

PUBLISHED EVERY WEEK. \$1.50 PER YEAR.

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

Director General Est. 31.18

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1917.

Vol. LIII.

LONDON, ONTARIO, APRIL 25, 1918.

No. 1335

Beauty, Fire-resistance, Economy combined in this Roofing

MANY costly homes have been roofed with Brantford Asphalt Slates. Architects select these slates because of the artistic beauty of the soft, harmonious shades of reddish-brown and dark green, which are the natural, unfadeable colors of the slates.

Brantford Asphalt Slates

are made from a special grade of long-fibered felt which is exceedingly absorbent, so that it will take a very heavy and thorough saturation and coating of asphalt and on top of that a surface of crushed slate. The slate is rolled into the asphalt while the asphalt is hot and becomes part and parcel of the roofing. It cannot be washed off, blown off, or even kicked off by the heel unless you use force enough to tear part of the asphalt with it.

The regular Brantford Asphalt Roll Roofing has been on roofs for many long years and shows little or no signs of wear. Brantford Asphalt Slates have the additional slate surface and are that much heavier. They are also laid to overlap, adding still further to the wear-resistance of a roof. It seems reasonable to expect that they will last almost as long as the walls.

Non-absorbent—Do not get water-soaked

Asphalt is one of the most waterproof materials known, and Brantford Asphalt Slates being non-absorbent, do not get water-soaked and rot. Neither do they crack, break or fall off. In fact, they possess one great advantage over any other form of roofing material:—they cement together under the heat of the sun shortly after



Home in Kingston roofed with Brantford Asphalt Slates

they are laid, resulting in a solid pavement-surface on the roof under which rain or snow cannot drive and no individual slates become loose or blow off.

Brantford Asphalt Slates are wonderfully fire-resistant and are approved by the fire insurance companies, being put into the non-combustible class. Flying embers from burning buildings, sparks from threshing engines or railroad locomotives die out on Brantford Asphalt Slates. If a fire should start in an interior of a building roofed with them, the slates act as a blanket and retard the spread of the fire.

Brantford Asphalt Slates are moderate in cost, and are very rapidly laid because they are regular in size and pliable. They can be laid over ridges or curved surfaces, and every one is perfect. No knots or worm holes to look out for. No care required to avoid splitting them when nailing. And you can reroof an old building with Brantford Asphalt Slates without any extra bracing being required.

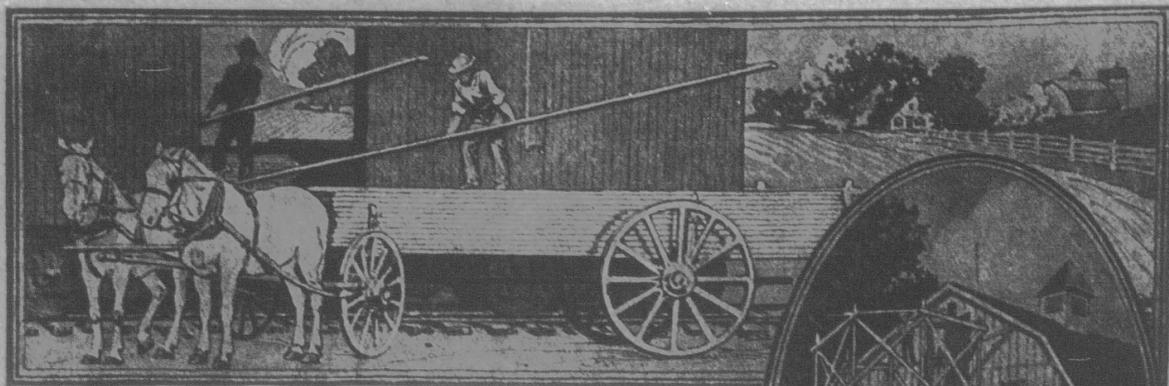
Send for illustrated booklet

Our booklet "Permanent Roofing Satisfaction" and a sample "slate" will be mailed on request. Both are worth getting if you are going to do any roofing this season.

Brantford Asphalt Slates are suitable for country homes, city homes, golf clubs, churches, garages, barns or any kind of a pitch roof where an artistic effect is desired.

