10.75-		10.75	12	9.50	8.50-10.00	10.00
COWS									
good	202	11.51	11.00-12.50		12.75	23	11.35	11.00-12.50	12.50
common	441	9.84	9.00-10.50		10.50	70	9.25	8.50-10.50	10.75
BULLS									
good	51	11.79	11.00-12.50		12.50	27	12.00	11.00-13.50	13.50
common	62	9.89	9.00-10.50		11.50	25	9.50	9.00-10.50	10.75
CANNERS & CUTTERS	133	7.24	6.75-7.50		7.50	18	6.75	6.00-7.00	7.00
OXEN									
						6	13.00	11.50-15.00	15.00
CALVES									
veal	1,472	13.33	12.00-15.00		16.00	2,393	12.50	11.00-13.50	13.50
grass	3	8.00			9.00	5			
STOCKERS									
good	109	11.50	11.00-12.00		12.00				
450-800 fair	54	10.26	9.75-10.75		11.25				
FEEDERS									
800-1,000 good	82	12.35	12.00-13.00		13.00				
fair	36	11.81	11.50-12.25		12.25				
HOGS									
selects	4,688	19.31	18.50-20.00		20.00	341	20.30	20.25-	20.75
heavies	14	18.93	18.50-20.00		20.00				
(fed and watered) lights	176	18.66	17.50-20.00		20.00	13			
sows	197	17.30	16.50-18.50		18.50	19	17.80	17.75-18.25	18.25
stags	7	15.28	14.50-16.00		16.00	4			
LAMBS									
good	64	20.35	18.00-22.00		22.00	19		*10.00-14.00	*14.00
common	6	17.00	16.00-18.00		18.00				
SHEEP									
heavy	187	12.75	11.00-14.00		14.00	111	13.50	13.00-14.00	14.00
light	158	14.68	13.00-16.00		17.00	25	12.75	12.00-13.00	13.00
common	111	8.00	7.00-10.00		10.00				

\*Each.

were lighter and the market was a trifle higher. Choice veal calves sold from \$15 to \$16, good calves from \$13 to \$14.25, and common at \$9 to \$11. A few spring lambs were offered and they sold from \$12 to \$17.50 each, while clipped yearlings realized from \$17 to \$19, and sheep from \$12 to \$15 per hundred. Hog prices suffered a severe decline during the week, values dropping from \$20 per hundred, the price paid for selects on a fed and watered basis on Monday, to \$18.50, on Wednesday. Hog quotations on the Canadian markets have been ruling from \$2 to \$3 per hundred higher than the quotations on the American markets. The abattoir buyers claim that there must be more equality of prices between the two countries in order to allow of competition on an equal basis on the European markets. While under normal conditions Canadian bacon commands a premium over American bacon on the export market, at the present time, quantity is the first need of the Allies. Bacon hog prices on the Buffalo market during the week ranged from \$18 to \$18.50 per hundred, and a further decline at Toronto, except in sympathy with the Buffalo market, is scarcely to be expected. On the other hand, the local abattoirs

have been paying from \$2 to \$3 per hundred above Buffalo quotations during the past six months and the season of short supplies is at hand. Of the disposition from the Yards for the week ending May 30, Canadian packing houses bought 866 calves, 54 bulls, 80 heavy steers, 1,888 butcher cattle, 5,859 hogs and 325 lambs. Local butchers bought 672 calves, 353 butcher cattle, 271 hogs, and 125 lambs. Canadian shipments consisted of 82 calves, 95 milch cows, 70 butcher cattle, 440 stockers, 281 feeders, and 1 hog. Shipments to United States points were made up of 595 butcher cattle, and 100 stockers. The total receipts from January 1 to May 30, inclusive, were: 107,215 catt'e, 28,449 calves, 165,976 hogs, and 11,578 sheep; compared with 95,276 cattle, 23,773 calves, 218,167 hogs, and 12,745 sheep, received during the corresponding period of 1917. **Montreal.** Receipts of stock for the week were practically equal in volume to those of the previous week. Indications are for fewer veal calves and more sheep and lambs as the season advances. There were three or four lots of good steers

offered and these sold readily at prices as high as any yet paid on the Montreal market. The highest price of the week was \$15.75 per hundred, for nineteen head of steers averaging eleven hundred pounds. Twenty head of steers averaging eleven hundred and thirty pounds sold at \$15.25, and fifteen head weighing a little more than one thousand pounds each were weighed up at \$15.50. Most of the good steers sold from \$14 to \$15.75. The next grade of steers offered were light and not finished and these sold from \$12.50 to \$12.75. Fat bulls of beef breeds and weighing from thirteen hundred to eighteen hundred pounds each, sold from \$13 to \$13.50 for the best, two of good quality sold at \$12.50, while heavy bulls in good flesh but coarse, sold around \$11; those of lighter weights and poorer grades sold down to \$8.75. There were very few good cows on the market and the price for most of the best animals offered was around \$10.75, although one lot of ten head averaging ten hundred and fifty pounds sold for \$11.40. A number of the cows on hand had been on grass, but were in poor flesh and sold from \$8 to \$8.50. One car lot of this latter quality was shipped to the country to be finished on grass. Prices for calves

ruled a previous few hundred head of steers, York, a this spr dealers. The h... The sma... being b... sumption... off cars, \$21. Pig... sold from... poses. fewer th... and less... weeks a... good cal... fed veal... Pt. S... from the... 30, Can... butchers... canners... cattle, 5... lambs. United S... The to... May 30... 29,744... sheep;... 30,046... sheep, re... period o... EAST... the Yarc... Canadian... butchers... butcher... Canadian... calves, 5... Shipmen... made up... The to... May 30... 25,726... sheep; c... calves, ... received... of 1917.

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ruled about the same as during the previous week. With the exception of a few hundred head shipped to Laval Rapids, Quebec, and a few cars to New York, all the calves sold at Montreal this spring have been bought by local dealers.

The hog market is still very unsettled. The small number of hogs marketed are being bought for immediate local consumption from \$20 to \$20.50 per hundred, off cars, with an occasional small lot at \$21. Pigs of from four to six weeks of age sold from \$7.50 to \$13 for feeding purposes. Receipts were two hundred head fewer than those of the previous week, and less than half of the volume of three weeks ago. The market looks firm for good cattle, sheep and lambs, and well fed veal calves.

PT. ST. CHARLES.—Of the disposition from the Yards for the week ending May 30, Canadian packing houses and local butchers purchased 2,202 calves, 18 canners and cutters, 36 bulls, 271 butcher cattle, 53 milkers, 853 hogs and 155 lambs. There were no shipments to United States' points during the week.

The total receipts from January 1 to May 30, inclusive, were: 13,733 cattle 29,744 calves, 26,941 hogs and 5,467 sheep; compared with 15,266 cattle, 30,046 calves, 39,039 hogs, and 5,360 sheep, received during the corresponding period of 1917.

EAST END.—Of the disposition from the Yards for the week ending May 30, Canadian packing houses and local butchers purchased 1,723 calves, 536 butcher cattle, 565 hogs and 185 lambs. Canadian shipments consisted of 209 calves, 58 butcher cattle, and 2 lambs. Shipments to United States' points were made up of 130 calves.

The total receipts from January 1 to May 30, inclusive, were: 12,018 cattle, 25,726 calves, 16,070 hogs, and 5,390 sheep; compared to 16,269 cattle, 24,602 calves, 20,906 hogs and 6,697 sheep, received during the corresponding period of 1917.

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### Buffalo.

Cattle.—Buffalo had another exceedingly high cattle market last week, placing shipping steers at the highest point for any market, for both last and this year—\$18.25. The extreme top was paid for extra prime, long fed steers, averaging better than 1,700 lbs., out of Michigan. Quite a string of choice natives sold on a range of from \$17.00 to \$18.00. Prices on shipping and the better kinds of handy steers from 15 cents to a quarter higher, while on the general run of medium and commoner grades, trade looked steady to strong. On milk cows and springers, real choice grades sold higher, while a medium and commoner kind looked a shade lower. Bulls of all kinds sold at strong prices, while the stocker and feeder market was rated about the highest of the year. Offerings for the week totaled 4,725 head, as against 3,900 for the previous week and as against 3,950 head for the corresponding week a year ago. Quotations:

Shipping Steers—Natives—Choice to prime, \$17.65 to \$18.25; fair to good, \$16.75 to \$17.25; plain and medium, \$16 to \$16.50; coarse and common, \$14.50 to \$15.75.

Shipping Steers—Canadians—Best \$16.35 to \$16.60; fair to good, \$15.75 to \$16; common and plain, \$14 to \$14.75.

Butchering Steers—Choice heavy, \$17 to \$17.50; fair to good, \$16.25 to \$16.75; best handy, \$15.50 to \$16.50; fair to good, \$14 to \$15; light and common, \$12 to \$13; yearlings, choice to prime, \$16.25 to \$16.75 fair to good, \$13.50 to \$14.75.

Cows and Heifers.—Best heavy heifers, \$14 to \$14.50; good butchering heifers, \$13.75 to \$14.25; fair butchering heifers, \$11.50 to \$12; common, \$8 to \$9; very fancy fat cows, \$12.50 to \$13.50; best heavy fat cows, \$11.50 to \$12; good butchering cows, \$10.50 to \$11.50; medium to fair, \$8.50 to \$9; cutters, \$7.25 to \$8; canners, \$6.50 to \$7.25.

Bulls.—Best heavy, \$11.50 to \$12.50; good butchering, \$10.50 to \$11.50; sausage, \$9.50 to \$10.50; light bulls, \$7.50 to \$8.50; oxen, \$10 to \$12.

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

Milchers and Springers.—Good to best, (small lots), \$100. to \$140; in car loads, \$80 to \$100; medium to fair, (small lots), \$75 to \$85; in car loads, \$65 to \$80; common, \$45 to \$50.

Hogs.—Receipts were exceedingly light last week and as a result prices were on the jump. Monday the range was wide. Heavies sold from \$17 to \$17.50, mixed grades landed at \$17.65 and \$17.75, Yorkers sold mostly at \$17.75, a few a little more and pigs were on top, bringing up to \$18.50. Tuesday pigs were steady and other grades were 25c. to 40c. higher, handy hogs selling from \$18 to \$18.15, with Yorkers up to \$18.75, and Wednesday prices were still higher, light hogs being placed at \$18.25 to \$18.35, one deck made \$18.45 and pigs were up to \$18.75. Thursday's trade was steady to a dime lower and Friday's market was 15c. to 25c. higher. Bulk of the pigs landed at \$18.75, most of the good handy hogs moved at \$18.50 and heavies ranged on down to \$17.75. Roughts \$15.50 to \$16 and stags \$10 to \$12.50. For the past week receipts were 11,700 head as against 18,856 head for the week before

and 20,000 head for the same week a year ago.

Sheep and Lambs.—Last week opened with prices showing a heavy decline. Monday, when values on lambs went off as much as \$1.00 per cwt., from the previous week's close, top was \$17.40, bulk sold at \$17.25 and culls went from \$14.00 down. Coarse weighty lambs ranged from \$14.50 to \$16.00 and grassy lambs undersold the dry-feds by from fifty cents to \$1.50 per cwt. Wether sheep, although none were here, were not quoted above \$14 and ewes from \$13 down. After Monday the market on lambs was higher and sheep were firm. Tuesday's top for yearling lambs was \$17.50, Wednesday the best sold up to \$17.75, Thursday they reached \$18 and Friday the choice lots landed at \$18.25 and \$18.50. Cull lambs the latter part of the week sold up to \$15.50. Receipts for the week were 9,000 head, as compared with 14,627 head for the week previous and 5,700 head for the corresponding week a year ago.

Calves.—Market was active and higher every day of last week. Monday top lots sold at \$15.50, Tuesday the bulk moved at \$16, Wednesday and Thursday the majority landed at \$16.50, few \$16.75 and Friday the big end of the crop was placed at \$17.25. Cull calves the latter part of the week sold downward from \$16. For the past week receipts were 4,600 head, as against 5,217 head for the week before and 4,125 head for the same week a year ago.

### Toronto Produce.

Liv: stock receipts at the Union Stock Yards, West Toronto on Monday, June 10, consisted of 2,523 cattle, 602 calves, 1,790 hogs, 518 sheep and lambs. Strong market with butcher steers, heifers, cows and bulls 50 cents to \$1 higher. Top \$17.15 for 20 steers averaging 1,191 pounds each. Stockers and feeders strong, 50 cents higher. Milkens, slow; springers, strong. Sheep, lambs and calves strong at last week's prices. Hogs, \$18.50 fed and watered.

### Breadstuffs.

Wheat.—Ontario (basis in store Montreal). No. 2 winter, per car lot, \$22.22. Manitoba wheat (in store, Fort William, including 2½c. tax)—No. 1 northern, \$2.23½; No. 2 northern, \$2.20½; No. 3 northern, \$2.17½; No. 4 wheat, \$2.10½.

Oats.—Manitoba (in store, Fort William) No. 2 C. W., 83c.; No. 3 C. W., 80c.; extra No. 1 feed, 80c.; No. 1 feed, 77c.

Oats.—Ontario, No. 2 white, 79c. to 80c., nominal; No. 3 white, 78c. to 79c., nominal (according to freights outside).

Rye (according to freights outside)—No. 2, \$2, nominal.

American corn (track, Toronto)—No. 3 yellow, kiln dried, nominal; No. 4 yellow, kiln dried, nominal.

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

Barley (according to freights outside)—malting, \$1.35 to \$1.37.

Buckwheat (according to freights outside)—\$1.80.

Flour.—Ontario (prompt shipment). War quality, \$10.65, Montreal; \$10.65, Toronto. Manitoba flour, (Toronto, new bags) war quality, \$10.95.

### Hay and Millfeed.

Hay.—No. 1, per ton, car lots, \$15.50 to \$16.50; mixed \$13 to \$14.

Incorporated 1855

## Farmers Who Call

at any of the Branches of THE MOLSONS BANK are always made welcome.

Especially at this time when increased production is so essential, our Managers will cheerfully discuss with farmers their financial situation.

Savings Department at all Branches, Interest at Highest Current Rate.

Straw.—Car lots, per ton, \$3 to \$8.50, Bran.—Per ton, \$35; shorts, per ton, \$40.

### Hides and Wool.

Prices delivered, Toronto:

City Hides.—City butcher hides, green, flat, 13½c.; calf skins, green, flat, 30c.; veal kip, 22c.; horse hides, city take off, \$6 to \$7; sheep, \$3.50 to \$5.50.

Country Markets.—Beef hides, flat, cured, 15c. to 17c.; green, 12c. to 13c.; deacon or bob calf, \$2.25 to \$2.75; horse hides, country take-off, No. 1, \$6 to \$7; No. 2, \$5 to \$6; No. 1 sheep skins, \$2.50 to \$5. Horse hair, farmers' stock, \$25.

Tallow.—City rendered, solids, in barrels, 16c. to 17c.; country solid, in barrels, No. 1, 15c. to 16c.; cakes, No. 1, 18c. to 19c.

Wool.—Unwashed fleece wool, as to quality, fine, 60c. to 65c.; washed wool, fine, 80c. to 90c.

### Country Produce.

Butter.—The butter market kept practically stationary in price, selling as follows on the wholesales: Creamery, fresh-made pound squares, 45c. to 47c. per lb.; creamery solids, 42c. to 44c. per lb.; dairy, 38c. to 40c. per lb.

Oleomargarine, 32c. to 33c. per lb.

Eggs.—New-laid eggs also kept stationary in price, selling as follows, wholesale: New-laid No. 1, 40c. to 41c. per dozen; selects, 43c. to 44c. per dozen.

Cheese.—Old, 24c. to 25c. per lb.; new, 24c. to 25c. per lb.

Poultry.—Spring chickens are beginning to come in, but receipts are quite light as are also all other lines excepting roosters. Spring chickens, 50c. per lb.; Roosters 25c. per lb.; fowl, 3½ lbs. and under, 25c. per lb.; fowl 3½ lbs. to 5 lbs., 30c. per lb.; fowl, 5 lbs and over, 30c. per lb.; ducklings, 30c. per lb.; turkeys, young, 30c. per lb.; turkeys, old, 25c. per lb. These quotations are for live weight and are now being paid to the producer.

Potatoes.—Old potatoes again showed a weakening tendency; Ontarios selling at \$1.50 per bag; New Brunswick Delawares at \$1.65 per bag; new potatoes came in more freely but kept firm in price at \$6 to \$7.50 per bbl., wholesale.

### Montreal.

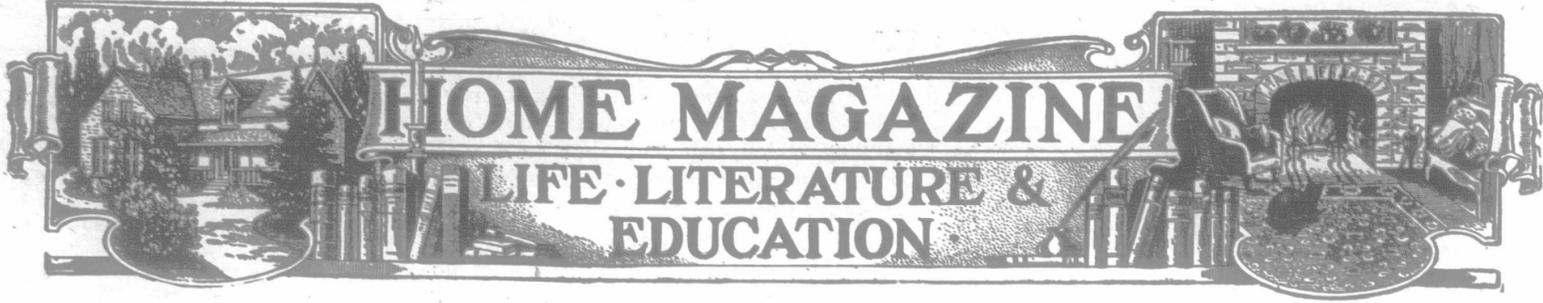
Horses.—Very few animals are changing hands, this being due both to lack of supply, and almost entire absence of demand. Prices were unchanged, being as follows: Heavy draft horses, weighing 1,500 to 1,700 lbs., \$250 to \$300 each; light draft horses, weighing 1,400 to 1,500 lbs., \$200 to \$250 each; light horses, \$125 to \$175 each; culls \$50 to \$75 each; fine saddle and carriage horses, \$175 to \$250 each.