Brantford Roofing Co., Limited

Head Office and Factory, Brantford, Canada
Branches at Toronto, Montreal, Halifax



This Year Corn is Gold Order a Silo NOW to Bank It

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

HYLO SILO

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

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

You can store your corn in the

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

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

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

Gilson Manufacturing Co., Limited

229 York Street
GUELPH ONTARIO



GILSON SILO FILLERS

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

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

Will Silo Filling Time find you ready?

Write for catalogue to-day.

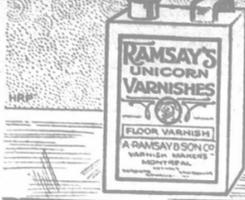
Gilson Mfg. Co. Ltd.
399 York St., Guelph
Ont.
39



Strawberry Plants, etc. We have a full line of first class Strawberries, Raspberries, Currants, Gooseberries, Grapes, Asparagus Roots, Fruit Trees, Ornamentals, Roses, Seed Potatoes, etc. Write for free catalogue.

H. L. McConnell & Son, Port Burwell, Ont.

A LASTING SURFACE -



—a Varnish that will stand wear and tear. Ramsay's Fine Floor Varnish maintains a perfect lasting finish under most extreme circumstances. The scraping of furniture and the stamp of heels is its daily test for durability.

The fact that Ramsay's Varnish stands this severe usage, proves its worth as a preservative for your floors.

Ask any Ramsay dealer, or write us for our descriptive literature.

The Right Varnish to Varnish Right

RAMSAY'S VARNISHES

A. RAMSAY & SON COMPANY
MONTREAL VANCOUVER

Clover Seeds

GOVERNMENT STANDARD

	Per Bus.
No. 1 Red Clover	\$23.00
No. 2 Red Clover	22.00
No. 1 Alsike	15.00
No. 2 Alsike	16.00
No. 1 Northern Crown Alfalfa	24.00
Ontario Variegated Alfalfa No. 2	24.00
No. 2 Timothy (This seed grades No. 1 for purity)	5.50
No. 3 Timothy	5.00
Mixed Timothy and Alsike	9.00
White Blossom Sweet Clover	18.00
G.A.C. No. 72 Oats	1.50
Marquis Spring Wheat	3.00
O.A.C. No. 21 Barley	2.25
Canadian Beauty Peas	5.50
Golden Vine Peas	5.00
White Seed Beans	10.00

Terms, cash with order. Bags extra at 45c. each.

On all orders, east of Manitoba, of \$25 or over, we will pay the freight.

We guarantee seeds to satisfy, or ship back at our expense.

Ask for samples if necessary.

TODD & COOK

Seed Merchants
Stouffville, Ont.

THIS ENGINE WILL COST YOU NOTHING

GILSON



Write for our new easy payment, free trial, plan.—We will send you an engine complete without a payment of any kind to test out on your own farm. Just try it—you'll wonder how you got along without it. You'll be surprised how quickly it will pay for itself.

Write us TO-DAY for particulars of this "Help the Allies" Grinding Outfit and special proposition.

GILSON MFG. CO. LTD.
437 YORK ST.
GUELPH CAN.

THE MARTIN DITCHER AND GRADER DIGS YOUR DITCHES GRADES YOUR ROADS

EASILY QUICKLY CHEAPLY



REVERSIBLE ADJUSTABLE
DOES THE WORK OF 50 MEN
SEND FOR FREE BOOKLET

The Preston Car & Coach Co. Limited
97 DOVER ST. PRESTON CANADA

SAW-BLADES

PRICE OF SAW BLADES F.O.B. FACTORY

20"	\$4.70	26"	\$6.90
22"	5.15	28"	8.25
24"	5.90	30"	9.25

You can order direct from this list, saving both time and money. Simply mention diameter of blade with size of hole wanted, and remit with your order. I ship promptly.

My Catalogue, "The Heart of the Farm," illustrating Lundy Oil Engines, Saw Frames, Grains Grinders, Etc., sent on request.

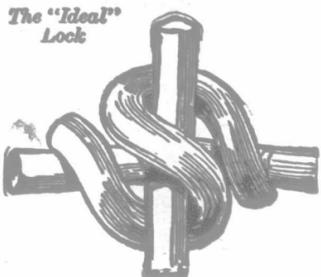
A. R. LUNDY,
257 KING STREET WEST, TORONTO

LONDON CONCRETE MIXER No. 6

Capacity, 60 cubic yards per day.
Price, \$375.00, complete with gasoline engine. Pays for itself in 30 days' use. Built to last a lifetime. Send for catalogue No. 1 B.



London Concrete Machinery Co.
Dept. B
London, Ontario
World's Largest Mfrs. of Concrete Machinery



"IDEAL" FENCE PRICES

FREIGHT PAID TO YOUR STATION

Below we give the freight-paid prices to any station (except Electric) in Old Ontario on orders of \$15.00 or over. Prices for New Ontario quoted on request.

QUEBEC AND MARITIME PROVINCES We have opened a warehouse and office in Montreal to handle Eastern shipments and correspondence. Ask our Branch, 14 Place Royale, Montreal, Quebec, for "Ideal" prices, freight paid to any station in Canada, east of Montreal.

We have a large stock of all styles of "Ideal" fence on hand and will ship all orders the same day as received while stock lasts.

HEAVY "IDEAL" FENCING

MADE THROUGHOUT OF FULL GAUGE No. 9 EVENLY GALVANIZED HARD STEEL WIRE; CARRIED IN 20, 30 AND 40 ROD ROLLS.

No. 5380 5-line wires, 38 inches apart, uprights 22 ins. apart, spacing 9, 9, 10, 10. Per rod.....	37c	No. 847 8-line wires, 48 inches high, uprights 16 1/2 inches apart, spacing 4, 5, 6, 7, 8, 8, 9. Per rod..	63c	No. 1054 10-line wires, 54 inches high, uprights 16 1/2 ins. apart, spacing 3 1/2, 3 1/2, 4, 5, 6, 7, 8, 8, 9. Per rod.....	80c
No. 6390 6-line wires, 39 inches high uprights 22 inches apart, spacing 7, 7, 8, 8, 9. Per rod.....	43c	No. 8470 8-line wires, 48 inches high uprights 22 inches apart, spacing 4, 5, 6, 7, 8, 8, 9. Per rod..	58c	No. 10540 10-line wires, 54 ins. high, uprights 22 ins. apart, spacing 3 1/2, 3 1/2, 4, 5, 6, 7, 8, 8, 9. Per rod.....	73c
No. 7400 7-line wires, 40 inches high, uprights 22 inches apart, spacing, 5, 6, 6, 7, 7 1/2, 8 1/2. Per rod.....	50c	No. 951 9-line wires, 51 ins. high, uprights 16 1/2 ins. apart, spacing 4, 4, 5, 6, 7, 8, 8, 9. Per rod.....	70c	No. 1157 11-line wires, 57 inches high, uprights 16 1/2 ins. apart, spacing 3, 3 1/2, 3 1/2, 4, 5, 6, 7, 8, 8, 9. Per rod.....	85c
No. 7480 7-line wires, 48 inches high, uprights 22 inches apart, spacing 5, 6 1/2, 7 1/2, 9, 10, 10. Per rod.....	51c	No. 9510 9-line wires, 51 inches high, uprights 22 inches apart, spacing 4, 4, 5, 6, 7, 8, 8, 9. Per rod.....	64c	No. 11570 11-line wires, 57 ins. high, uprights 22 ins. apart, spacing 3, 3 1/2, 3 1/2, 4, 5, 6, 7, 8, 8, 9. Per rod.....	77c
No. 841 8-line wires, 41 inches high, uprights 16 1/2 ins. apart, spacing 4, 4, 5, 6, 7, 7, 8. Per rod..	62c	No. 1048 10-line wires, 48 inches high, uprights 16 1/2 ins. apart, spacing 3, 3, 3 1/2, 4, 5, 6, 7, 8, 8 1/2. Per rod.....	75c	No. 831 8-line wires, 31 ins. high, uprights 16 1/2 ins. apart, spacing 3, 3, 3, 4, 5, 6, 7. Per rod.....	60c
No. 8410 8-line wires, 41 inches high, uprights 22 inches apart, spacing 4, 4, 5, 6, 7, 7, 8. Per rod....	57c	No. 10480 10-line wires, 48 ins. high, uprights 22 ins. apart, spacing 3, 3, 3 1/2, 4, 5, 6, 7, 8, 8 1/2. Per rod.....	70c	No. 939 9-line wires, 39 inches high, uprights 16 1/2 inches apart, spacing 3, 3, 3, 4, 5, 6, 7, 8. Per rod..	67c

MEDIUM HEAVY "IDEAL" FENCING

TOP AND BOTTOM WIRES No. 9; OTHER WIRES No. 12; CARRIED IN 20, 30 AND 40 ROD ROLLS.