Dressed Hogs.—The tendency of the market for dressed hogs was somewhat downward, in sympathy with that for live hogs, and prices last week were fractionally lower, at 29c. to 29½c. per lb. for abattoir fresh-killed stock.

Potatoes.—The market is now showing advances, and it looks as if from this forward prices will be higher until the new crop comes in. Green Mountains were selling at \$1.80 per 90 lbs., ex-store; reds being \$1.70 and McIntyre \$1.60, while on track, Green Mountains were \$1.60 in bulk, per 90 lbs.; reds \$1.50, including bags, and McIntyres \$1.40.

Maple Syrup.—The demand for maple syrup was fairly good, and as supplies were light, the tone of the market was firm. Syrup in 15 to 20 gallon barrels, was

Continued on page 1026



### "Twas Said."

BY RICHARD WATSON GILDER.

"Twas said, "When roll of drum and battle's roar  
Shall cease upon the earth, oh, then no more  
The deed, the race, the heroes in the land."  
But scarce that word was breathed when  
one small hand  
Lifted victorious o'er a giant wrong,  
That had its victims crushed through ages long;  
Some woman set her pale and quivering face  
Firm as a rock against a man's disgrace;  
Some quiet scholar flung his gauntlet down  
And risked in Truth's great name the  
Synod's frown;  
A civic hero, in calm realm of laws,  
Did that which suddenly drew a world's  
applause;  
And one to the pest his lithe young body  
gave,  
That he a thousand lives might save.

### Liebnecht in Prison.

BY EDITH M. THOMAS.

"We Germans in Prussia have three cardinal rights: the right to be soldiers, to pay taxes, to keep our tongues between our teeth. Consider well the facts: as long as the German people do not rise and enforce their own will, the assassination of the people will continue. Let thousands of voices shout: 'Down with the shameless extermination of nations! Down with those who are responsible for these crimes!' (In "Militarism.")

Liebnecht, alone you chose the freeman's way—  
You would not keep your tongue between your teeth;  
Like a bright sword, whipt sudden from the sheath,  
Flashed that edged word of yours in dangerous play!  
Hence do you suffer civil death to-day.  
Yet, for that word you did to them bequeath,  
You live—while your compatriots, sunk beneath  
A despot's will, in spiritual death delay.

What thoughts are yours—past outer sight and sound—  
At heavy toil, in penal silence drear,  
The while the wheel of Moloch still goes round  
And men are broken on it? . . . Can you hear  
(As do our Indians, stooping to the ground).  
Oncoming tumult overlords must fear?

### Among the Books.

[Great Possessions, by David Grayson. Illustrated by Thomas Fogarty. The Musson Book Co., Ltd., Toronto. Price \$1.50.]

PASSING along the tables of the bookshops the country lover is attracted by one of the "jackets" or outside paper covers with which nowadays books are invariably protected. It represents a cool stream, green with shadows, the one bank covered with tall green willows, the other running from a small shingle of stones to a bit of sedge among which is growing a clump of swamp weeds golden with flowers—loosestrife, perhaps. In the distance is a field of grain bordered by a rail fence, and in the immediate foreground standing in the water, a very small boy. The jacket is repeated inside in a frontispiece beneath which are inscribed the words, "The goodly plain things—

the smells, sights, sounds, touches and tastes of the country."

The country lover, we have said, is attracted by the jacket. He is attracted still more by the name of the author, that is, if he knows anything of the former books by the same writer, *Adventures in Contentment*, *Adventures in Friendship*, and *The Friendly Road*.

In *Great Possessions*, "David Grayson" and his sister "Harriet" again come close to us, and David, with his usual cheerful philosophy proceeds to tell us how men and women may be very rich indeed even though they own no broad lands and no palatial home. It is unnecessary to tell those who already know him that all this is told with compelling interest, and with the simple quiet artistry in words of which this writer is so finished a master. In his own inimitable way he tells us about the fields near his home and about his neighbors, and when he is through we know the neighbors at least, perhaps better than we know those about our own homes. For it is the prerogative of the true artist to see into the hearts of folk, and not to judge them altogether by what appears on the surface. Best of all David Grayson teaches us, if we need the lesson, to see the beauty in common things. "Oh, my friend," he exclaims, "is it the settled rule of life that we are to accept nothing not expensive?" And again, "How we go through life, losing most of the beauties of it from sheer inability to see!"

And how he loves people! "It is only as we come to know a man," he says, "that we can see how wonderful his life has been." "Talk about going to the North Pole! It is not to be compared, for downright fascination, with the exploration of an undiscovered human being."

him) who "votes as he thinks, though the only man in meeting who votes that way; for when a man works in the open, laying walls true to lines and measurements, being honest with natural things, he comes clear, sane, strong, upon many things." One would like to tell of the "woman of forty-five" and her search for simplicity, and one would like to quote *in toto* the whole concluding chapter on "Living in the Country."

But choice has been made of "His Majesty—Bill Richards," not because it is the best part of the book, but because it is so amusingly, stimulatingly characteristic of a character that everyone in the country knows—a "lineman". Space consideration forbids more than a fraction of the description.

Bill comes putting up telephone wires and attracts David by his sheer vitality and unselfconscious enjoyment of life; so one day David starts out in search of him, keen with the adventure of discovering another soul. The narrative proceeds as follows:

WELL, I was lucky. About a quarter of a mile up the road, in a little valley near the far corner of Horace's farm, I found the truck, and Bill just getting out his dinner pail. It seems they had flipped pennies and Bill had been left behind with the truck and the tools while the others went down to the mill pond in the valley below.

"How are you?" said I.  
"How are you?" said he.  
I could see that he was rather cross over being left behind.  
"Fine day," said I.  
"You bet," said he.  
He got out his pail, which was a big one, and seated himself on the roadside,

you know what made me speak of them?"

He had spread down a newspaper and was taking the luncheon out of his "bucket", as he called it, including a large bottle of coffee; but he paused and looked at me with keen interest.

"Well," said I, "when I saw you dragging that wire yesterday I took you to be a pretty husky citizen yourself."

He grinned and took a big mouthful from one of his sandwiches. I could see that my shot had gone home.

"So when I got back last night," I said, "I looked up the arm measurements of Sullivan and Fitzsimmons in a book I have and got to wondering how they compared with mine and yours. They were considerably larger than mine—"

Bill thought this a fine joke and laughed out in great good humor.

"But I imagine you'd not be far behind either of them."

He looked at me a little suspiciously, as if doubtful what I was driving at or whether or not I was joking him. But I was as serious as the face of nature; and proceeded at once to get out my tape measure.

"I get very much interested in such things," I said, "and I had enough curiosity to want to see how big your arm really was."

He smiled broadly.

"You're a queer one," said he. But he took another bite of sandwich, and clenching his great fist drew up his forearm until the biceps muscles looked like a roll of Vienna bread—except that they had the velvety gleam of life. So I measured first one arm, then the other.

"By George!" said I, "you're ahead of Fitzsimmons, but not quite up to Sullivan."

"Fitz wasn't a heavy man," said Bill, "but a dead game fighter."

I saw then that I had him! So I sat down on the grass near by and we had great talk about the comparative merits of Fitzsimmons and Sullivan and Corbett and Jack Johnson, a department of knowledge in which he outdistanced me. He even told me of an exploit or two of his own, which showed that he was able to take care of himself.

While we talked he ate his luncheon, and a downright gargantuan luncheon it was, backed by an appetite which if it were offered to the highest bidder on the New York Stock Exchange would, I am convinced, bring in at least ten thousand dollars in cash. It even made me envious.

There were three huge corned-beef sandwiches, three hard-boiled eggs, a pickle six inches long and fat to boot, four doughnuts so big that they resembled pitching quits, a bottle of coffee and milk, a quarter of a pie, and, to cap the climax, an immense raw onion. It was worth a long journey to see Bill eat that onion. He took out his clasp knife, and after stripping off the papery outer shell, cut the onion into thick dewy slices. Then he opened one of the sandwiches and placed several of them on the beef, afterward sprinkling them with salt from a small paper parcel. Having restored the top slice of bread he took a moon-shaped bite out of one end of this glorified sandwich.

"I like onions," said he. When we first sat down he had offered to share his luncheon with me, but I told him I had just been to dinner, and I observed that he had no difficulty in taking care of every crumb in his "bucket" It was wonderful to see.

Having finished his luncheon he went down to the brook and got a drink, and then sat down comfortably with his back among the ferns of the roadside, crossed his legs, and lit his pipe. There was a healthy and wholesome flush in his face, and as he blew off the first cloud of smoke he drew a sigh of complete comfort and looked around at me with a lordly



Captain Carpenter of the "Vindictive".

Which made a successful raid on Zeebrugge, and was afterwards sunk, filled with concrete, in Ostend harbor to prevent egress of the enemy's submarines.—London Daily Mail Copyright.

Truly his is "the harvest of a quiet eye", to quote the poet Wordsworth, a true twin soul to our author, and he esteems his work well done if he can make that harvest ours.

I N considering what portion to quote, to give an idea of the style and content of this book, one hesitates long.—Whether to tell about Old Horace the practical, or the strange "old fellow" known as the Herberman; about the odd raft of people whom David finds on his fleeting trip to the city or about the dear old stone mason (one pauses long over

a grassy, comfortable spot near the brook which runs below into the pond. There were white birches and hemlocks on the hill, and somewhere in the thicket I heard a wood thrush singing.

"Did you ever see John L. Sullivan?" I asked.

He glanced up at me quickly, but with new interest.

"No, did you?"

"Or Bob Fitzsimmons?"

"Nope—but I was mighty near it once. I've seen 'em both in the movies."

"Well, sir," said I, "that's interesting. I should like to see them myself. Do

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air such as few monarchs, no matter how well fed, could have bettered. He had worked and sweat for what he got, and was now taking his ease in his roadside inn. I wonder sometimes if anybody in the world experiences keener joys than unwatched common people.

How we talked! From pugilists we proceeded to telephones, and from that to wages, hours, and strikes, and from that we leaped easily to Alaska and gold-mining, and touched in passing upon Theodore Roosevelt.

"I was just thinking," I said, "that you and I can enjoy some things that were beyond the reach of the greatest joys of the world."

"How's that?" said he.

"Why, Napoleon never saw a telephone nor talked through one."

"That's so!" he laughed.

"And Caesar couldn't have dreamed that such a thing as you are doing now was a possibility—nor George Washington, either."

"Say, that's so. I never thought of that."

"Why," I said, "the world is only half as big as it was before you fellows came along stringing your wires! I can get to town now from my farm in two minutes, when it used to take me an hour."

I really believe I gave him more of his own business than ever he had before, for he listened so intently that his pipe went out.

I found that Bill was from Ohio, and that he had been as far south as Atlanta and as far west as Denver. He got his three dollars and a half a day, rain or shine, and thought it wonderful pay; and besides, he was seen in the country "free gratis, fer nothing."

He got his coat out of the truck and took from the pocket a many-colored folder.

"Say, Mister, have you ever been to the Northwest?"

"No," said I.

"Well, it's a great country, and I'm goin' up there."

He spread out the glittering folder and placed his big forefinger on a spot about the size of Rhode Island somewhere this side of the Rockies.

"How'll you do it?" I asked.

"Oh, a lineman can go anywhere," said he with a flourish. "A lineman don't have to beg a job. Besides, I got eighty dollars sewed up."

Talk about freedom! Never have I got a clearer impression of it than Bill gave me that day. No millionaire, no potentate, could touch him.

The crew came back all too soon for me. Bill knocked the ashes out of his pipe on his boot heel, and put his "bucket" back in the truck. Five minutes later he was climbing a tall pole with legs bowed out, striking in his spikes at each step. From the cross-arm, up among the hemlock tops, he called out to me:

"Good-bye, pard."

"Stop in, Bill, and see me when you come by my place," said I.

"You bet," said he.

And he did, the next day, and I showed him off to Harriet, who brought him a plate of her best doughnuts and asked him about his mother.

Yesterday I saw him again careering by in the truck. The job was finished. He waved his hand at me.

"I'm off," said he.

"Where?" I shouted.

"Canada."

### History of the Pansy.

Something over 100 years ago, Lady Mary Bennett, a daughter of the Earl of Tankerville, was so struck with the simple beauty of a little wild flower, *Viola tricolor*, (our "Johnny jump-ups"), that she collected some of the best plants and gave them careful cultivation. The best seeds were saved from these, and from that beginning, by systematic selection and cultivation in the following years, was developed the pansy. The old name of the pansy, "heartsease", has no more romantic an origin than that the plant was once believed to be efficacious in diseases of the heart. Other names given to it in former days were "butterfly flowers," "kiss me quick," "herb trinity", and "love in idleness". German children call it "stiefmutterchen", and pointing to the petals show how the little step-mother sits in state alone while her stepchildren must stand around her.

## Hope's Quiet Hour.

### The Power of Thought.

"I hold it true that thoughts are things  
Endowed with bodies, breath and wings,  
And that we send them forth to fill  
The world with good results—or ill.  
That which we call our secret thought  
Speeds to the earth's remotest spot,  
And leaves its blessings or its woes  
Like tracks behind it as it goes.  
It is God's law. Remember it  
In your still chamber as you sit  
With thoughts you would not dare have  
known,  
And yet make comrades when alone,  
These thoughts have life; and they will fly  
And leave their impress by and by,  
Like some marsh breeze, whose poisoned  
breath  
Breathes into homes its fevered death  
And, after you have quite forgot  
Or all outgrown some vanished thought,  
Back to your mind to make its home,  
A dove or raven it will come,  
Then let your secret thoughts be fair;  
They have a vital part and share  
In shaping worlds and moulding fate—  
God's system is so intricate.

—Ella Wheeler Wilcox.

It is an old saying that thoughts should be guarded well, because they are "known in heaven;" but there is another reason for guarding them, and that is that they can do great good or great evil on earth. "As he thinketh in his heart, so is he," said a wise man long ago; and those words are still a warning and an encouragement to us. Character—that treasure of priceless value—is built up or destroyed by secret thoughts; and a strong and noble character is a tremendous force for good in the world.

A man's unconscious influence affects a great many more people than he knows. It goes on continually, and a good character has more power to uplift than a bad character has to degrade. This may be partly because the character is strong instead of weak, and has more power to impress other people, partly because everyone wants to be good (perhaps I am wrong about that, but I certainly think it is so) but especially because God is infinitely greater and stronger than Satan, and His power is always on the side of good.

It is character that really tells in this world—not wealth or cleverness—and we are responsible for our unconscious influence, for the results of our secret thoughts.

Spiritual infection is as real as the invisible germs of an infectious disease. One who has small-pox or diphtheria is carefully isolated, for fear the evil may spread into other homes; but we can't isolate a man whose secret thoughts are a menace to the community. Guard well your thoughts, lest you may be scattering soul-poison broadcast. Guard well your thoughts; for, in the quiet of your own room, in the silence of a sleepless night, you may have the high honor of working with God the Holy Ghost, Who is ceaselessly inspiring and uplifting the souls of men.

It is utter folly to fancy that evil thoughts can harm no one but the person who recklessly dares to pollute his soul by encouraging them. We are members one of another, and we can't help exercising "the action of presence;" but it rests with ourselves to determine whether our presence in this world shall be hurtful or helpful to our fellows.

It is quite possible to actively "do good" (as an energetic philanthropist) without being good. But it is impossible to be good (to walk with God in the secret temple of the soul) without in some way helping other people to higher ideals of life. There is a mysterious influence going out from each of us. It is not what we say or do, but what we really are in the sight of God, that affects other people most powerfully.

"Be noble! and the nobleness that lies  
In other men, sleeping, but never dead—  
Will rise in majesty to meet thine own."

A friend of mine once said to me: "The Master never wrote a book. He only—but what a big one—lived a life." Think of the mighty power for good that has gone out through all these centuries from

that Life spent in the little country of Palestine. It was only a short Life—ending in a death of shameful torture—but it has been working secretly, like leaven "hidden in three measures of meal," uplifting society ever since.

It is not the miracles of Christ which have been His greatest power for good. In fact, the story of the miracles is often a barrier to would-be disciples in these days. But that faultless Life—breathing love to the Father and love to men in every word and act—has captured the hearts of eager, climbing men and women in every age.

This afternoon I saw a notice-board outside a Methodist Church, announcing the subject for next Sunday's sermon. The subject is a vital one in this day of anxiety and glory: "What we mean by the communion of saints."

Does anyone know the far-reaching power for good of that dear mystery of God which we call "the communion of saints?" To label a mystery is not to probe its depths. We don't know the full extent of that living power of thoughts to "fly and leave their impress;" and yet millions of thoughts are rushing overseas (both ways) in full confidence that they will go swiftly and surely to their mark. No submarine can destroy them. No "red tape" can delay them.

An army chaplain knew that he was speaking of a reality—though a mystery—when he said: "We have no mothers out here, and yet we have. Our mothers come and go just as they ever did. They look in at our barn, or cottage, or dug-out at night, just as they did when we slept in our little cots. They look at our scattered belongings, and we try to tidy up a bit to please them. . . . A poor fellow (in hospital) smiles in his sleep, and we know why. His mother has come to him. It may be a man doesn't want his mother to come. It may be he shuts his heart against her. . . . but she comes, and with her quick eye she discovers why he did not wish her to come."

Yes, let us thank God for the mystery of the communion of saints; and let us use the power of reaching other souls—the power of prayerful thoughts—without waiting until we can understand it fully. We may not be able to explain our certainty, but we know we can stretch out a hand to clasp the hand of one we love—though thousands of miles may appear to separate us. The power is ours—are we using it? Or are we too busy with the things which are seen to claim our right to the power of the unseen? The things which are seen are solid (or seem so) but they are temporal. The things which are unseen—God's great mysteries—are spiritual but they will last throughout eternity.

Send out your prayerful thoughts in sure confidence that they are able to accomplish God's purposes.

Put them in His hand and He will speed them straight to the mark.

### Gifts for the Needy.

Two dollars (from "Grateful Reader," Bolton, Ont.) went through the Q. H. P. last week. They went out to help two elderly widows. The S. S. papers have also gone to cheer the "shut-in."

The continued kindness of our readers has been a help and inspiration to me as well as to many sick and needy people.

DORA FARNCOMB,  
6 West Ave., Toronto.

## 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.—Perhaps some of you have wondered that I have never spoken a word on the conscription of farmers' sons, the problem that is foremost in the minds of almost everyone who has to do with agriculture in any way during these days. I have not spoken for one reason only,—that I do not know the things "behind." It may be that the need at the front, immediately, justifies the step that has been taken. When we read of the way the Germans are appropriating the crops, even to the hens' eggs, in the Ukraine, we may get some inkling of the fate of any

British territory that might fall under German control. . . . On the other hand, the conclusion seems clear that before an election a political party—any political party—should be very careful about making promises that it may not be able to carry out. Promises of such kind should be much more than "scraps of paper" lightly to be set aside, for if people lose confidence in the promises of the governing bodies what have they to hold to?

After all I suppose the farmers cannot expect to escape Scot free from suffering any more than anyone else, in this war. The whole western world seems to be receiving blows, and democracy must triumph over autocracy both in this war and after it, everywhere, if life is to be worth living. German autocracy is the menace now, but "Prussianism," whether of mobs or of aristocrats, may spring up in any land, and must be nipped in the bud wherever it shows itself else our boys will have died in vain. It must always be remembered that autocracy is never confined—as some seem to imagine—to the aristocracy. Wherever a man, or clique of men, seeks to dominate, without regard to the good of all, there is autocracy. An autocrat may be an Emperor, or he may be a Bolshevik. Wars may come after this war. It seems to me that but one thing will check them and end them forever, and that is a complete revolution of our way of thinking all over the world. If we humans grow up, in all lands, with the idea that usefulness to human kind is what we are put here for—not the mere gaining of wealth and position for ourselves—then will war be ended forever. But who will be the missionaries who will teach this great truth so effectively that it will sink in and take root in every land? The Carpenter, Jesus of Nazareth, taught it long ago. The world has listened but has not heard.—And now, have you thought of this?—that the boys who have gone out to run the risk of death in this war are just doing what He did. They are offering their lives for others. Every young man who has volunteered—or been willing to go—with this idea in his mind, whether British, French, Russian, American, or German, has done just this. Perhaps some of you will object to my adding "German" there. But I have not the slightest doubt that the autocracy in Germany has represented to the people that they have been set upon, and that they must fight for their homes and their liberty.

Nevertheless, all war is cruel and unnecessary and men at the head of affairs who churn it up for the sake of their own power and wealth, exploiting the people to win it for them, while saving their own skins by keeping at safe vantage points, (the picture of the Kaiser and his six sons in our issue of May 9th is very suggestive) deserve not an iota of anyone's sympathy. Of this the Kaiser and his immediate advisers are convicted—by the consensus of opinion of the civilized world, and by such revelations as those given by Prince Lichnowsky and, later, by Dr. Muehlton, former manager of Krupps. It is to be remembered, too, that the great humanitarian, Liebknecht, imprisoned for his plain speaking, still languishes—if he be yet alive—in a cell "somewhere in Germany."

NOW why am I rehearsing all this? Simply to try to help you to be a bit more reconciled if your son or brother has been called.

Someone has said that "the best way to buck Fate is acquiescence;" and we may just as well accept the fact—because we have to, whether we like it or not—that never again can we live our own little lives in our own little way utterly regardless of the big world. Everything has been changed within the last four years. Things cannot be again what they were.—But the hope is that with the larger vision these years have brought to us, some day things may be better than ever before. It may not be in our day, but surely there is justice in the Universe, and that in that day we shall know and be satisfied.

FOR nearly four years we—and now I speak of us who live in this city—have been looking, every day, at men in khaki. Some of them have been farm boys—for not all farm boys have waited for conscription. But within the last few weeks the rooms for medical examination of those going into the army have been just

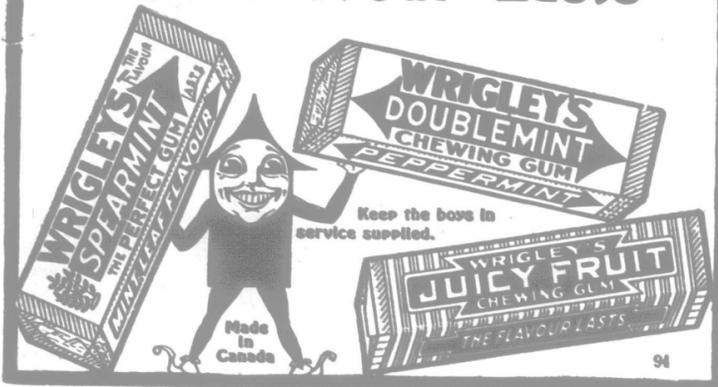
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around the corner from the Farmer's Advocate and Home Magazine offices, and so we have seen much more than before of the men who are just arriving—lads with suit-cases from off the trains, lads brought in by buggy and automobile. During the past two weeks they have been examined sometimes, it is said, at the rate of 200 a day, and sometimes the whole street has been lined with motor cars in which sit fathers, perhaps mothers and sisters, too, waiting anxiously while the dear one passes through the door, at each side of which stands a soldier with a blue band about his cap, and passes up the stairs to the doctors above. That long wait for the verdict carries its own agony, and no wonder the faces of those in the cars and standing along the sidewalk show seldom the flit of a smile.

It is all inexpressibly sad, and sometimes one stops aghast to think that at this age in the world's history there can exist anywhere the possibility of these things.

Yet we have to accept the fact that the thing has happened, is here, and we have to face it.

AND now I want to tell you something that will be sure to comfort those of you who have the larger vision.

At the house where I take dinner every day several members of the Army Dental Corps also dine. For the past year they have spent much time working with the teeth of returned soldiers, and not without danger to themselves either, since many of their patients are tubercular. The other day one of them said that, since he has been brought into such close companionship with these men, he has been impressed, over and over, by the fine character that has been developed in them. Sham and glitter count for nothing with the most of them now, and the only things they demand are "squareness" and the ideal of "standing by the other fellow." Surely even war itself has not been a waste to these men. They have lost limbs, perhaps, or health,—and yet may it not be that they have gained a higher plane than they might ever have reached had they not felt themselves called upon to sacrifice themselves for others?

NOW just another little word for you who may have relatives "prisoners in Germany." A week or so ago I told you that the prisoners are depending, almost wholly, upon their parcels for clothing and food. Since writing you a letter has come from a repatriated prisoner now in Switzerland, to the proprietor of our paper, whose son, Douglas Weld, an airman, was brought down in Germany and is now in the prison camp at Holzminden. "Doug. is receiving his parcels regularly," said the letter. Also, "The boys there play baseball and football sometimes, and when I left were getting a tennis court ready."

This confirms what was told you before—that the Germans really do deliver the parcels.—The games may be limited to officers' camps I do not know.—At any rate you need not be afraid to keep on the good work of sending parcels.

JUNIA.

### Canning Meat.

BY the three-day canning method given in our issue of May 30, meats as well as vegetables may be canned, and so a supply of fresh meat may always be kept on hand to be used in case of emergency. There is another reason, also for learning this method of preserving meat: Every scrap of it, even to the liver, heart and kidneys, may be put up for use; also the bones may be boiled to supply an ever-ready soup.—But the method must be exactly followed, as regards sterilization, etc., for unless perfectly sterilized and sealed, meats are particularly liable to spoil.

To secure best results in fried meat, the slices should first be fried exactly as for serving, but should be thoroughly cooked so that no portions are left rare. The next step is to pack them into sterilized wide-mouthed sealers and fill up with boiling gravy, the richer the better. Boiling water will do, but the product will not have so good a flavor, so it is better to make a gravy with scraps of meat, fat, etc., even adding a little meat extract if necessary. Of course the cans should be hot from the sterilizing when the gravy is poured in, else there is danger of breakage. It is advisable, also, to put them on several thicknesses of

clean cheesecloth wrung out of boiling water before filling them. Finish in the method given in last week's issue.

Roast meat may be sliced and proceeded with as above. Also scraps of the cheaper portions of beef may be first fried in a little fat to sear the outside and keep in the juices, then finished in the same way.—Excellent for stews and meat-pies.

Shanks and heads may be first boiled in a kettle, exactly as for potted meat or headcheese, so that the bones may be taken out. The meat should be then chopped and seasoned and liquid and all poured into the sealers and sterilized as before. Heads should be prepared by splitting them open and soaking them in several changes of water before boiling them down. Any kind of seasoning liked may be added. Veal and chicken are especially good for making potted or jellied meat, and should be well boiled with the bones before being packed into the jars in order that the jelling substances of any gristle adhering to the bones may be boiled off into the gravy.

Heart, kidney and liver may be sliced, seared in fat, cooked, then packed into the jars and covered with gravy, great care being always taken that the gravy penetrates every crevice in the jar.

Even the tails and feet may be made use of. Cut the tail in pieces, put it in cold water and boil until every bit of juice is extracted, then season and can for soup. Fresh bones of any kind may be cracked and prepared in the same way.

The feet should be scalded until the hoof can be removed, then carefully cleaned and scraped and boiled down to make soup-stock, or mixed with chopped meat to make jellied meat. Soup stock should always be boiled down in the kettle until a little of it taken out for testing forms a jelly.

Potted or jellied meat of any kind, when taken out of the jars for use, should be melted over again and poured into a wet mould in which slices of hard boiled egg have been placed. When cold turn out on a platter and garnish with parsley, or put a ring of any kind of salad about it.

Fish may be canned in the same way as meat, but the skin and bones should be removed. To remove the bones use a very sharp knife and slip it along above the backbone and at one side, carefully loosening the flesh, then proceed in the same way with the other side.

All meat or fish used for canning should be perfectly fresh, and great care should be taken from the very first, when handling it, to keep it perfectly clean. Some people claim to have absolute success with it by boiling once for about an hour, but my friend of the "three-day-method" to whom reference was made last week, pins her faith to the three-day boilings, an hour each day, although she says she has had success with meats by boiling them just once—but for three hours. A little experimenting with a one-day one-hour boiling may commend itself to you, for certainly fuel is some consideration.

### Corned Beef.

CORNED beef is very delicious for a change, especially when served with greens, cabbage, kale, Brussels sprouts or turnips. A good brine for making it, also for pickling tongues, is prepared as follows: Take 1 quart salt, 1 ounce saltpetre,  $\frac{1}{2}$  cup brown sugar, 1 gallon cold water. Rub part of the salt into the meat; dissolve the rest of the salt the sugar and the saltpetre in the water. Put in the meat and set a weight above to keep the meat under the brine. Let stand in a cool place. Thin pieces of meat and tongues will be ready to cook in three or four days; thick pieces should be left longer. For less salt meat, shorten the time in the brine.

The cheaper cuts of beef, such as the rump and brisket, may be used for corn-ing.

The secret of really delicious corned beef is long, slow cooking. If you put a piece of it into boiling water and keep it boiling at a gallop, it will be hard, dry and comparatively tasteless. Cooked properly, it is tender, juicy and of delicious flavor. The following is the method. Place the piece in a saucepan with enough cold water to cover it. Let come to a boil and boil briskly for half an hour, then draw to the back of the range and let just simmer, covered closely, for  $3\frac{1}{2}$  hours or

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The chauffeur never spoke except when addressed, but his few utterances, given in a broad brogue, were full of wit. One of the men in the party remarked: "You're a bright sort of a fellow and it's easy to see that your people came from Ireland."

"No, sir; ye are very badly mistaken," replied Pat.

"What!" said the man; "didn't they come from Ireland?"

"No, sir," he answered, "they're there yet."

the Soil" won prizes. To sixteen of these prizewinners—corn and beans and other things that will bear late sowing—have been sent; the seventeenth, a Beaver from Sundridge, signed only "Quaddie" to his or her letter, and so we cannot send anything without further information.

We were very much pleased to see the great spirit of unselfishness—willingness for service for others—shown in most of the letters. Composition, neatness of writing, spelling, etc., were marked as usual, in addition to the evidence of "war work", and the results were as follows:

The very best letters were written by: Clifford Lannin, R. 4, Owen Sound, Ont.; Ruth Mitchell, R. 4, Lindsay, Ont.; Percy Ward, Walter's Falls, Ont.; and Dollie Ard, R. 1, Allenford, Ont.

The next best were written by: Agnes Sim, R. 1, Innerkip, Ont.; Kenneth Wright, Marter, Englehart, New Ont.; Helen Hudson, Chelsea, Que.; James Campbell, R. 2, Wingham, Ont.; Vera Costello, Branchton, Ont.; Oral Finigan, R. 1, Sheppardton, Ont.; Bessie Holm, R. 1, Hespeler, Ont.; Alice Taylor, R. 1, Mansfield, Ont.; Elmer Sheehy, R. 2, Little Britain, Ont.; Earl Powell, R. 4, Ingersoll, Ont.; Mabel Dunn, R. 3, Owen Sound, Ont.; Ella Grundy, Charlton, New Ontario; "Quaddie", Sundridge, Ont.

Nearly all of these spoke of working in gardens, or on the land in some way, as well as of attending to young stock or poultry.

We wish our young soldiers every success. Perhaps they will be interested to know that in the United States a great School Garden Army has been organized to help to feed the world in this war-time, so our Canadian girls and boys are joined hands with their young cousins over the border in doing a great and good work.

Young Soldiers of the Soil, sometimes the work will seem wearisome; sometimes it would be nicer to go and play baseball than to hoe and weed in the sun; but, as some of you have remarked "Think of what our boys in France and Flanders are doing?" It is our duty and privilege to help them all we can, and your letters show that you are realizing this.

### Some of the Prize Essays.

#### "What I Am Going to do This Year to Help Win the War."

[Note.—These essays were written six weeks ago.—Ed.]

The great European war is still progressing and we do not know when it will end. Never was the necessity for men and food more needed than at the present time. Men are badly needed, but we must have plenty of food to feed this great army. There are two lines of defence, the one in France, and the other at home. If the second line fails in its efforts to keep the first line firm, then the first line must give way. The blame will not be on our soldiers but on those who hold the second line of defence. I have given you a brief outline of the situation Canada faces. Will her people shrink from doing their duty, or will they remember the boys at the front and be patriots all? God grant that they remain loyal to their sons, and to their country.

I live on a farm near Owen Sound. We have fifty acres and carry on mixed farming. Last year we hired help for only a few days. This year father and I intend to take the crops off ourselves and let other people who need help worse get their crops off. Last year I had only a small garden, no more than enough for our own use. This year I have a plot of ground forty-two feet by one hundred and ten feet. I intend to plant parsnips, beets, onions, carrots and lettuce. Besides this garden I am going to plant enough potatoes for ten or fifteen bags, a little more than I had last year. From last year I had saved fifteen dollars; with this I bought a pig for five dollars and have ten dollars to feed it with. This is one way in which I am going to help the war; another way is by saving food.

Owing to the present scarcity of food waste should be looked upon as a crime and all loyal citizens should avoid it. Not to waste any food is a duty that every person in Canada, young, or old, rich or poor can do. Vegetables, to any extent cannot be sent overseas to the soldiers. What is most needed is flour and sugar. A good deal depends upon this year's

wheat crop. The population of Canada is about eight million people. The soldiers at the front number about five hundred thousand; that is, there are sixteen people for every soldier. We could, without leaving ourselves short, save a little each day for the soldiers. Supposing we save one ounce of sugar a day we could save one hundred and eighty-two ounces a year. If there are sixteen people for one soldier, then one soldier would receive one hundred and eighty-two pounds of sugar a year. This is more than enough for one soldier so the rest could go to the starving people on the allied side. If you figure out the same amount of flour for one soldier you will find out that there is plenty for our soldiers. Tea and porridge along with puddings require a great deal of sugar. I do not take neither one of these three, so I do not eat much sugar. Any food that I do not eat goes to the hens and in return we get eggs. If we would only save a trifle each day, at the end of the year we would be surprised to find what we had done for the soldiers.

MASTER CLIFFORD LANNIN,  
R. R. No. 4, Owen Sound, Ont.

### From Another Grey Co. Boy.

I am only a boy thirteen years old and live on a farm, and have a long way to go to school, but I am going to do all I can this year to help win the war.

Since the new time came in force we go to school an hour earlier and so get home that much earlier, but I don't know as it is going to work much better on the farm as there were lots of chores we could do in the morning that we haven't time for now; however, I will try and make up after school.

I guess it just comes natural for a boy raised on a farm to plant and grow things, only we will have to try to grow everything on a larger scale this year, and the right kind that will spare good food for the men overseas. So I will try and tell you our plans for this year.

My younger brother won a prize from the Farmer's Advocate and got ten packets of garden seed, so we intend to have a dandy garden this year.

We have twelve acres of splendid fall wheat, if the spring frosts don't harm it, and we are sowing a large field of peas, and going to put in a big patch of white beans, as we consider them better for food value, if food is scarce, than potatoes or garden truck; but we intend to have lots of those too, if we can.

Then we always have a big field of corn and turnips and we boys know what it is like to hoe the long rows day after day in the hot sun. It will be fun to watch some of the city boys hoeing this year. They will need lots of grit to stick to it when old sol warms up their backs and they get blisters on their hands.

My big brother is only eighteen years old but is doing all the ploughing and seeding and other farm work; so to help I am going to do the harrowing. It is a footsore, dusty job, walking so much in the soft earth, but I should not mind. Then we have to go all over the fields with the horses and stone-boat and pick up all the small stones that get worked up.

We tapped eighty trees and made a lot of maple syrup; we boys had to gather the sap and chop wood and keep the sap boiling. In this way we helped save sugar.

In these busy times there isn't much time that a boy can have any idle fun, so we will have to make it as we go about our work.

If I go to have a game or a ride on my bike, it's "Johnny get your hoe, or the axe and split some wood."

Of course I will try and gather all the wild fruits and tame fruits and everything else eatable this summer to conserve food.

We can fish speckled trout in the creek to save meat. I like this job best of all.

We boys have to go for the cows, help milk, turn the separator and help churn and numerous other jobs, which I count all helping to produce in this war time.

I read all about the city boys and girls joining the S. O. S. but I think I am one already.

PERCY WARD,  
Walter's Falls, Ontario.

Yes, you and the city boys and girls all belong to the one army. Be nice to them if they have to work with you, and show them how to do things. Some day they may show you things in the city.

## The Proceeds

The fifth Canada war the Bank a  
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# The Merchants Bank of Canada

## Proceedings of the Fifty-Fifth Annual Meeting of Shareholders, on June 5th, 1918

The fifty-fifth Annual Meeting of the Shareholders of the Merchants Bank of Canada was held on Wednesday, June 5th, in the Board Room at the Head Office of the Bank at Montreal. The meeting was called to order at twelve o'clock noon.