No. 640 6-line wires, 40 ins. high, uprights 16 1/2 ins. apart, spacing 7, 7, 8, 9, 9. Per rod.....	33c	No. 726 7-line wires, 26 ins. high, uprights 13 inches apart, spacing 3, 3 1/2, 4, 4 1/2, 5, 6. Per rod.....	35c	No. 930 9-line wires, 30 ins. high, uprights 13 ins. apart, spacing 3, 3, 3, 3, 3, 4, 5, 6. Per rod.....	43c
No. 6400 6-line wires, 40 ins. high, uprights 22 inches apart, spacing 7, 7, 8, 9, 9. Per rod.....	30c	No. 7261 7-line wires, 26 inches high, uprights 8 inches apart, spacing 3, 3 1/2, 4, 4 1/2, 5, 6. Per rod.....	41c	No. 9301 9-line wires, 30 inches apart, uprights 8 inches apart, spacing 3, 3, 3, 3, 3, 4, 5, 6. Per rod.....	50c
No. 950 9-line wires, 50 ins. high, uprights 13 inches apart, spacing 4, 4, 5, 6, 7, 7, 8, 9. Per rod.....	48c	No. 1150 11-line wires, 50 inches high, uprights 13 inches apart, spacing 3, 3, 3, 4, 4, 5, 6, 7, 7, 8. Per rod.....	55c	No. 1448 14-line wires, 48 inches high, uprights 13 ins. apart, spacing 2 1/2, 2 1/2, 2 1/2, 2 1/2, 2 1/2, 3, 3, 3 1/2, 4, 5, 5 1/2, 5 1/2, 6. Per rod.....	64c

"IDEAL" POULTRY FENCING

TOP AND BOTTOM WIRES ARE MADE OF No. 9, ALL OTHER WIRES No. 13. MADE IN TWO STYLES ONLY. CARRIED IN 10 AND 20 ROD ROLLS.

No. 1848 18-line wires, 48 inches high, uprights 8 1/2 inches apart, spacing 1 1/2, 1 1/2, 1 1/2, 1 1/2, 1 1/2, 1 1/2, 2 1/4, 2 1/4, 2 1/4, 3, 3, 3 1/2, 3 1/2, 4, 4 1/2, 5. Per rod.....	85c	No. 2060 20-line wires, 60 inches high, uprights 8 1/2 inches apart, spacing 1 1/2, 1 1/2, 1 1/2, 1 1/2, 1 1/2, 1 1/2, 2 1/4, 2 1/4, 2 1/4, 3, 3, 3 1/2, 3 1/2, 4, 4 1/2, 5, 6, 6. Per rod.....	90c
--	------------	--	------------

Improved "Ideal" Stock Gates—Open Mesh

Made in the following sizes only:

12 feet long, 51 inches high, each.....	\$6 00
13 feet long, 51 inches high, each.....	6 25
14 feet long, 51 inches high, each.....	6 50

Improved "Ideal" Farm Gates—Close Mesh

3 feet long, 48 inches high, each.....	\$3.00
3 1/2 feet long, 48 inches high, each.....	3.25
4 feet long, 48 inches high, each.....	3.50
10 feet long, 48 inches high, each.....	6.25
12 feet long, 48 inches high, each.....	7.00
13 feet long, 48 inches high, each.....	7.25
14 feet long, 48 inches high, each.....	7.50
16 feet long, 48 inches high, each.....	8.00

Supplies for "Ideal" Fence

Ideal Fence Stretcher, each.....	\$10.00
Hand Stretcher for Single Wire, each.....	1.00
Universal Post-Hole Digger, each.....	2.75
Ideal Steel Fence Posts, 1 1/2 in. x 1 1/2 in. angle by 7 1/2 ft. long, each.....	.55

Brace Wire, Staples and Barb Wire

Galvanized Staples in 25-lb. Boxes.....	\$1.85
Galvanized Staples in 100-lb. Boxes.....	7.00
Galvanized Fence Hooks, per 100 lbs.....	7.00
No. 12 Brace Wire, per 100 lbs.....	6.50
No. 9 Brace Wire, per 25 lbs.....	1.60
No. 9 Brace Wire, per 100 lbs.....	6.00
No. 9 Coiled Spring Wire, per 100 lbs.....	6.10
4 pt. 4" Galv. Cabled Barbed Wire, per 100 lbs. (about 95 rods).....	6.75
4 pt. 6" Galv. Cabled Barbed Wire, per 80 rod spool.....	5.50
2 pt. 5" Galv. Cabled Barbed Wire, per 80 rod spool.....	5.25
"Ideal" Single Strand Barbed Wire, per 80 rod spool.....	3.75

Buy Now and Save Money

The enormous demand for steel by the European countries leaves only a limited tonnage for home use—therefore prices are uncertain. We suggest your ordering now, while our stock lasts and prices are right. Remit by Bank Draft, Post Office Order or Express Money Order.