On motion of Mr. John Patterson the Vice-President, Mr. K. W. Blackwell, in the absence of the President (Sir H. Montagu Allan), was asked to take the chair.

Mr. J. M. Kilbourn was appointed Secretary of the meeting.

The minutes of the last annual meeting were taken as read.

The Chairman, Mr. K. W. Blackwell, then presented the Annual Report, as follows:—

It is my privilege to submit for your approval the Fifty-fifth Annual Statement of the Merchants Bank of Canada as at the close of business on the evening of the 30th April, 1918, the last day of the Bank's fiscal year, accompanied by a statement of the Profits covering the same period.

You will observe, with satisfaction, I doubt not, that the profits as a result of the year's operations amount to \$1,236,680.96, being an increase over last year of \$116,372.12.

Subscriptions by the Bank's clientele throughout the country to that important piece of national financing, known as the Victory Loan, amounted to no less a sum than \$25,000,000, distributed amongst fifty-three thousand depositors. Notwithstanding the heavy consequent withdrawals, our deposits have grown about \$20,000,000, or roughly, twenty-one per cent. Our commercial advances have correspondingly increased, thus enabling us, while maintaining a proper measure of liquid strength, to materially improve our earning power.

The whole position as reflected by the Balance Sheet will be viewed, I am sure, with feelings of entire satisfaction.

There has been no activity during the course of the year in branch extensions, owing to the exigencies of the staff situation. Indeed, we are, in all the circumstances, doing well to keep pace with the development of our business under the difficulties by which we are surrounded in this respect.

All the various offices have been inspected during the past twelve months.

The Auditors' Certificate is appended.

All of which is respectfully submitted,

K. W. BLACKWELL,  
Vice-President.

### Statement of the Result of the Business of the Bank for the Year Ended 30th April, 1918

The Net Profits of the year, after payment of charges, rebate on discounts, interest on deposits, and making full provision for bad and doubtful debts, have amounted to.....	\$1,236,680.96
The balance brought forward from 30th April, 1917, was.....	421,292.96
<b>Making a total of.....</b>	<b>\$1,657,973.92</b>
This has been disposed of as follows:	
Dividend No. 120, at the rate of 10 p. c. per annum.....	\$175,000.00
"    121,    "    10    "    ".....	175,000.00
"    122,    "    10    "    ".....	175,000.00
"    123,    "    10    "    ".....	175,000.00
Government War Tax on Note Circulation.....	700,000.00
Contribution to Officers' Pension Fund.....	50,000.00
Transferred to Contingent Fund.....	400,000.00
Balance carried forward.....	437,973.92
	<b>\$1,657,973.92</b>

K. W. BLACKWELL, Vice-President. E. F. HEBDEN, Managing Director. D. C. MACAROW, General Manager.

### Statement of Liabilities and Assets at 30th April, 1918

LIABILITIES.		1918	1917.
<b>1. To the Shareholders:</b>			
Capital stock paid in.....	\$ 7,000,000.00	\$ 7,000,000.00	
Rest or Reserve Fund.....	7,000,000.00	7,000,000.00	
Dividends declared and unpaid.....	176,900.00	178,365.00	
Balance of Profits as per Profit and Loss Account submitted herewith.....	437,973.92	421,292.96	
	<b>\$ 14,614,873.92</b>	<b>\$ 14,599,657.96</b>	
<b>2. To the Public:</b>			
Notes of the Bank in Circulation.....	12,327,168.00	9,483,468.00	
Deposits not bearing interest.....	34,886,747.83	27,101,587.86	
Deposits bearing interest (including interest accrued to date of statement).....	75,946,985.48	65,000,484.42	
Balance due to other Banks in Canada.....	1,400,941.75	628,863.08	
Balances due to Banks and banking correspondents in the United Kingdom and foreign countries.....	1,161,976.79	3,904,690.72	
Bills payable.....			
Acceptances under letters of credit.....	598,851.20	411,806.78	
Liabilities not included in the foregoing.....			
	<b>\$140,937,544.97</b>	<b>\$121,130,558.82</b>	
<b>ASSETS.</b>			
Current Coin.....	\$ 4,890,061.36	\$ 4,766,438.82	
Deposit in the Central Gold Reserves.....	6,000,000.00	3,500,000.00	
Dominion Notes.....	5,912,092.50	7,650,790.50	
Notes of other Banks.....	893,076.00	793,367.00	
Cheques on other Banks.....	5,311,786.12	5,674,828.67	
Balances due by other Banks in Canada.....	4,704.37	2,635.33	
Balances due by Banks and banking correspondents in the United Kingdom.....	82,580.53	61,225.79	
Balances due by Banks and banking correspondents elsewhere than in Canada and the United Kingdom.....	1,357,843.03	2,413,100.10	
Dominion and Provincial Government securities, not exceeding market value.....	5,435,464.66	3,862,507.19	
Railway and other Bonds, Debentures and Stocks, not exceeding market value.....	4,060,204.70	3,964,251.24	
Canadian Municipal Securities, and British, Foreign and Colonial public securities other than Canadian.....	14,589,065.54	11,263,196.20	
Call Loans in Canada on Bonds, Debentures and Stocks.....	5,223,953.88	4,627,863.57	
Call Loans elsewhere than in Canada.....	3,906,648.93	3,461,420.47	
	<b>\$ 57,667,481.62</b>	<b>\$ 52,041,624.88</b>	
Current Loans and Discounts in Canada (less Rebate of Interest).....	76,194,016.15	67,737,958.74	
Current Loans and Discounts elsewhere than in Canada (less Rebate of Interest).....	339,987.29	377,582.42	
Liabilities of customers under letters of credit as per contra.....	598,851.20	411,806.78	
Real Estate other than bank premises.....	312,928.11	294,197.07	
Overdue debts, estimated loss provided for.....	272,226.60	149,039.68	
Bank Premises, at not more than cost, less amounts written off.....	4,886,438.98	4,617,400.23	
Deposit with the Minister for the purposes of the Circulation Fund.....	355,000.00	375,000.00	
Other Assets not included in the foregoing.....	310,615.02	125,949.02	
	<b>\$140,937,544.97</b>	<b>\$121,130,558.82</b>	

K. W. BLACKWELL, Vice-President. E. F. HEBDEN, Managing Director. D. C. MACAROW, General Manager.

### REPORT OF THE AUDITORS TO THE SHAREHOLDERS OF THE MERCHANTS BANK OF CANADA.

In accordance with the provisions of sub-Sections 19 and 20 of Section 59 of the Bank Act, we report to the Shareholders as follows:

We have examined the above Balance Sheet with the Books of Account and other records at the Chief Office of the Bank, and with the signed returns from the Branches and Agencies and have checked the cash and verified the securities of the Bank at the Chief Office against the entries in regard thereto in the books of the Bank at 30th April, 1918, and at a different time during the year and found them to agree with such entries. We also attended at some of the Branches during the year and checked the cash and verified the securities held at the dates of our attendances, and found them to agree with the entries in regard thereto in the books of the Bank.

We have obtained all the information and explanations we have required. In our opinion, the transactions of the Bank which have come under our notice have been within the powers of the Bank, and the above Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Bank's affairs, according to the best of our information and the explanations given to us, and as shown by the books of the Bank.

VIVIAN HARCOURT, } Auditors.  
GORDON TANSLEY, }  
(of the firm of Deloitte, Plender, Griffiths & Co.)

Montreal, 23rd May, 1918.

In moving the adoption of the Report the Chairman, after referring to the features of the Annual Statement, continued, in brief:

"Some strange doctrines have recently taken possession of the minds of many people on this subject. It is a phase of the war excitements," he said.

"I am enthusiastic on the subject of fair play towards Vested Interests," he continued. "You and I, gentlemen, as bankers, and bank shareholders, are the natural guardians of Vested Interests.

"We must argue against and oppose the mischievous propaganda of unthinking and illogical people. They will tell you that this is a socialistic age and complain that banks and large capitalists are banded together to keep on amassing wealth to the detriment of the conditions of the general community.

"We may answer this in saying most truthfully that banks themselves are absolutely socialistic in their methods. They accept money from those who have it, and lend it to those who need it and can use it safely.

"The great resources of any large bank belong mainly to its depositors, its own capital being, comparatively speaking, quite insignificant, nor do its depositors belong to any one particular class. It is a careful trustee of millions of dollars belonging to all classes.

"In our case, for example, the large total of our deposits and current accounts belong to so many thousands of individuals that the average holding is only about \$500.

"Surely rich depositors are not capitalists! Therefore, it would be most unfair to accuse us of being prejudiced in favor of great capitalists.

"The cost of the war is being paid for out of the savings of past years, and is now in some countries nearly approaching the limit of exhaustion, and the question of how interest charges are to be met, engages the deepest attention of all classes. Here again the treatment of Vested Interests must be carefully guarded against unwise and wanton action; when we hear people talk about the conscription of wealth and levy on capital in a vague and indefinite way we realize that this might be pushed to a limit that would break down the whole financial fabric."

He went into a discussion of what so-called conscription of wealth meant and the impossibility of turning property into cash, as very little individual wealth was composed of cash.

"Vested Interests," he added, "are also threatened from another quarter. We, in this young country, must guard them against the free trader. I am not going into politics here, but the fact cannot be overlooked that amongst the agricultural community there are many who are favorable to taking down the tariff bars, in order to cheapen articles that enter into their own daily use, without thinking of the consequences, they don't seem to realize that if they disturb the present equilibrium of tax distribution, a greater share of the taxation must undoubtedly fall upon their own shoulders."

He concluded with an appeal to the public for fairer treatment of vested interests.

In seconding the adoption of the Report, Mr. Thomas Long then said:

"It is a great pleasure to me to be invited to second the adoption of the Annual Report, which has been presented by the Vice-President. I am sure that as stockholders we are all pleased and delighted to see the substantial growth that has taken place within the past few years in the volume of business transacted by this Bank. That this progress is still continuing is apparent by the report we have just

heard, so that we may look forward to the future with both hope and confidence." (Applause.)

After remarks by Mr. Percival C. Elgee and Mr. R. Campbell Nelles, the Annual Report was unanimously adopted.

Mr. E. F. Hebden, Managing Director, addressing the shareholders, stated that a year ago they had looked for the close of the war before another meeting, but in this expectation the world had been disappointed. Meanwhile, the affairs of the bank continue to prosper, stimulated by favorable economic conditions.

Mr. Hebden referred to the important position held by the chartered banks of Canada and said: "There is no more important part of the civil arm than the chartered banks. I say it without the possibility of the statement being gainsaid, that the chartered banks of Canada have been a pile-driving influence from Confederation on—notwithstanding some setbacks to themselves—in the development of Canada's material resources in every field of enterprise." (Applause.)

Mr. Hebden also referred at length to the very crippling effect the exceedingly heavy military levies upon Banks' staffs are having and will have upon their organizations.

Mr. D. C. Macarow, general manager, reviewed the financial statement and said, in part: "The times through which we are passing are indeed anxious and exacting, and the future unquestionably holds many serious problems, upon the wise solution of which far-reaching issues will depend. But the potentialities of this country are well nigh boundless, and if continued to be developed along sound and businesslike lines, as we have no doubt they will be, the future, I am sure, may be regarded without undue apprehension.

"Economics tell you that the stability and wealth of a country such as ours lies largely in the measure and value of the exportable surplus of our products. Judged by this true standard and in the light of past achievements one will require to be a pessimist indeed to regard our future otherwise than with well-grounded confidence."

Mr. Macarow paid a tribute to the loyalty of the staff to the Bank and to their country, so many of them having laid down their lives in defence of the latter, and those who are debarred from active participation in the war "doing their bit" in taking on additional burdens of work in the Bank to compensate for the shortage in the staff. (Applause.)

On motion of Mr. John Patterson, seconded by Mr. A. D. Fraser, Messrs. Vivian Harcourt and Gordon Tansley, of Deloitte, Plender, Griffiths & Co., were appointed auditors of the bank, to hold office until the next annual general meeting.

Messrs. John Patterson and Arthur Browning were by unanimous vote appointed scrutineers, and instructed to cast one ballot for the election of the following persons as directors: Sir H. Montagu Allan and Messrs. K. W. Blackwell, Thomas Long, F. Orr Lewis, Andrew A. Allan, Lieut.-Col. C. C. Ballantyne, A. J. Dawes, F. Howard Wilson, Farquhar Robertson, Geo. L. Cains, Alfred B. Evans, E. F. Hebden, T. Ahearn and Lieut.-Col. Jas. R. Moodie.

On motion of Messrs. R. Campbell Nelles and John Patterson, a vote of thanks was tendered the Board of Directors, the General Manager and Staff, which was briefly acknowledged by the General Manager, Mr. D. C. Macarow.

This concluded the business of the meeting, which then adjourned.

At the subsequent special meeting of the Directors, Sir H. Montagu Allan was re-elected President, and Mr. K. W. Blackwell, Vice-President.—Adv't.



DATE OF REGISTRATION			CANADA REGISTRATION BOARD			SERIES NUMBER		
MONTH	DAY	YEAR	1918					
<b>CARD FOR MALES</b>								
TO BE FILLED IN BY DEPUTY REGISTRAR								
1. Name in full (surname last) ? _____								
Address (permanent) ? _____								
STREET AND NUMBER			RURAL DELIVERY OR POST OFFICE			TOWN OR CITY		
PROVINCE								
2. Age ?	Date of Birth ?	Country of Birth ?	3. Race ?			Speak English (E) or French (F) ?		
4. British subject ?	By birth ?	By Naturalization ?	5. If not a British subject, to what country do you owe allegiance ?					
If naturalized, Which year ?			What place ?					
6. Single (S), Married (M), Widower (W), or divorced (D) ? _____								
8. Physical disabilities, if any ? _____								
10. (a) Present occupation (if any) ? _____								
(b) What is your regular occupation ? _____								
(c) What other work can you do well ? _____								
11. If an employee, state employer's name _____								
Address _____			Nature of business _____					
12. Do your circumstances permit you to serve in the present national crisis, by changing your present occupation to some other for which you are qualified, if the conditions offered be satisfactory ? (a) Where you can return home daily ? (b) Away from home ?								
13. (a) Were you brought up on a farm? (b) Have you worked on farm? (c) Are you retired farmer? (d) Can you handle horses? (e) Are you willing to do farm work? (f) Drive tractors? (g) Use farm machinery? (h) How long? (i) Where? (j) During what periods?								
I affirm that I have verified the above answers and that they are true								
Signature of Registrant _____								

## Procedure of Registration

On June 22nd every person residing in Canada, male or female, British or alien, of sixteen years or over, must attend one of the registration booths located in his or her district, and there observe the procedure explained below.

### Where to Register

Every person required to register has the privilege of registering at any of the public places provided for that purpose. The location of all such places will be specified in proclamations posted conspicuously.

In Cities and Towns, many of these places will be open for registration purposes prior to Registration day. Where such arrangements are made, the local papers will supply full information.

Large industrial and business concerns are being asked to provide facilities for registering their employees. Where they do so, business will not be interfered with, and employees will suffer no loss of time.

While all are compelled to register on Registration Day, it is not contemplated by the Government to force the sick, feeble and aged to turn out. If such persons will notify the Registrar prior to June 22nd of their inability to attend at a place of registration, an effort will be made to register them at home, provided the request is reasonable and justified.

Remember the Day — June 22nd — Remember the Hours — 7 a. m. to 10 p. m.  
Register early and get your Certificate for your own protection.

Issued by authority of  
**Canada Registration Board**

34M

### How to Register

The procedure of registration is simple. The questions upon the registration card can be answered very easily, but they must be answered truthfully and fully.

The card shown in the illustration is a facsimile of the registration card for males. An advertisement showing the card for females appears in another paper.

Study the questions carefully, so that you will be able to answer them promptly when registering. If you have any special qualification, or feel that your services would be more beneficial to the country in some other line of work, say so.

### Dollie Ard's Letter.

On account of the great war which is raging in Europe and causing so much ruin and disaster, the government has asked every girl and boy to raise a little more food this year than last and help to feed the soldiers and in so doing they are helping to win the war.

One year ago only the enemy were on rations; to-day Great Britain, France and Italy are on rations, because Germany controls the wheat lands of Roumania, Russia, Poland and Ukraina. To-day the shadows of hunger, famine, disease and death hang over the allies.

Upon the 1918 crop of Canada and the United States depends the fate of the democratic nations of the world. If that crop is sufficient the allies can be fed; if not they may have to accept a German peace. Of course all loyal subjects of the King and Empire will not want this, so as I am one I am going to do all in my power this year to help win the war. I am going to learn to knit and knit socks for the soldiers. I am having a garden of vegetables which I will sell and give most of the money to the soldiers; and any other way I can help by raising animals and giving the money to the soldiers. Every home in Canada, I think, is economizing on food. As I am going to school and am in the entrance class I have (like all other girls under the same circumstances) very few chances to earn money for the war.

Hoping to see this letter in print even if I don't get a prize.

I remain,  
DOLLIE R. ARD, Age 13 years.  
R. R. No. 1, Allenford, Ont.

P. S.—I would like some Beavers to write to me.

### Ruth Mitchell's Letter.

Dear Puck and Beavers.—Below will be found an essay on: "What I am going to do this year to help win the war."

Last year we got potatoes from the Department of Agriculture for school fair purposes. In the fall when they were picked we had nearly a barrel of potatoes. I think if I could do as well this year, only increase the quantity, it would be helping in the war. Just think if every school boy and girl would grow this many potatoes what it would add to the older folk's crop. Well I shall try and do this and if possible increase it to about as much again.

This year my little brother, aged nine, has learned to milk and milks two cows night and morning. Last year I learned and am keeping it up still more this year. Mother says everything we do around the barn is helping in the war. Well, I guess it is, too, because the more chores we do around the barn means so many less for father to do, and in so doing let him have more time to produce.

This spring some officials from the town came out and spoke on greater production. They said if each man would grow five acres more wheat what it would count over the whole Dominion. Beans are counted such excellent food for soldiers it would be good for each one of us to have a patch of them. I may do that this year myself.

In our school we have a notice up saying, "save the food". Well we all know this is very easily done by throwing away no crusts but securing every one and let mother make pudding out of them.