THE MCGREGOR BANWELL FENCE CO., Limited, Walkerville, Ont.



The Ford Saves the Hay and Oats the Horses Eat

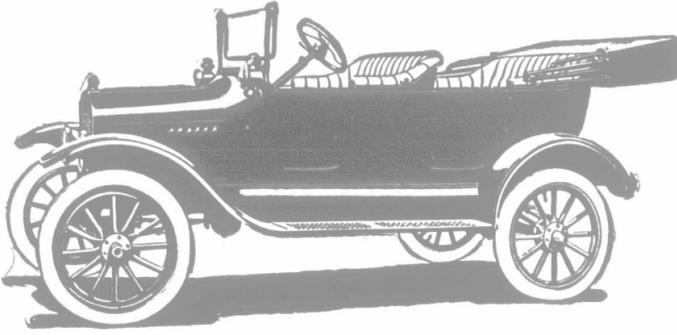
IT HAS been estimated that five acres of land are required to maintain one horse for a year, and that the same five acres would produce nearly enough food for two people. If 50,000 Canadian farmers each replaced one horse with a Ford, 250,000 acres would be added to the Nation's source of food supply and enough extra food made available to feed 100,000 people.

Just think what a great service this means to the country at the present time and the benefit to the farmers from the sale of food produced on this acreage.

A Ford car also saves the farmer a week or more of valuable time each year, which can be used for further productive work. The Ford travels three times as fast as a horse and rig—costs less to run and keep, and is far easier to take care of. With labor so scarce and high priced, time means money, so do not delay in getting your Ford.

Ford

- Touring - - \$595
- Runabout - - \$575
- Coupe - - \$770
- Sedan - - \$970
- Chassis - - \$535
- One-ton Truck \$750



E. O. B. FORD, ONT.

Ford Motor Company of Canada, Limited
Ford, Ontario

IRON AGE ?

Farm, Garden and Orchard Tools
Answer the farmer's big questions.
How can I get my crops sprayed
when help is scarce? How pro-
tect my crops against bugs and
blight?

IRON AGE Traction Sprayer
meets the need for a fast working, high-pressure field
sprayer. Covers 4 or 6 rows—55 or 100 gal. tank. Write to-
day for free booklet.

4 or 6 rows

THE BATEMAN WILKINSON CO., Ltd.
41 Symington Avenue, Toronto, Canada.

When writing please mention Advocate

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.
HON. G. H. FERGUSON, Minister of Lands, Forests and Mines.

ROOFING AT FACTORY PRICES

WE ARE THE LARGEST ROOFING SUPPLY HOUSE IN CANADA. WE HAVE THE LARGEST STOCK OF ROOFING MATERIALS IN CANADA. WE HAVE THE LARGEST STOCK OF ROOFING MATERIALS IN CANADA.

THE HALLIDAY COMPANY LIMITED HAMILTON
FACTORY DISTRIBUTORS CANADA

NURSERY STOCK AT WHOLESALE PRICES.

First-class and true to name. Send for catalogue. No agents.

The Imperial Nurseries, Ridgeville, Ont.

For your HARNESS' SAKE

Overcome the worst enemies of leather—water and dirt—by using

EUREKA HARNESS OIL
"Lengthens leather life"

Softens old harness, leaves it pliable and waterproof, prevents cracking and breaking of stitches, doubles the life of new harness.

MICA AXLE GREASE
"Use half as much as any other"

Gives the effect of roller bearings. The mica flakes work into the pores and crevices of the axle and the grease holds them there. Mica Grease prevents hot boxes, locked wheels and screeching axles. Saves wear and tear on horses, harness and wagons. "Best thing on Wheels."

Sold in standard sized packages by live dealers everywhere.

IMPERIAL OIL LIMITED

BRANCHES IN ALL CITIES

Victory Bonds

Which issue of Victory Bonds is the best purchase for the average investor?

This question is answered in the current issue of "Greenshield's Monthly Review."

The Review also contains other information which can be profitably used by every investor.

Write for Review No. 73
It will be sent you free on request

GREENSHIELDS & CO.
Members Montreal Stock Exchange
Dealers in Canadian Bond Issues
17 St. John Street, Montreal
Central Chambers, Ottawa

BE YOUR OWN BLACKSMITH

FARMERS! SAVE REPAIR BILLS & VALUABLE TIME. ONE OF OUR BLACKSMITHING OUT-FITS WILL PAY FOR ITSELF. CATALOG FREE

THE HALLIDAY COMPANY, LTD. HAMILTON
FACTORY DISTRIBUTORS CANADA

FO

When Out Thro on the ho ground. gangs do draught i work and for any oth do not fail The Cl operated l get out of The Bi bars are 1 tween the kept clean

The ax

T. E. E

PEE

THE gat Peerles with h steel bridge. hung by a ma clasped at all in tubular steel ele

FOR L

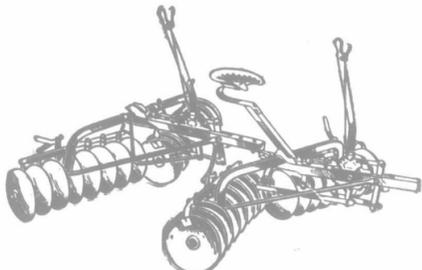
In appearan For durability it can't rust at a lifetime and is interested in our

Write

describing all our Poultry Fencing, pay you well to standard of constru

The Banwell-Comp
Winnipeg, Man.

FORESIGHT ON THE FARM



Heavy types for use with tractors

IN CHOOSING A HARROW

INVESTIGATE THE GANGS

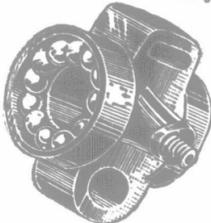
Whenever Disk Harrow gangs crowd, you have trouble. In most Out Throw Harrows they bump together, rock and sway; they are heavy on the horses and when the land is tough or hard, they rise out of the ground. Bissell Disks are a different construction from others. The gangs do not butt together. They have no rocking motion. The draught is steady and even. The team will travel faster, do more work and do it easier. Bissell Disks will work land which is too hard for any other make to handle and have wider field of usefulness. They do not fail where the most work is required.

The Cleaners are built of steel throughout, riveted to stay, and are operated by a locking device—No castings to break, no coil springs to get out of order.

The Bissell Scrapers are the only Scrapers on which the steel clod bars are moveable endwise by a lever, thus keeping the spaces between the plates free from clods. The cutting edges of the plates are kept clean by the steel blades.

AXLES ON BISSELL GANGS

The axles are heavy—malleable nuts and washers are used so that the complete gang can be drawn up so tight that the axles can not spring or allow the disks to work loose.



The Bissell Bearing is a success. The body parts are all in one piece, manufactured without the use of bolts. No holes to break out. No crevices for dirt to work in. The journal being tapered, the pressure is toward the balls which are elevated on a heavy durable base. This is why Bissell Disk Harrows excel in light draught. The end of the bearing opposite the balls is protected by malleable rings or sand bands, making it impossible for dirt to enter.

The success of Bissell Disk Harrows is beyond repute—only one is genuine—the one with the name Bissell.

T. E. BISSELL CO. LTD., ELORA, ONT.



The Paint for the Barn

The barn is usually the most valuable building on the farm; it houses several thousand dollars' worth of stock, implements and foodstuffs. Don't leave so much valuable property unprotected. Safeguard it with

"HOMESTEAD LIQUID RED"

This is the best wearing and most economical paint for all farm buildings. One gallon covers 300 square feet, two coats, where the wood is in good condition. It's a wise investment to let this good paint protect all your farm buildings.

Paint the house with CANADA PAINT; decorate the walls with C.P. "SANITONE"; freshen up the furniture and floors with C.P. "SUN VARNISH STAINS". Ask the C.P. agent in town for further particulars.

Our book: "What, When and How to Paint" mailed free upon request.

DECORATIVE SERVICE FREE. Our suggestions and color schemes for finishing any part of the exterior or interior of your building would be helpful to you.