I learned how to trip the slings last year and I guess if all the boys have to go I will do it again this year. I cannot work in the fields for a while yet but the time may come when women may have to assist in the harvest field, in fact, in some papers they are advising women to go out this year.

RUTH M. MITCHELL, (Age 13.)  
R. R. No. 4, Lindsay, Ont.

Some more prize letters will be published soon.

### Junior Beavers' Letter Box.

Dear Puck and Beavers.—I have read your very interesting letters for quite a while but have not ventured to write. Last summer I was up in Alberta about one hundred miles from Edmonton, at a place called Vermillion. I was not staying in town but was twenty-two miles from it.

One day I was rambling about with the dog, Fanny, when I looked into a tree about one hundred yards away and there to my surprise I saw a lynx.

The dog run, and quite out

Lion's H

Dear Puck first letter I enjoy read My father vocate for We have dog named to school r has great goats and milking an I go to sch a half mile the least. My cousin Well I g Beaver C the w.-p. l

R. R. No.

Dear Puck second letter I saw my would try in print to I call her from her called Two my two sis is Mrs. J Isn't this in France in the war, to an eno have read "St. Nich Books" and "Stories Fun." We year and got lots of a week bef fixed and he came sweater an the Beave Beavers p

Emo, Or

# FIRST ANNUAL CONSIGNMENT SALE OF HOLSTEINS

In Hamilton, Ontario, Canada, June 25th, 1918

To be held on the grounds of the HAMILTON JOCKEY CLUB,  
where 60 head of very choice high-class Holsteins will be sold.

This is the first time in the history of Canada that the sons and daughters of 36 to 43-lb. cows have been offered for sale either by private or public auction. Every animal tuberculin tested and fully guaranteed.

Remember the date—Tuesday, June 25th

Arrange so as to spend the day with us and see the quality of cattle consigned from the following herds:

- |  |                                    |
|--|------------------------------------|
| Lakeview Stock Farm, Bronte, Ontario   | Riverside Farm, Caledonia, Ontario |
| Ridgedale Stock Farm, Freeman, Ontario | Oak Park Farm, Paris, Ontario      |
| Avondale Farm, Brockville, Ontario     | Herd of G. Cox, Winona, Ontario    |
| Manor Farm, Clarkson, Ontario          |                                    |

Write for catalogue to-night.

SALES MANAGERS:

T. A. Dawson, Bronte, Ont.      Gordon S. Gooderham, Clarkson, Ont.

The dog began to bark but I started to run, and when I reached home I was quite out of breath.

I remain yours truly,  
Lion's Head, Ont. JOHN W. GRAHAM.

Dear Puck and Beavers.—This is my first letter to your charming Circle. I enjoy reading the letters in the Advocate. My father has taken the Farmer's Advocate for as long as I can remember. We have a cat named George and a dog named Gyp. When the rest of us are to school my little brother four years old has great fun with them. We have six goats and four little kids; one goat is milking and my father drinks the milk. I go to school every day I can; it is about a half mile. I got the prize for having the least mistakes in spelling last year. My cousin got it this year at Easter. Well I guess I will close, wishing the Beaver Circle every success. Hoping the w.-p. b. is asleep when this arrives.  
HAZEL VANSICKLE, (age 10).  
R. R. No. 3, Cainsville, Ont.

Dear Puck and Beavers.—This is my second letter to the Beaver Circle. When I saw my first letter in print I thought I would try again. I hope to see this letter in print too. For a pet I have a cat, I call her Nigger; we had two kittens from her this year, and we have a dog called Tweed. I go to school every day my two sisters go to. My teacher's name is Mrs. Jack and we all like her fine. Isn't this a terrible war. I have an Uncle in France doing his bit. I have a cousin in the war, I hope this war will soon come to an end. I like reading stories. I have read a lot of books. Stories from "St. Nicholas", and the "Golden Rule Books" and "Tales from Hans Anderson", "Stories from Grimm" and "Holiday Fun." We had a big Christmas tree this year and we had it all decorated and I got lots of toys. Papa went to Winnipeg a week before Christmas, he got his eyes fixed and now he can see better. When he came back he brought me a new sweater and a pair of felt shoes. Wishing the Beavers success. Will some of the Beavers please write.  
LAURA LOCKING, (age 10).  
Emo, Ontario, Rainy River District.

## Lakeview Holsteins AT AUCTION

On the HAMILTON JOCKEY CLUB GROUNDS  
Hamilton, Ontario, June 25th, 1918

Lakeview Rattler, Canadian champion 30-day mature cow; 8 months after calving, milk, 1409.7 lbs., butter, 61.20 lbs. in 30 days; 724 lbs. milk, 37.54 lbs. butter in 7 days. Besides the above cow, we are including in sale her two daughters, one granddaughter and two great-granddaughters. We are also offering a son of Lakeview Lestrangle, 741.9 lbs. milk, 38.06 lbs. butter in 7 days; sired by Dutchland Colantha Sir Mona, sire of Lakeview Dutchland Artis, 43.46 lbs. butter, and Lakeview Dutchland Calamity Rose, 31.71 lbs. butter, world's champion 2-year-old with first calf; also Lakeview Daisy, 34.26 lbs. butter; daughter of Therrivale, the noted show cow; and two of her daughters.

This is the first time in the history of Canada that daughters of a 43-lb. cow have been offered to the public at auction. *Come and buy them at your own price.*

Lakeview Farm, Bronte, Ontario  
Major E. F. Osler, Proprietor.      T. A. Dawson, Manager.

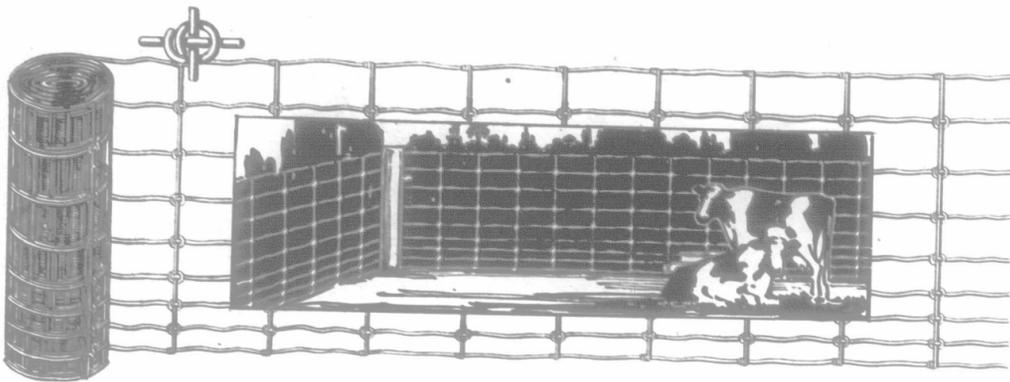
## Current Events.

Before the spring campaign began in Germany it was announced that a million and a half casualties would not be regarded as an excessive price for a decisive victory.

That the Germans have found it possible to come very near to America is evidenced by the fact that during June 3rd, 4th and 5th submarines sank 7 passenger steamships and at least 8 defenceless schooners engaged in coast-wise traffic along the east coast of the United States. Among the steamers were the British steamship Harpathania and the American vessels Texel and Carolina, the last of which carried 220 passengers and 130 crew who were sent afloat in open boats, most of them being eventually picked up by the steamer Palmer. All of these vessels except the Harpathania were bombed, the submarines evidently reserving their torpedoes in the hope of catching some of the American transports carrying soldiers to Europe. In this, however, they were not successful, and immediately a swarm of American destroyers began a search which is still being kept up at time of going to press. On June 4th a mine, evidently dropped from one of the submarines, was picked up off Delaware Capes on the New Jersey shore. In the meantime New York has been put in comparative darkness, as all display lights have been forbidden. It is thought that two U-boats did the damage.

At time of going to press it is stated that the Germans have renewed a drive over a front of 2½ miles between Noyon and Montdidier, but whether this is the great effort that has been expected for the past fortnight remains to be seen. During the week the Allies—British, French and "Sammies" all fighting together—succeeded in driving the enemy back from the Marne and some distance beyond it. On June 6 the French and Americans made a notable advance capturing all the important high ground northwest of Chateau Thierry, the point at which the Germans attempted to make their drive across the Marne. Canadians were not in this sector, but in the vicinity of Arras Central Ontario men continued

## Page Fencing Prices Lowered



**T**HE same Page Fencing that built for itself a high reputation by its uniformly high quality, is now obtainable at prices lower than you have had to pay for it.

Even at its former prices, Page Fencing has been the choice of the careful Canadian Farmer. At these lower prices—made possible by the introduction in our factory of the most modern of labor-saving systems—Page Fencing is the best choice for every Farmer who wants Fencing to last, to look well, and to stay "put" for a lifetime. The quality of Page Fencing is guaranteed to be of the same high standard as in the past. Write for prices now, and select the fencing that you need.

**T**HE great big fact about Page Fence is its uniformity. Fence woven on Page Looms is sure to be uniform and that's the only kind of fence you can afford to buy. The other kind may be a little cheaper in first cost, but what a difference a few years make. Many of the first fences we made, and that's over 25 years ago, are still giving the best of good service.

**PAGE WIRE FENCES** are full No. 9 gauge wire. Even the locks are full gauge. The finest quality wire is used—extra strong, very rigid, tight-locked and evenly spaced.

For a life-time security against fence troubles, get Page Fencing and Page Gates.

### SHIPPING TERMS:

Freight allowed on all shipments of 200 lbs. or more, to any place in Old Ontario or Quebec, when payment is made within thirty days.

### RESPONSIBLE DEALERS WANTED

THE PAGE WIRE FENCE COMPANY OF CANADA  
LIMITED

Toronto Branch: 183 King Street East

Sales Offices at Montreal, Winnipeg, Toronto, St. John

# PAGE FENCING

## WOOL

When ready to sell, write us for prices or ship your wool in. We pay highest prices and make prompt returns. Try us.

**William Stone Sons**  
LIMITED  
Woodstock, Ontario



### MAIL CONTRACT

Sealed Tenders, addressed to the Postmaster General, will be received at Ottawa until noon, on Friday, the 5th day of July, 1918, for the conveyance of His Majesty's Mails, on a proposed Contract for four years, six times per week on the Petersburg No. 1 Rural Route, from the 1st of October, 1918.

Printed notices containing further information as to conditions of proposed Contract may be seen and blank forms of Tender may be obtained at the Post Offices of Petersburg and New Dundee, and at the office of the Post Office Inspector, London, Chas. E. H. Fisher, Post Office Inspector, Post Office Department, Canada, Mail Service Branch Ottawa, 24th May, 1918.

## Sydney Basic Slag

The Most Economical and Effective Fertilizer for Fall Wheat

Mr. Fred. A. Thompson, R.R. No. 3, Blenheim, Kent County, Ont., writes on 20th December, 1917:

"In the Fall of 1916, I sowed broadcast 1,600 lbs. of your Basic Slag, at the rate of 400 lbs. per acre, on one side of a 10½ acre bean field before drilling into wheat. The field was all the same kind of land, and had twelve loads barnyard manure applied per acre on clover sod before the beans were put in. The wheat field was cut in half, and each half threshed separately. On the one side I had 152 bushels, which tested 58 lbs. On the other side, where the Slag was applied, I had 212 bushels, which tested 59 lbs., thus making a gain of 60 bushels, or \$135.00, as I sold for \$2.25 per bushel, for the use of \$16 worth of Slag applied to four acres."

Isn't it worth your while to use Sydney Basic Slag? Write us for our new pamphlet, giving full information as to our goods.

**The Cross Fertilizer Co., Limited**  
Sydney, Nova Scotia

to harass the enemy day and night, directing shell-fire and making raids. A little farther south British Columbia men were similarly engaged.

## The Dollar Chain

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

Contributions from May 31 to June 7:  
Mrs. G. L. M., Wallaceburg, Ont., \$5.00;  
Mrs. H. M., Dundonald, Ont., \$2.00;  
"Ravenswood", Forest, Ont., \$5.00;  
George Sherriffs, Preston, Ont., \$1.00.  
Amount previously acknowledged \$5,525.25

Total to June 7 \$5,538.25

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

While others are giving their lives and limbs, what are you giving?

## Markets

Continued from page 1015.

quoted at \$1.80 per gallon; in 5-gallon tins at \$1.85; and in 1-gallon tins, at \$2 to \$2.10, while 8½-lb. tins were \$1.50. The U. S. was taking maple sugar at 23c. to 23½c. per lb., f. o. b., country points, and sales were being made here in a limited way at 24c. to 24½c.

Eggs.—The quality of the offerings showed some deterioration but prices were very firm throughout, and dealers did not look for them to go any lower. Selected new laid stock was quoted at 44c. to 45c., and new-laid at 42c. No. 1 stock was quoted at 40c. and No. 2 at 38c.

Butter.—There was practically no change in the market for creamery, although fractionally more is being asked in some cases. The quality is now very fine. Choicest creamery was 43½c. to 44c. per lb.; fine being 1c. less; dairies ranged from 36½c. to 38½c.

Cheese.—Commission prices were steady, at 23c. for No. 1, 22½c. for No. 2, and 22c. for No. 3. The Peterboro Board was cleared at 22½c.

Grain.—No. 2 Canadian Western oats were steady at 93c. to 93½c.; tough No. 2, and extra No. 1 feed, being 90c. to 90½c.; No. 1 feed, 87c. to 87½c.; No. 2 feed, 84c. to 84½c. per bushel, ex-store. Rejected barley was quoted at \$1.34 and feed at \$1.26, ex-store. American No. 3 yellow corn \$1.75 and No. 4 yellow \$1.70.

Flour.—Prices were steady, with rye flour firm at \$16.50 to \$17; barley flour \$13.50; corn flour \$12; Graham flour \$11.05 per barrel, in bags. Government Standard Manitoba spring wheat flour \$10.95, f. o. b., cars, Montreal, and 10c. more delivered; Ontario winter wheat flour \$11.40 to \$11.50 in new cotton bags.

Millfeed.—Pure grain mouille was quoted at \$72 per ton, in bags; bran being \$35; shorts, \$40 and other grades of feed \$51 to \$68 per ton.

Baled Hay.—The market was unchanged this week, at the previous decline. Demand was light. No. 2 baled hay, \$15.50 per ton; No. 3, \$13.50 to \$14 and clover hay \$6 to \$9, ex-track.

Hides.—Sheep skins are now practically all clipped, and from \$4.50 to \$4.75, with the wool on, have fallen to \$1 each. Spring lambs were 75c. each; cow hides, 18c. per lb.; bulls, 16c.; and steers 22c., flat. Hides, Montreal inspection, were 20c. 19c. and 18c. per lb.; calf skins 45c. to 48c.; horse hides, \$5 to \$6.50 each. Tallow, 3½c. per lb. for scrap fat; 8c. for abattoir fat, and 16c. to 16½c. for rendered.

### Chicago.

Hogs.—Butchers, \$16.60 to \$16.95; heavy packing, \$16.25 to \$16.50; rough heavy, \$15.60 to \$16 selected light, \$16.95 to \$17.10; medium and light mixed, \$16.55 to \$16.75; pigs, mostly \$16.50 to \$17.10.

Sheep.—Lambs, \$7.50 higher for the week; sheep steady to 25c. higher than a week ago.

### Cheese Markets.

St. Hyacinthe, Que., 22c.; Vankleek Hill, 22½c.; Perth, 22½c.; Belleville, 22½c.; Watertown, N. Y., 22½c.; Montreal, finest easterns 22½c. to 23c.; New York, specials, 23½c. to 23¾c.; average run, 23c.

### Questions

1st—Questions to "The Farmer's Advocate" department.  
2nd—Questions plainly written and must be addressed to the editor.  
3rd—In especially new wise satisfaction.  
4th—Who veterinary enclosed.

### Our cows

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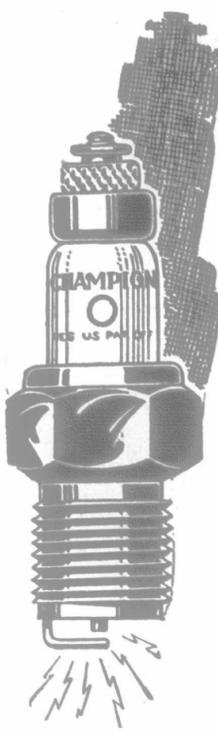
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**All Overland Cars are Equipped with**

**Champion**

**Dependable Spark Plugs**

The Champion "O" Plug has been developed for and is exclusive factory equipment in all new Overland motors—it is the plug that gets the most out of each gallon of gasoline and helps to maintain an economy in operation that has made the name of Overland, the "by-word" for efficient motor service.

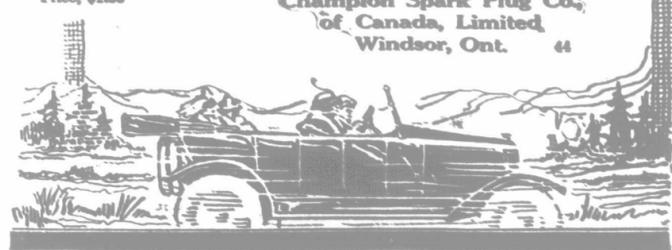
The unfailing dependability of this and all other Champion Plugs is obtained through careful testing of the porcelain and the patented asbestos-lined, copper gaskets on each shoulder which form cushions that absorb the almost continuous shock of exploding gasses in the cylinder.

Dealers everywhere sell Champions for Overlands and every other make of automobile, motorcycle, farm engine, tractor, or motorboat.

Look for the name "CHAMPION" on the porcelain. It guarantees "Absolute-satisfaction to the user or free repair or replacement will be made."

**Champion Spark Plug Co., of Canada, Limited, Windsor, Ont. 44**

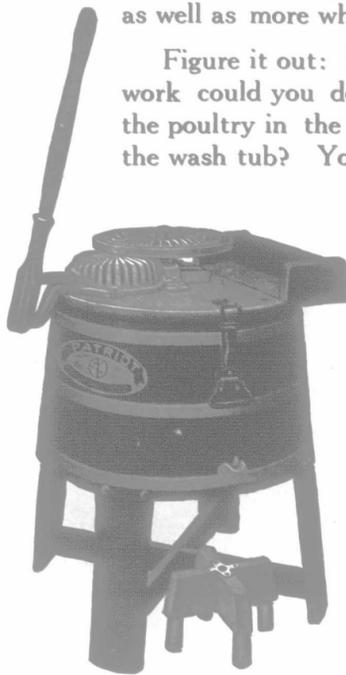
Champion "O" For Overland Cars Price, \$1.00



## Make Every Hour Count

The Government says "Produce," more chickens, eggs and butter are needed as well as more wheat.

Figure it out: How much productive work could you do in the dairy or with the poultry in the time you spend over the wash tub? You will find that a



## Patriot

Spiral Cut Gear

## Hand Washing Machine

will more than pay for itself in a little while and be a real money-making investment. The Patriot is built for faithful service and long-lived usefulness. The bearings are heavily coated to prevent rust, and the gearings are covered to avoid accidents.

**Dowswell, Lees & Company**  
Hamilton, Canada

### Questions and Answers.

1st—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.

2nd—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

#### Veterinary.

##### Weak Cows.

Our cows were fed on silage, chaff and hay all winter. The water was foul smelling and the silage of poor quality. We killed a beef and some pigs near the well and some of the blood may have entered the well. The cows are very thin and weak. One could not rise after calving and she died in about 4 weeks. Another was unable to rise before she calved. The calf died but the cow is still alive and eats well. R. S. B.

The inability to rise is due to weakness which is due to the poor quality of the food and foul condition of the water. Mix equal parts of ginger, gentian and nux vomica and give a tablespoonful 3 times daily. Feed well on food of good quality and supply water of good quality. Keep the cow as comfortable as possible and assist her to her feet so soon as she has sufficient strength to try to rise. V.

##### Spinal Meningitis—Fatality in Pigs.

1. What are the symptoms of spinal meningitis in a horse? We have a horse that has been ailing for 12 weeks. Will he recover?

2. Sow farrowed 10 pigs. She has plenty of milk. The third day 3 lost power of their legs and died. A week later another lost power of his legs and died. A. R. S.

Ans. 1. The first symptom noticed is inability to swallow. The appetite is good but he can swallow neither food nor water. In a variable time, from 1 to a few days, he loses power of motion,

## Extra Money

WE ALL WANT IT—all of the time—for necessary things like boots and shoes and hats. We all want some particular thing, and we want it badly, but we don't like to take it out of the bank.

### You Can Get It

Just as others are doing, without going to the bank, and you can pick your own time to do the work, as you will be entirely your own master while doing it. The time and effort you expend will fix the amount you will make.

### How Much Each Week?

\$1.00?—\$2.00?—or more? It is for you to decide. One of our boy friends made \$2.50 the first afternoon he worked!

One young lady of ten made \$8.00 in fifteen days by getting new subscribers to the Farmer's Advocate and Home Magazine.

These are just two instances, as we have boys and girls, and older people too, all over Canada, earning spare money by helping The Farmer's Advocate.

### Are You a Worker?

If so, cut out the coupon and mail it to us right away, and we will give you full instructions as to what you have to do.

### Coupon

The Farmer's Advocate and Home Magazine, London, Ontario

Gentlemen: I want to earn money by getting new subscribers. Please send me full instructions at once.

NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_

NAME OF SUBSCRIBER \_\_\_\_\_ AGE \_\_\_\_\_

falls down and dies in from one to 3 days. Your horse is not suffering from this disease. It is not possible to attempt diagnosis without knowing the symptoms.

2. It is hard to account for paralysis in such young pigs. It sometimes occurs when the sow is quite fat and has not had regular exercise during pregnancy. Feed the sow all the grass she will eat and allow her and the remainder of the litter free run on grass for a few hours daily. V.

#### Miscellaneous.

##### Line Fence.

What is a lawful line fence between neighbors to keep sheep and lambs from getting through? A. A.

Ans.—It depends upon the township by-law respecting fences. Some townships have somewhat different regulations to others. Information may be secured from your township clerk.

##### Insect Powder.

How can I make a good insect powder to kill lice on hens? J. W.

Ans.—The following is an effective and inexpensive powder for killing lice on hens: Three parts gasoline to one part crude carbolic or one part cresol. Mix together and add enough plaster of Paris to take up the moisture. This powder must be worked into the feathers of the bird. Pyrethrum powder may also be used.

The annual summer field meeting of the New England Shorthorn Breeders Association will be held at the Flintstone Farm, Dalton, Mass., on Wednesday, June 26. A large crowd of Shorthorn breeders is expected and a splendid program is being arranged. Judging classes will also be held during the day and should be of interest, as there will be excellent stock to work on. The following day the annual sale of the Berkshire County Berkshire Club will be held at Flintstone Farm, when a number of choice individuals of prolific families, and carrying the blood of the greatest sires and dams of the breed, will be disposed of.



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

**BURLINGTON CABLE BAND SILO**  
is the product of 18 years' experience in silo-building and practical farming. Over three thousand are in use throughout Canada, and their owners are well satisfied. The seven-strand Cable Band, which hoops this silo, is used exclusively by us. It gives and takes up as the silo expands or contracts when full or empty. It is stronger than iron and insures rigidity of construction. These silos are easily erected, require no special skilled help, and may be put up in 10 to 15 hours. Buy Direct from the Maker. Get our price list. Everything supplied complete, with simple instructions for erection.

**THE NICHOLSON LUMBER COMPANY, LIMITED**  
Burlington Ontario

**HAY**  
SHIPPERS! Consign your carloads to  
**The E. L. RICHMOND CO. DETROIT**  
The Old Reliable Firm. In business a quarter of a century.  
References—Any Bank.

**SUNNYSIDE HEREFORDS**  
We are offering special values in heifers, and bulls with size, quality and breeding; will promise not to disappoint you if you want good cattle.

Arthur F. O'Neill & Sons, R. No. 2, Denfield, Ont.

**Alloway Lodge Stock Farm**

Angus - Southdowns - Collies

SHOW FLOCKS  
Rams and ewes. Heifers in calf to Queen's Edward 1st prize, Indiana State Fair.

Robt. McEwen, R. R. 4, London, Ont.

**SUNNY ACRES ABERDEEN-ANGUS**

Bulls of serviceable age and females not akin.

WM. CHANNON & SON  
P.O. and Phone Oakwood, Ont.  
Stations—Lindsay, G.T.R. and C.P.R.

**ABERDEEN-ANGUS**

Alonso Mathews, Manager, Forest, Ontario  
H. Fraleigh, Proprietor, Meadowdale Farm, Forest, Ont.

Dr. Bell's Veterinary Medical Wonder, 10 000 \$1.00 bottles FREE to horsemen who give the Wonder a trial. Guaranteed for Colic, Inflammation of Lungs, Bowels, Kidneys, Fevers and Distempers, etc. Send 25c. for mailing, packing, etc. Agents wanted. Write address plainly.  
DR. BELL, V.S. Kingston, Ontario

**FLINTSTONE FARM**

Breeders of—  
Milking Shorthorn Cattle  
Belgian Draft Horses  
Berkshire Swine

A cordial invitation is extended to all interested to be present at the joint Field Day of the Massachusetts Swine Breeders' Association, the New England Shorthorn Breeders' Association, the New England Berkshire Club and the Berkshire County Farm Bureau to be held here at Flintstone Farm on Wednesday, June 26th. Prominent speakers will give short talks on farming problems of current interest. Cattle, Horses, and Swine will be judged.

Dalton, Massachusetts

**Alsike and White Clover as Honey Plants.**

Farmers know the value of the two perennial clovers, alsike and white Dutch clover, for hay and pasture, but it is not always remembered that a large bonus may be obtained from them in the form of honey. They produce more honey in Canada than all other plants put together, and this honey is of the highest quality.

(1) Production of clover honey is greatest in the farming lands of Eastern Canada. Almost the whole region south of the Ottawa River is excellent. The St. Lawrence River Valley is almost as good. The valleys of the St. John, and other rivers in New Brunswick, marsh hay lands in Nova Scotia and the rich farming lands of Prince Edward Island and around Lake St. John, Que., are very good too. In the clay belt of Northern Ontario, notably around Haileybury and Dryden, these clovers grow in immense quantity and luxuriance, and some years produce heavy honey crops. While alsike as a commercial honey plant has reached its highest development in the Eastern Provinces, white clover does well in a large part of Manitoba and British Columbia.

(2) The cultivation of clover on suitable lands as a combined farm and honey crop is recommended as follows:

(1) Growing alsike with timothy for hay. Alsike is better for this purpose than red clover because the latter is of practically no value for honey production and is beginning to spoil by the time the alsike and timothy are ready to cut. Alsike will grow on certain types of soil, for instance, ill-drained land, better than red clover.

(2) Growing alsike for seed. An abundance of honey bees increases the yield of seed per acre; and leaving the plant to produce seed lengthens the honey flow.

(3) Sowing white clover in grass mixtures intended for pasture. On favorable lands the white clover will keep spreading, improving the pasture both for cattle and bees. Grazing, if not too close, will not seriously curtail honey production, and it lengthens the honey-flow.

The honey-flow from clover lasts three to five weeks, beginning, according to latitude, between mid-June and mid-July. Good management of the bees, to build them up strong in time for the honey-flow and keep them from swarming, is necessary. There is no better food for bees in winter than clover honey. —Experimental Farms Note.

**Gossip.**

The Department of Agriculture and the Canadian Bankers' Association have completed their arrangements for the continuation of the Boys and Girls' Calf and Pig Competitions, at the local fairs this coming fall. The regulations are much the same as last year, with the exception that it is optional with the managers of the branch banks whether the competition should be held in connection with the school fair or the agricultural fair. The intention of the competition is to arouse the interest of the boys and girls in the live stock of the farm and to help the young folk in becoming more familiar in doing bank business. The prizes in the classes for calves, pure-bred or grade, and for two pigs, pure-bred or grade, range from \$5 down to \$1.

In the Shorthorn herd of Geo. D. Fletcher, of Erin, are to be found a number of animals of aristocratic breeding and of excellent Shorthorn type and individuality. Such families as Orange Blossom, Kilblean Beauty, Matchless, Mysie and Clementina are represented. The herd is headed by Victor Stamford, a particularly choice individual that is a show animal. Mr. Fletcher recently strengthened his herd by the purchase of Lady Madge 5th at the Watt-Gardhouse sale. This is a deep, thick, low-set cow of excellent quality. With her Mr. Fletcher secured a calf, which is indeed a show animal. The calf was sired by Gairford Marquis, and the sire of the dam was Gay Monarch. At the present time Mr. Fletcher is offering several heifers and cows of the families above mentioned. Anyone wishing to secure animals that will be a credit in the showing and of strength to the herd should visit this farm.

**To Our Subscribers**

We express our appreciation for co-operation in the past by sending us the names of other new subscribers, and so widening the circle of influence and usefulness of the Farmer's Advocate and Home Magazine.

**"I Have Been Reading It Forty Years"**

Is a remark made by our visitors much more often than you would suppose, and some, not many now, tell us they have been getting it since the first number came out.

**Why Do Farmers Stick to The Advocate?**

Because for over fifty years it has been owned and edited by practical farmers, who know what they are talking about. They know the difficulties the farmer has to contend with, and they give him facts, not hot air. And don't forget the fact, that no outside interest, moneyed or political, has any control over the policy of the paper.

That's why Advocate subscribers stick.

**How About Your Neighbor?**

If he is not yet a subscriber, send in his name with the \$1.50 he will give you for a year's subscription, and we will advance the label on your paper six months, free, for each new name you send.

----- COUPON -----

**The Farmer's Advocate & Home Magazine, London, Ont.**

Gentlemen,—Enclosed is money order, value \$..... for..... new subscriptions for one year, please advance the date on my label six months for each subscription.

Name of sender.....Address.....

New name.....Address.....

New name.....Address.....

**THE LATEST ECONOMICAL RECIPES CONTAINED IN THE PURITY FLOUR COOK BOOK**

have been reviewed and approved by the DOMESTIC SCIENCE DEPARTMENT of the famous McDONALD INSTITUTE

Mailed post paid for 20 cents  
Western Canada Flour Mills Co. Limited  
TORONTO.

**Clydesdales and Shorthorns**

I still have some Shorthorn bulls, twelve and thirteen months old. Two grandsons of Old Sort, and four great-grandsons of Royal Blood; these are an exceptionally fine lot; also a number of females. Inspection invited. Apply to J. B. CALDER, GLANFORD STATION, R.R. 3.

**BROOKDALE FARM HEREFORDS**

Having purchased the old-established herd of Mr. Thos. Skippon, I can offer some good values in females, cows with calves by side and bred again. A few good open heifers left.  
W. READHEAD MILTON, ONT.

**Dual-Purpose Shorthorns**

—CROWN JEWEL still heads the herd. Present offering is 5 bulls, from 13 to 18 months. Prices from \$200 to \$250. Also some good breeding females, either bred or with calf at foot. All registered and priced to sell.  
JNO. ELDER, Hensall, Ontario



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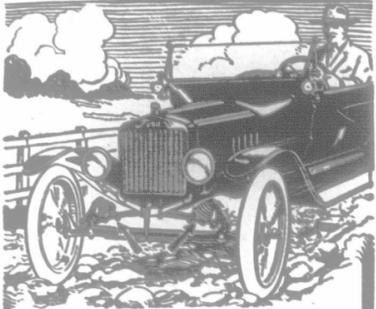
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**Don't Let Rough Roads Keep You from Riding**

IT ISN'T NECESSARY. Hassler Shock Absorbers on your Ford will make "rough spots" feel almost as smooth as an even stretch of road. Their gentle, springy action absorbs every jolt and jar.



Hassler Shock Absorbers make your Ford ride as easily as a \$2,000 car. They increase tire mileage 20 to 100%, save gasoline, cut your up-keep bills one-third, and increase the resale value of your car. 300,000 Ford Owners recognize their economy.

You can't realize how much difference they make until you try them. That is why we want to give you the opportunity to see for yourself.

**10-Day Free Trial Offer**  
Phone, write or call for FREE TRIAL BLANK and we will have a set of Hasslers put on your Ford without a cent of expense to you. Try them 10 days. Then, if you are willing to do without them, they will be taken off without charge. Don't ride without Hasslers simply because someone discourages you from trying them. Accept this offer and see for yourself. Over 300,000 sets in use. Do it now.

**ROBERT H. HASSLER, Limited**  
Lock Drawer H.C.27 HAMILTON, ONT., CAN.

**BULLS**

I am offering, for immediate sale, three good bulls. One roan, imported, 13 months, and two others, extra well bred. Anyone wanting a bull of the better sort should see these.

**A. G. FARROW, OAKVILLE**  
(Half Way Between Toronto and Hamilton)

**SHORTHORNS**

FOR SALE

Good animals of both sexes. Burlington phone and G.T.R. Jct. Radial every hour from Hamilton.

**C. N. Blanshard, R. R. 2, Freeman, Ont.**

**Evergreen Hill R.O.P. Shorthorns**

Herd headed by the R.O.P. bull, St. Clare Nothing for sale at present.

**S. W. Jackson, R.R. No. 4, Woodstock, Ont.**

**GLENFOYLE SHORTHORNS**  
College Duke 4th in service—a high record son of Rothschild and Taylor's noted stock. Am offering young cows and heifers, bred to this great bull. Have a few bulls of breeding age on hand.  
**Stewart M. Graham, Lindsay, Ontario**

**Spruce Lodge Shorthorns and Leicesters**

Herd headed by the Butterfly-bred bull, Roan Chief Imp. = 60865—. Young bulls, cows, and heifers of all ages, of good breeding and quality.

**W. A. DOUGLAS, CALEDONIA, ONTARIO**

**Plaster Hill Herd Dual-Purpose Shorthorns.**  
Six young bulls from four to thirteen months. Size, quality and good milking strains.

**F. Martindale & Son, R.R. 3, Caledonia, Ont.**

**The Cost of Mutton Production.**

The scarcity of wool and meat has given a new impetus to the sheep-breeding industry in Canada, and once it becomes again firmly established as a common farm industry and the benefits coming from it are fully recognized, the writer feels confident that it will not again go into decline.

This class of stock, while enjoying to the full the benefit of the increased high prices of the products produced, is probably the one which has been affected the least by increased cost of production, common to the products from other classes of stock. This is due to the fact that the feed consumed consists largely of home-grown roughages and grains, thus eliminating, to a large extent, the purchase of high-priced concentrates. It is also due, in part, to the fact that very little labor is required to handle a flock so that the increased price of labor has not the same effect.

To arrive at the cost of mutton production many factors must be taken into consideration. It may be safely considered that the value accruing from the manure produced and weeds destroyed fully offsets the labor expended. From the records of the breeding and feeding work at the Central Experimental Farm, the remaining factors in the cost of production of year-old mutton may be tabulated as follows:

Cost of feed in maintaining ewe from weaning of one lamb to weaning of next.....	\$5.00
Interest on value of ewe (\$30.00 at 6 per cent.).....	1.80
Service charges and maintenance of ram.....	.35
Cost of feeding lamb from weaning till finishing at one year old.....	6.72
	<b>\$13.87</b>
Wool from ewe (7 pounds at 60 cents per lb.).....	4.20
Cost of 120 pounds mutton.....	9.67
Value of 100 pounds mutton, spring 1918.....	17.75
Cost of 100 pounds mutton.....	8.06
	<b>\$9.69</b>

This is a profit of \$11.63 per lamb if but one lamb is raised per ewe.

The above figures are based on an increase of one lamb per ewe. Where two lambs were raised practically the same results in weight may be expected at the end of the year. In such a case the first three items in the cost would be split between the two, thus reducing the cost to \$5.09 per hundredweight and increasing the profit to \$12.66 per hundredweight.

The foregoing estimates are exclusive of overhead charges or depreciation but these items may well be overlooked, as they are almost negligible in sheep raising owing to the fact that so little is required in buildings or equipment. Moreover, the estimates are conservative, and though they show a return of at least 38.8 per cent. on the investment of \$30.00 per ewe, the same may be looked for under eastern conditions, while under Western conditions even greater dividends may be realized.—Experimental Farms Note.

**Gossip.**

At a recent meeting of the directors of the International Live Stock Exposition, to be held at the Union Stock Yards, Chicago, from November 30 to December 7, the prize-lists were increased in nearly every division, and many cups, medals and trophies are to be offered in addition to the numerous and liberal money prizes. It was also decided to reward the superior skill of herdsman, shepherds and grooms who will be fortunate enough to carry off some of the higher honors in the various departments. For the purpose of stimulating the short feeding of steers the prizes in this division were greatly increased, as were also the prizes in the barrow classes. In the swine department it was decided to permit exhibitors to show three animals instead of two. In the horse department a classification was made for light and heavy artillery horses. The Board went on record as favoring a limited show of grains, seed corn and forage crops.

**You've no time to waste**

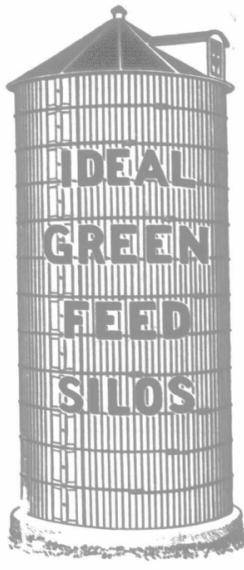
If you expect to get your silo erected in time to take care of your 1918 corn crop, don't put off placing your order a day longer.

With the railroads congested with war traffic, no manufacturer can guarantee prompt deliveries very far ahead.

Be forehanded. Allow for freight delays and uncertainties. Give yourself time to erect your silo properly.

**Plan to Install an IDEAL GREEN FEED SILO Right Away**

The Ideal is the most economical silo you can buy, because it not only produces the best silage but will pay its own cost the first year and will last from 20 to 30 years.



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50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

**FLETCHER'S SHORTHORNS**

Our herd of Scotch Shorthorns represents Orange Blossoms, Kilbean Beauties, Matchless, Mysies, Misses, Clementinas, etc., and is headed by the Watt-Stamford bull, Victor Stamford = 95959 =, a Toronto winner. Present offering—two young (show animals); also several heifers and cows. **GEO. D. FLETCHER, ERIN, R. R. 1, ONT.** - - Erin Station, C. P. R., L.-D. Phone

**SEVENTY-THREE HEAD OF SHORTHORNS**

Four good young bulls of serviceable age; Nonpareil Ramsden = 101081 = and Royal Red Blood, = 77521 =, at the head of the herd. These young bulls range in age from 8 to 15 months, and are for immediate sale. They are out of good dams, which will bear inspection. Our cows and heifers will please, and you'll like the bulls. Also three extra-good grade heifers, from heavy milk-producing dams. **James McPherson & Sons, Dundalk, Ontario**

**Here at Present—TEN IMPORTED BULLS**

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

**SHORTHORN BULLS Will. A. Dryden**

Brooklin, Ontario Co. of my own breeding, around a year old; best families and good colors, are for sale. Also a few young, imported bulls. **Myrtle, C.P.R., Brooklin, G.T.R. Brooklin, C.N.R.**

**SALEM SHORTHORNS**

Herd headed by Gainford Marquis (Imp.), undefeated in England and Canada. Sire of the winning group at Canadian National, 1914, 1915, 1916. Can supply cattle, both sexes, at all times. **J. A. WATT, ELORA, ONTARIO**

**ESCANA FARM SHORTHORNS**

Five Bulls for Sale. One roan senior yearling; one choice twelve months white calf, by Right Sort (Imp.); one select, dark roan, ten months calf; one roan yearling, by Raphael (Imp.); one red roan yearling, for grade herd. Farm 1/2 mile from Burlington Jct., G.T.R. **J. F. MITCHELL, Limited BURLINGTON, ONTARIO**

**MAPLE HALL SHORTHORNS**

Present offering, 7 yearling bulls: One Cruickshank Duchess of Gloster Five Cruickshank Butterflies One Shepherd Rosemary All pure Scotch, and extra good; also a few young cows with calves, and yearling heifers. **D. BIRRELL & SON, CLAREMONT, ONT.**

**PLEASANT VALLEY FARMS**

Present offering—A number of good young Scotch cows with calves at foot and rebred to (Imp.) Newton Grand Champion; also a number of 2-year-old heifers bred to same sire. Suitable for good herd foundations; priced to move them. Inspection invited. **GEO. AMOS & SONS. Farm 11 miles east of Guelph. C.P.R. MOFFAT ONTARIO**

**IMPORTED SCOTCH SHORTHORNS**

Our present offering includes 100 imported females and 12 young imported bulls, representing the most desirable lines of breeding. If interested come and see them. Burlington Jct., G.T.R., is only half mile from farm. **J. A. & H. M. PETTIT, FREEMAN, ONTARIO.**

**SPRING VALLEY SHORTHORNS**

Herd of seventy head, straight Scotch, good individuals. Headed by the great show and breeding bull Sea Gem's Pride 96365, and Nonpareil Ramsden 83422. We have for sale four as good young bulls as we ever had, and a few females. **KYLE BROS., Drumbo, Ont. (Phone and telegraph via Ayr.)**

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Just turn a faucet, and the water gushes out in a fresh, pure, abundant stream.

Think of it! No more water to carry by hand for drinking, cooking, washing, scrubbing or for watering the stock. Isn't that a convenience that appeals to you?

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We want to tell you about the many advantages of the Empire System. Our free booklet gives descriptions and illustrations. We will also send you an Information Blank, which, when filled out, will enable us to send you full particulars and the cost of a system adapted to your particular needs. Get posted—write to-day.

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No matter how old the blench, how lame the horse, or how many doctors have tried and failed, use Fleming's Spavin and Ringbone Paste.

Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 45-minute application—occasionally two required. Cures Bone Spavin, Ringbone and Sidebone, new and old cases alike. Write for detailed information and a free copy of Fleming's Vest-Pocket Veterinary Adviser.

Ninety-six pages, durably bound, indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.

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Linseed Oil Cake Meal, Corn Oil Cake Meal, Gluten Feed Meal, Bran, Shorts, Feeding Corn Meal.

Also a full line of the reliable Good Luck Brands of Poultry Feeds.

Write or 'phone for prices.

**CRAMPSEY & KELLY**  
Dovercourt Road, Toronto, Ontario

## Mardella Shorthorns

Dual purpose bulls, 20 young cows and heifers—bred, some calves by side. Size, type, quality, some full of Scotch. The great, massive Duke, dam gave 13,599 lbs. milk, 474 lbs. butter-fat, at the head.

**THOMAS GRAHAM**  
Port Perry, R. 3, Ontario

**Bulls** all sold. One extra good roan bull calf by an R.O.P. dam with an average test of 4.5; he would work by July. Also a few females bred to the herd sire, Royal Choice 79864, Leicester rams and Yorkshire sows. C.P.R., G.T.R., ALLAN B. MANN, "The Hawthornes," Peterboro, R.R. 4.

## Milking Shorthorns

The herd is composed of individuals with high milk records and of splendid beef conformation. Several bulls of breeding age, sired by Dominator 10629, one of the best bred bulls for milk in Canada, are now being offered. They are out of cows with records ranging from 8,000 to 11,000 pounds of milk in one lactation. Prices right.

**Weldwood Farm, Farmer's Advocate, London, Ontario**  
**WELLAND DISTRICT SHORTHORN BREEDERS' CLUB**  
New sales list out: cows, heifers bred, young bulls, also stock bull Morrison Pride = 102330 =.

**Chas. Gainer, Secretary, Box 697, Welland, Ontario. A. E. Howell, President, Fenwick, Ont.**

## Sprucedale Dual-Purpose Shorthorns

I am offering my herd sire, Braebur Prince; dam, Bessie of Low Banks 2nd, 11,636 lbs. of milk in R.O.P. Good individual, sure and right. Also a few calves by him as well as some nice young litters in Berkshires.

**Frank Teasdale, (Concord G.T.R. Station 100 Yards) Concord, Ontario.**

### GERRIE BROS.' SHORTHORNS

Herd headed by Gainford Matchless, one of the very best sons of the great Gainford Marquis. Our breeding cows are Missies, English Ladys, Duchess of Glosters, etc. Present offering of young bulls are by our former herd sire, Master Missie, Junior Champion at Brandon last summer.

**GERRIE BROS., ELORA, ONT.**

## BLAIRGOWRIE SHORTHORNS

I have females all ages and bulls of serviceable age. Worth while to come and see or write

**JOHN MILLER Myrtle Station, C.P.R., G.T.R. ASHBURN, ONTARIO**

## GLENGOW SHORTHORNS

We have a choice offering in young bulls, fit for service. They are all of pure Scotch breeding and are thick, mellow fellows, bred in the purple.

**WM. SMITH, COLUMBUS, ONTARIO. Myrtle, C.P.R., Brooklin, G.T.R., Oshawa, C.N.R.**

## Robert Miller, Stouffville, Ontario

still has a few Shorthorn bulls, fit for service, and some females that are as good as can be found for the man that wants to start right in Scotch Shorthorns. They will be sold for a low price, considering the quality, and the freight will be paid.

Write for anything in Shorthorns. One hour from Toronto

## HIGH-CLASS SHORTHORN BULLS

We have a number of choice young bulls on hand, ready for service. Some are straight Scotch and others are bred for milk production. Also offering the four-year-old Duchess-bred bull, Duchess Hur for sale or exchange.

**GEO. MORDEN & SON, OAKVILLE, ONT**

## THE MANOR STOCK FARM---SHORTHORNS

Bulls all sold. Have Wimples, Rosemarys, Minas, Roan Ladys, etc., for inspection.

**JOHN T. GIBSON DENFIELD, ONTARIO.**

## BURNFOOT STOCK FARM

Breeders of high record, dual-purpose Shorthorns with splendid conformation for beef. Have a number of bulls calves last fall and early in winter.

**S. A. MOORE, PROP. (Farm one mile north of Caledonia) CALEDONIA, ONTARIO**

## SHORTHORNS LANDED HOME

My new installation at which I will be at home to visitors June 20th, and includes representatives of the most popular families of the breed. There are 12 yearling bulls, 7 cows with calves at foot, 24 heifers in a lot of such good strains as Princess Royal, Golden Drop, Broadhooks, Augusta, Miss Ramsden, Windmiller. Make your selection early. Geo. Isaac, (All Railroads, Bell Phone) Cobourg, Ont.

### Questions and Answers. Miscellaneous.

#### Spavin.

I have a horse with a large bog spavin on one leg, and also a small one on the other. What treatment should I apply?  
R. B.

Ans.—Give the horse rest and blister with 2 drams each of biniodide of mercury and cantharides, mixed with 2 ounces of vaseline. Repeat in about two weeks. If this fails to cure, you might have the joint fired and blistered.

#### Distilling Water.

What is the method of distilling and filtering water, or any solution of a medicinal nature?  
A. C. A.

Ans.—The distilling of any substance is the heating and boiling of it in a receptacle where the steam can be condensed and collected. Filtering a substance is allowing it to pass through certain material. There is the regular filter for this purpose; then there is the charcoal or sand filter, especially for water.

#### Tomato Rot.

Last year our tomatoes commenced to rot at the time of ripening. It was a dry rot. What was the cause, and how could it be prevented?  
T. E.

Ans.—This is a fungous disease which makes its appearance in the fruit when about full grown. Spraying during the season with Bordeaux mixture, pruning the vines to allow them to dry off rapidly after a rain, and planting varieties that are most immune from the disease are preventive measures. When the land is not too heavily manured the plants are less liable to the disease than if grown in very rich soil.

#### Keeping Ice.

I have a small ice-house at the end of my wood-shed. I filled it with snow, covered it with boards and put sawdust on top of the boards, but in spite of this the snow melts away. What can I do to prevent loss of snow?  
A. S.

Ans.—We doubt if you can do anything to keep the snow from melting during the heat of summer. Snow is more or less porous and does not lend itself to keeping in storage as does ice. For keeping ice it is necessary to have insulating material on the bottom, around the sides, and on the top. A foot of shavings or sawdust would serve this purpose.

#### Cream Tester.

I would like to get a cream tester for private use. Where may they be secured at a reasonable price?  
J. J. M.

Ans.—There are various sizes of cream testers on the market, varying in size from two bottles up to twenty-four. For private use a two or four-bottle would be found quite satisfactory. The testers manufactured by the various firms are all made on the same principle and are called the Babcock test. The Drummond Dairy Supply Co., of Toronto, and C. Richardson & Co., St. Mary's, handle cream testers. The same machine would do for testing milk; however, it would be necessary to get bottles which were graduated differently. Besides testing the cream the milk from individual cows could also be tested.

#### Gapes.

Early in May we hatched 130 chickens and they were all very healthy until just recently, when we noticed one gaping and sneezing. Now there are nearly a dozen so affected. What treatment do you advise? We fear they have caught cold during cold, windy nights.  
S. W. J.

Ans.—The symptoms are those of birds suffering from gapes. This is due to the presence of thin, thread-like, reddish-colored worms in the bronchial tubes. Coughing, sneezing and gaping are the first symptoms and the birds soon become weak and gasp for breath. Treatment consists of dipping a feather in turpentine and introducing it into the trachea, or put a loop in a horse hair and pass it down the windpipe, twist around and withdraw; the worms come with it. It is well to exercise preventive cautions, which are: keeping the drinking fountains and feeding troughs clean, providing fresh runs, and using potassium of permanganate in the drinking water.

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**A BISSELL SILO MEANS MONEY FOR YOU**

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

**Why Waste Your Corn Crop?**

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

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

**T. E. BISSELL**  
Co. Ltd., Elora, Ont.  
Dept. W



**Cream Wanted**

For good service and better prices, ship your cream to us. We guarantee the test, and pay 47 cents a pound butterfat. We remit daily and pay express charges.

**The Mutual Dairy & Creamery Co.**  
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**Lump Jaw**  
The only reliable treatment for Lump Jaw in Cattle.  
**Fleming's Lump Jaw Cure**  
Price \$2.50 a bottle. Sold under a positive guarantee since 1896. Your money back if it fails. Write for Fleming's Vast-Pocket Veterinary Adviser 96 pages and illustrated. It is Free. Fleming's Chemical Horn Stop. A small quantity applied when calves are young will prevent growth of Horns. A 50c tube sent postpaid is enough for 25 calves.  
**FLEMING BROS., Chemists,**  
77 Church St., Toronto, Ont.

**ARE YOU BUILDING OR REPAIRING?**  
OUR CATALOGUE OF BUILDING MATERIALS AND TOOLS WILL SAVE YOU MONEY. WRITE FOR FREE COPY.  
**THE HALLIDAY COMPANY, Limited, HAMILTON**  
FACTORY DISTRIBUTORS CANADA

**HOLSTEINS**  
1 bull 2 years old; 1 bull 18 mos. old, from a 23 1/2 lb. 3-year-old dam. One bull 13 mos.; others younger.  
**R. M. Holtby, Port Perry, Ont.**

**KING SEGIS PONTIAC DUPLICATE**  
A \$4 brother to the \$50,000 bull is the sire of our young bulls offered at present. Two of these are ready for service. Write us also for females.  
**R. W. Walker & Sons, Manchester Station, G.T.R., Port Perry, Ontario**

**BONANZA STOCK FARM**  
Large offering of a few Holstein bulls, calves, and yearlings from a heavy milking strain. Priced right for quick sale. Herd headed for years by the best stock. Write for prices.  
**W. W. Scott, Moorefield, Ontario**

**Profits in Farming.**

EDITOR "THE FARMER'S ADVOCATE":

Just now we hear a lot of talk about the farmers making pockets full of bills. Quite right; he gets all kinds of bills, both dollar bills and bills for dollars. But let no one make error, by the time he has settled up all his accounts at the end of the year, if, indeed, he is able to do so, he certainly has not a fortune to his credit. No one will deny that the farmers are making larger profits at the present time than they ever have heretofore, but even at that, while some are successful financially, there are still thousands carrying on between success and failure. As is well known, a great many still have old accounts to settle which were incurred long ago, when agricultural products had to be sold for far less than their real value. It is only since the war began that the farmers have been able to get a profitable price for their wheat.

It is well to remember that the farmer has to work in accordance with old mother Nature who is never in any hurry and who can be very fickle, and she is sometimes so slow in revealing certain results from the attempts of the farmer to improve various conditions, that often, quite a length of time will have elapsed before he derives any benefit therefrom, and often it is an irremediable loss to him financially. Chaucer explained it very concisely years ago when he wrote:

"The life so short, the craft so long to learn,  
Th' assay so hard, so sharpe the conquering."

Everything that it is possible to do should be done to increase agricultural production, especially is this true at the present time, when the cause for which the Anglo-Saxon race and their Allies are united and sacrificing the finest blood of the land, hangs in the balance, and wherein lies their principal support in carrying on this gigantic struggle until Germany is chastised sufficiently to recognize the things that are really worth while in life. In times of peace as agriculture is the one basic industry whereby all other business and commerce derives its trade and support, and consequently whereby all people live, the greater the benefit to the farmer, the greater the benefit to the community, and as the nation is one great community it is obvious the whole nation will be benefited, enabling it to have better educational and physical training systems which will raise the tone and standard of its people both mentally and physically.

Apparently there is a great deal of consternation caused by some making a success of their business financially, no matter whether farmers, packers, munition manufacturers or what not, sometimes there may be grounds for suspicion, but it seems to me most of the shout arises from jealousy. Nothing hinders progress more than jealousy. A great deal of the difference in our incomes is chiefly due to the difference of our brain power. Initiative and enterprise are two very important factors towards attaining success in our achievements.

Sask. W. H. GAMBLE.

**Questions and Answers. Miscellaneous.**

**Beans on Spring-Plowed Sod.**

1. Will beans planted on sod plowed in the spring yield as well as on fall plowed land?  
W. A. S.

Ans.—1. While good yields have been obtained from spring-plowed sod, it is usually better practice to plow the land in the fall in preparation for the bean crop, especially if the land is heavy.

**Crop-bound.**

1. What treatment could I give a pullet or hen which appears to be crop-bound? Is this due to indigestion? Would eating old grass in the spring cause the trouble?  
T. O.

Ans.—1. This trouble is sometimes caused from improper feeding impairing the digestion and from too much dry feed. Give the bird a teaspoonful of castor oil and knead the crop. If this fails to give relief an operation could be performed, removing the contents of the crop. This should only be done, however, as a last resort.

*Listing a Few Averages in the Herd of*  
**LAKEVIEW HOLSTEINS**  
11 cows average 100 lbs. of milk daily, and 33.38 lbs. of butter in 7 days.  
16 cows average 30.86 lbs. of butter in 7 days.  
9 cows average 34.50 lbs. of butter in 7 days.  
3 cows average 39.53 lbs. of butter in 7 days.  
2 cows average 40.55 lbs. of butter in 7 days.  
1 cow has 43.06 lbs. of butter in 7 days.  
Every male and female offered by us are either sons or daughters of these record cows. No herd in Canada has as high an average. We offer for sale a show bull, 3 years old (mostly white), sired by Dutchland Colantha Sir Mona, and from Lakeview LeStrange, 741.9 lbs. of milk, 38.06 lbs. of butter in 7 days. He is a brother to Lakeview Dutchland Artis, Canada's only 43-lb. cow, and also Lakeview Dutchland Calamity Rose, the world's highest producing 2-year-old with first calf. This bull is priced to sell on terms to suit purchaser. Remember he is the only bull in Canada whose seven R. O. M. sisters hold nine Canadian records and two world's records for butter. Photo and extended pedigree on application. We also have others.  
**LAKEVIEW FARMS, BRONTE, ONT.**  
MAJOR E. F. OSLER, Prop. T. A. DAWSON, Mgr.

**"Going to Sell 'Em"**

We have 5 thirteen-months bulls and are going to let them go. Three are by Pontiac Korndyke of Het Loo and brothers to Het Loo Pieterje (the world's champion heifer) while the other two are by King Segis Alcartra Spofford and Dutchland Colantha Sir Mona. Act quick if you want them.

**W. L. Shaw, ELECTRIC CARS FROM TORONTO Roycroft Farm, Newmarket, Ontario**

**LLENROC STOCK FARM**  
*On the Boulevard of the beautiful Niagara River*  
A few high-record Holstein bulls for sale at reasonable prices; also Holstein females in calf to our junior Rag Apple bull.  
ADDRESS—**W. C. HOUCK, R. R. No. 1, CHIPPAWA, ONTARIO**

**Manor Farm Holstein-Friesians**

If it's a herd sire you want, write me. I have sons of both my senior and junior sires, King Segis Pontiac Posch and King Korndyke Sadie Keyes. All are from good record dams.

Choice bull calves at present to offer — average for two nearest dams, up to 34.71 lbs. butter in seven days. Correspondence solicited, visitors welcome.

**Gordon S. Gooderham Stations: Clarkson and Oakville Farm on Toronto and Hamilton Highway Clarkson, Ont.**

**Hospital for Insane, Hamilton**

We offer bulls only for sale, but they are from some of the choicest cows to be seen in any herd, and bulls equal to the best.  
—Apply to Superintendent

**CHOICE BULLS—Ready for Service**

No. 1—By a son of MAY ECHO SYLVIA His two nearest dams (both Canadian champions) average 35.62 lbs. butter in seven days. Price \$1,000.  
No. 2—By a son of MAY ECHO SYLVIA. His two nearest dams (one a four-year-old) average 34.17 lbs. butter in seven days. Price \$600.

Some extra choice young bull calves, from \$200 to \$1,000. We have sold 37 bulls this winter.  
**HIGHLAND LAKE FARMS**  
R. W. E. Burnaby - Farm at Stop 55, Yonge St. Radial - Jefferson, Ont.

**SUMMERHILL HOLSTEINS**

Present offering: Two bulls fit for service, both show animals, with excellent breeding, will be sold. Cheap if taken at once.

**D. C. FLATT & SON Long-distance 'phone R.R. 2, Hamilton, Ont.**

**RIDGEDALE STOCK FARM**

offers for sale young bulls from high-testing dams, such as Lakeview Dutchland Wayne Rose, the highest producing cow of her age in the world. It will pay you to inspect these before buying.  
**DR. F. A. HESLOP, Prop., R. R. No. 1, FREEMAN, ONTARIO. CHAS. HESLOP, Manager**

**SILVER STREAM HOLSTEINS**

Present Offering—six extra well bred bull calves, sired by bulls with 34-lb. backing, and from tested dams, individually as good as their breeding. For fuller particulars and prices, write, or better come and see them.  
**J. MOGK & SON, R. R. 1, TAVISTOCK, ONTARIO**

**Cloverlea Farm Holstein-Friesians**

Offers for sale a choice young bull three months old, out of a 20.3-lb. dam. For price and extended pedigree write to  
**GRIESBACH BROS., COLLINGWOOD, ONTARIO**

**Choice Grandson of Queen Butter Baroness**

I am offering a choice 14-months bull from a 21-lb. junior two-year-old daughter of Louis Prilly Rouble Hartog, and sired by Baron Colantha Fayne, a son of Queen Butter Baroness, the former 33-lb. Canadian champion cow. Also have others younger. **T. W. McQUEEN (Oxford Co.) TILLSONBURG, ONT.**

**WALNUT GROVE HOLSTEINS**

I am offering a choice lot of bull calves, all sired by May Echo Champion, who is a full brother to the world's champion, May Echo Sylvia. All are from R.O.M. dams and good individuals. Also have the usual offering in Tamworth sows.  
**C. R. JAMES, (Take Radial Cars from North Toronto) RICHMOND HILL, ONTARIO**

**SOVEREIGN STOCK FARM**

The home of Baroness Madoline; 34.48 lbs. butter in 7 days, 1,043.75 lbs. in 335 days, over 87,200 lbs. milk in 47 months. We are offering a few of her grandsons up to 6 months old.  
**WM. STOCK & SON, Phone Innerkip 3, on line 25. R.R. No. 1, TAVISTOCK, ONTARIO**

**DUMFRIES FARM HOLSTEINS**

Cows for sale, bred to Plus Evergreen, son of Evergreen March.  
**S. G. & ERLE KITCHEN Bell 'phone. ST. GEORGE, ONTARIO**



the mistake right. "I will conquer myself! I will not be mastered by such a little thing as that!" So he said many times; and slowly he is overcoming the tendency to forget that part of his work. Not always does he now, after months of fighting his besetting sin of neglect, remember the duty he knows should be done, for it is a battle against heavy odds; but if he keeps true to his purpose, he will win.

Think what trouble this man might have saved himself if he had begun right when he was young. Habit is like water running swiftly down from the mountain side. It soon cuts a deep channel in the earth. It will, in time, chisel its way down through the hardest rock. And it is not easy to turn the course of a stream that has once made a bed for itself. A new course must be cut, leading off out of the old bed. Over and over again the stream will leap its bounds and go back where it used to run. But the day will come if we are persistent enough and patient enough, when the new channel will hold the water within bounds, and the old course be forgotten. The right, the only thing, then, to do when we realize that we are not thorough in our work at any point is to begin now to be so. It will mean endless attention to little things that may have seemed scarcely worth while, but in the long run, the character will be strengthened and the whole life made finer and richer.

E. L. VINCENT.

**Questions and Answers.**  
**Miscellaneous.**

**Rabbits.**

1. Will a European rabbit live in this country? Are they fit for food? Where could I get a pair? T. W.

Ans.—1. So far as we are aware the rabbits would do all right in this country and are fit for food. We cannot put you in touch with anyone having them for sale at the present, but an advertisement inserted in our columns would no doubt bring you the desired information.

**Temperatures.**

1. Which is the hottest hour for work on the farm, from 12 to 1, or from 3 to 4? Which is the coldest hour during the winter night? J. A. Y.

Ans.—1. From 12 to 1 is usually considered hotter than from 2 to 4, but we believe the temperature goes the highest between 1 and 2. Around 4 o'clock is generally considered to be the coldest hour of the night.

**Plank Drag.**

1. I desire information regarding the making of a drag from 2-inch plank. L. A. P.

Ans.—1. A drag, whether made from split-logs or plank, is not difficult to construct. Two or three planks about 6 feet long could be used. Many prefer using only two planks. At each end and in the centre a 2 by 4 piece of timber is mortised into the planks to hold them together; in fact, a hole may be cut in the planks and the end of the cross piece put through and held in place with wood or iron pins. An old wagon tire, or the cutting-bar off an old mower, could be bolted on the front plank to prevent it wearing. A draw chain may be attached around the two end cross pieces, and the drag is made to go at an angle so as to drag the material toward the centre by merely hitching to the draw chain a little past the centre.

**Bull Running at Large.**

1. A puts registered heifers on B's farm to pasture at so much per month. C living next farm lets his scrub bull run at large. The said bull breaks into the field and A's heifers are in calf. After warning C does not shut the bull in.

1. Can a man let a bull run on his own farm?
2. Is he responsible for damages and loss caused by this bull to these heifers?
3. Is there a fine for letting a bull run?
4. Has A ground for claiming damages?

Y. C.  
Ans.—1. According to the present regulations he cannot.

2. Yes.  
3 and 4. Action could be taken against the man for allowing his bull to run at large and A can claim damages provided he can prove that his heifers got in calf to this particular bull.

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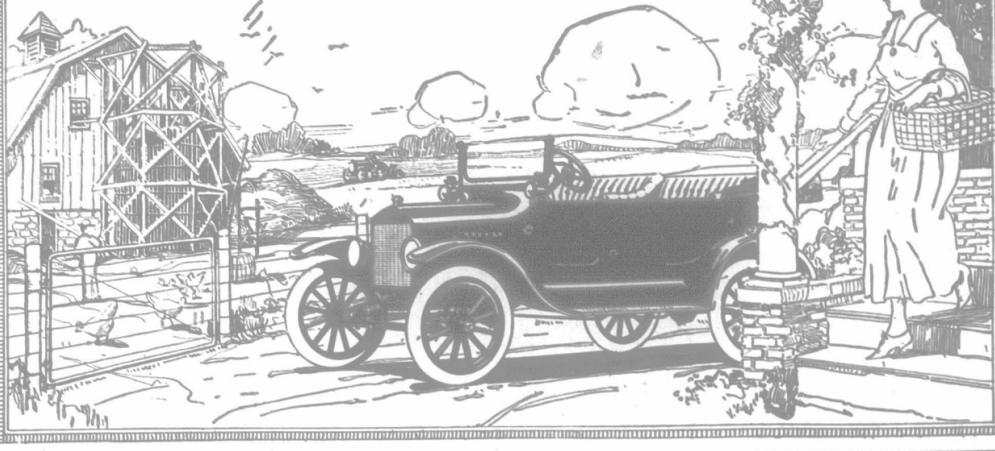
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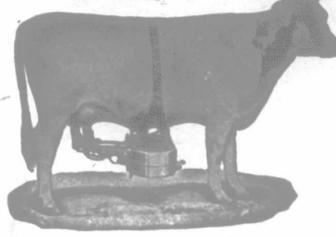
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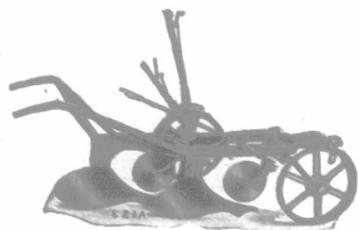


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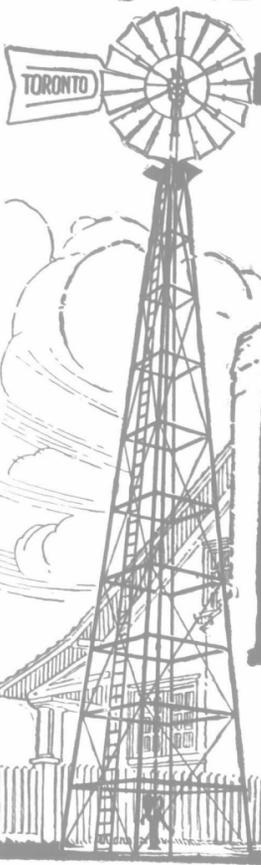
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## Questions and Answers

Miscellaneous.

### Deed of Land.

1. O and W own adjoining farms. O also has a narrow strip running across W's land which he is willing to exchange for a strip of W's land adjoining his own. What is the proper wording of a deed to accomplish this exchange? N. S.

1. While an agreement could be drawn up by yourselves, it is advisable to have the transfer made through a lawyer, or notary public. They have the forms for transfer of property and it would make the transaction legal.

### Inversion of Rectum.

1. Sow 4 months old protrudes rectum. It looks like piles. The complaint is new here. Kindly advise. Feed is milk and millfeed. G. P.

Ans.—1. The trouble is possibly caused by excessive straining due to constipation or acute diarrhoea. In the latter case the straining is caused by irritation. Treatment is often unsuccessful. Wash and bathe the protruded portion with a hot solution of one ounce alum to a pint of water. Then return it and arrange a truss to prevent reinversion. Give her 2 ounces raw linseed oil and feed on milk and shorts with a little linseed meal. Remove the truss, as indicated by efforts to defecate, and after defecation inject into the rectum a little warm solution of alum.

### Buckwheat as a Green Manure.

1. What do you think of buckwheat as a crop to plow down for wheat? When should it be sown and how should it be handled? W. D. F.

Ans.—1. Buckwheat is a crop which is frequently sown to be plowed under to enrich the soil. It is not considered as good as clover as it does not improve the nitrogen content of the soil to the same extent. However, it adds humus. It can be sown about the middle of June on land which has been cultivated up to that time. Some sow later than this. If the soil is inclined to be a little acid, it is advisable to allow the buckwheat to be frosted before plowing it under. We have known cases where a rank growth of green buckwheat had been plowed under with rather detrimental results to the following crop. However, this is not usually the case.

### Cistern Under Verandah.

1. I would like to build a cistern under the verandah floor. Can one be built there and made frost proof? The ground comes to within 8 inches of the floor. Could I put asbestos in the cement to help keep out the frost? Could I run the overflow into a well about 6 feet deep? Would this water soak away in soil that is limestone gravel? W. F.

Ans.—1. We see no reason why a cistern could not be built under the verandah; in fact, the cistern at Weldwood Farm is under the back verandah floor, and while the earth is within 2 feet of the top, we have had no difficulty from frost. Undoubtedly a layer of asbestos in the cement would tend to keep it warmer. A layer of wood put in the cement would also have the same effect. However, we doubt if you would have much trouble from the water freezing, if you banked it up fairly well. The water should soak away in gravel.

### Tapping Trees.

1. I have rented my sugar bush and the man who tapped it bored holes in the wood to a depth of 2 1/2 inches. I think this is injurious to the trees. Is there a limit to the depth at which a man can tap trees? Can I do anything to prevent him doing the same next year as he has the bush rented for several years? E. M. K.

Ans.—1. So far as we know there is no limit to the depth at which a person may tap. We doubt if boring to the depth mentioned would injure the trees much more than would a shallow hole. If tapping injures a tree at all it is cutting the outer layer of the wood through which the sap flows which causes the most harm. If you so desire you might request your tenant not to bore quite so deeply; if he does not heed your request we doubt if you could do anything to compel him to tap in any particular way unless you had so specified in the agreement.

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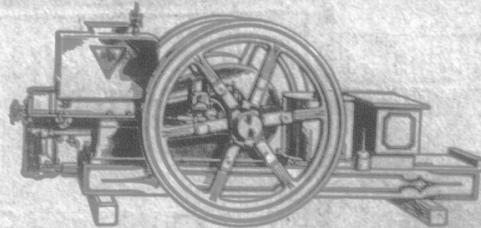
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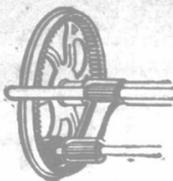
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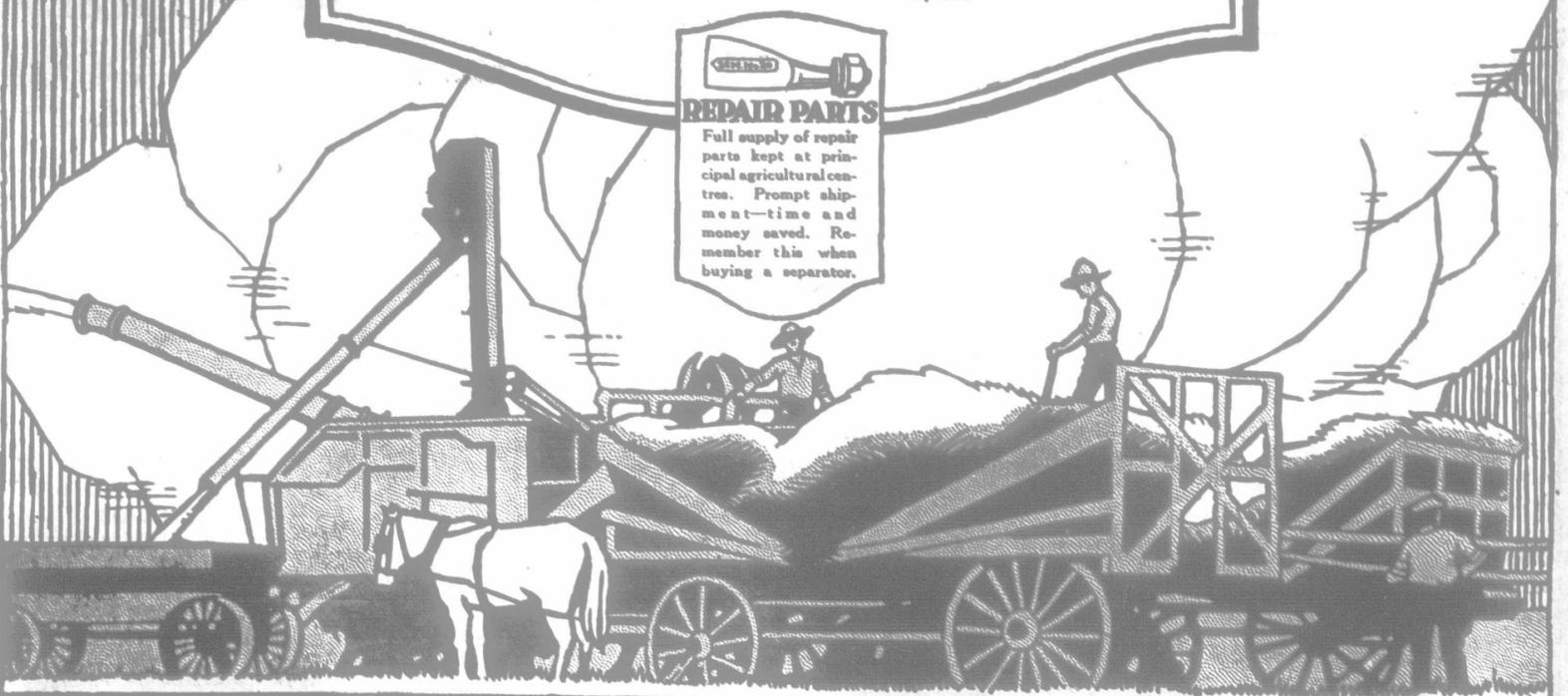
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