THE CANADA PAINT CO. LIMITED,

Makers of the famous "ELEPHANT BRAND" White Lead.

572 William Street, Montreal. 112 Sutherland Ave., Winnipeg.

PEERLESS LONG SPAN GATES

THE gate pictured below is a companion to the Peerless Perfection farm fencing, strong, durable, with heavy tubular brace, which stiffens it like a steel bridge. It swings true and rigid as an oak door hung by a master mechanic. Lateral and upright wires securely clasped at all intersections and stretched upon a strong rigid frame of tubular steel electrically welded into one solid piece.

FOR LOOKS, WEAR AND SERVICE

In appearance a Peerless Gate says: "I am guardian here." For durability it is of heavy open hearth steel wire, galvanized and can't rust at any point. For service it is put together to last a lifetime and is the cheapest, best gate made. You will be interested in our Catalog.

Write Today for Literature

describing all our many styles of Gates, all kinds of Farm and Poultry Fencing, etc. Dealers nearly everywhere. It will pay you well to get acquainted with Peerless Perfection standard of construction. Write today.

The Banwell-Hoxie Wire Fence

Company, Ltd.

Winnipeg, Man. Hamilton, Ont.



The Pouch with the Guarantee

WITH reasonable use, the Arlington is guaranteed for two years against imperfections of all kinds. The thick red rubber will not become soft and tear like the rubber used in pouches of inferior makes. The

ARLINGTON Tobacco Pouch

is unequalled for keeping the Tobacco cool and moist. You can always be sure that in it your tobacco will be in the best of condition, thus assuring pipe satisfaction.

There's a size and shape to fit any pocket.

Priced from 50 cents to 75 cents, according to size.

At your dealer.

The Empire WATER SUPPLY System

Makes Farm Life Comfortable

Brings you the desirable labor-saving convenience you have envied the city folk.

Hot and cold water anywhere you want it in the house and outbuildings. And water—gallons of it—anywhere about the barn, stable, stockpens, lawn or garden.

The invention of the simple and efficient Empire Water Supply System makes all this possible at a cost well within reach of the average farmer or small-town dweller.

WRITE FOR OUR FREE BOOKLET

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 us to-day.

The EMPIRE MANUFACTURING CO., LIMITED

Head Office and Factory:
London, Ontario

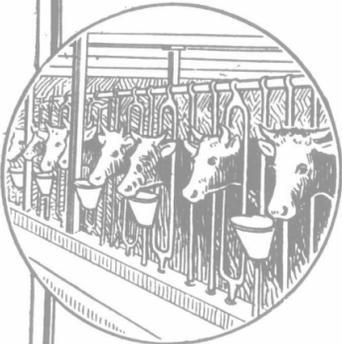
Branch Office and Warehouse:
119 Adelaide Street, W.
Toronto, Ontario



KITCHEN



BATH ROOM



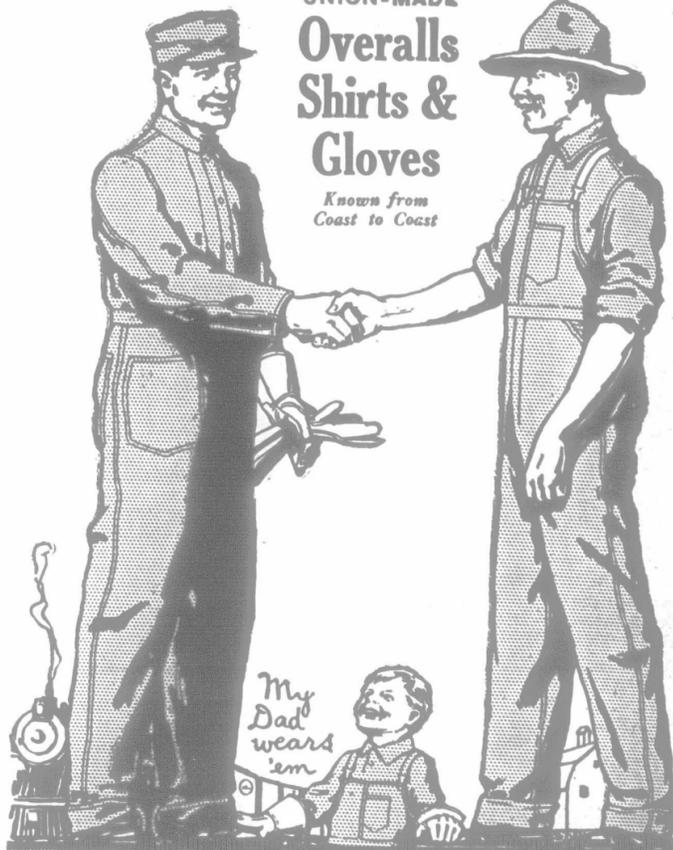
BARN

Bob Long

UNION-MADE

**Overalls
Shirts &
Gloves**

Known from
Coast to Coast



Bob Long says:

"My overalls and shirts are the best made, because—I know what a man wants—long wear, solid comfort and all-round satisfaction."
Insist on "Bob Long" brand, and ask for Big 11—the big grey overalls—the cloth with the test.

R. G. LONG & CO., Limited, Toronto, Canada

**FISH NETS
TRAPS
GUNS**

Gill, Hoop, Brook, Trammel, Pound and Dip Nets and Seines. Traps for all animals—We carry in stock the largest assortment of animal traps in Canada—Guns and rifles of the popular makes—Tents, Camp Stoves, Canoes, Bicycles, Headlights and Sporting Goods.

FREE—Hallam's Sportsman's Supply Catalog—22 pages illustrated—write for your copy to-day.

John Hallam Limited
81 HALLAM BUILDING, TORONTO

Happy Farmer Tractor handling 3 bottom 14 inch plow—back-setting Timothy Sod



Thirty-One Cents an Acre!

At Brandon the Happy Farmer demonstrated its ability to plow an acre in 45 minutes at a cost of only 31 cents worth of coal oil! Compare this with the cost of plowing an acre with your best team, with feed at high prices, and men's extra time to be counted in. Will it not pay you to use the

Happy Farmer Tractor

Model A—8-16 Horsepower.

Model B—12-24 Horsepower.

Here is the ultimate tractor for efficiency and economy combined! It is famous for its simplicity—few parts to get out of order. Any intelligent farm lad can run it. It is heavy enough for the hardest plowing test and for heavy hauling—light enough to use with the drill. And it will go anywhere; it will plow right up to the fence with no unfinished corners. It will turn in its own space and not mire in soft spots.

Model B's engine is not just "adapted" to coal oil. It is designed *specially* for kerosene. It

burns it perfectly—all of it—with no smoke nuisance and no carbon trouble. Model B will not only pull the plow and the binder, getting your work done early in critical times, but it will deliver 24 horsepower for all kinds of belt work at low up-keep cost.

If you prefer a lower power tractor, Model A supplies the need.

Write us for full particulars about price, delivery terms, etc. Literature free on request.

The Renfrew Machinery Co., Limited Head Office & Works **Renfrew, Ont.**

Eastern Branch, Sussex, N.B.

Branches almost everywhere in Canada

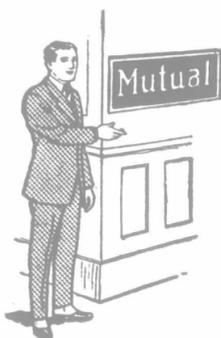
The price of
You can buy

M

for the price
MILTON
Head Office: M

Turn to the Right!

THE Insurance Times of New York is one of the best authorities in the world on the subject of Life Insurance. In its issue of February, 1918, in commenting upon the fact that another of the large American Companies had adopted the mutual principle, the following words are used:—



The Six Largest Companies of the United States are Mutual Companies.

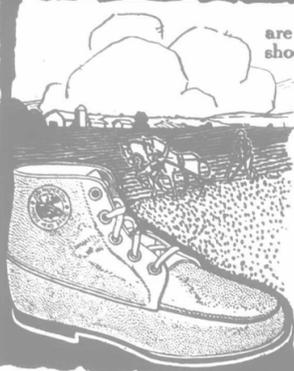
"The Mutual idea is unquestionably the highest ideal in Life Insurance service. Cooperation, collective bargaining and distribution are the order of the twentieth century. All Life Insurance must ultimately come to be written as well as conceived on a purely mutual basis. Genuine mutualization—mutual in fact as well as in theory—will be called for in the coming years, and the company that does not limit its mutual program to its principles, but makes its practise and its policies concretely mutual, is the company that will be most in accord with the spirit of the coming generation, which before all things will be social-minded and democratic. Mutualization is the sign-board 'Turn to the Right,' and it is the road that all life insurance will eventually take."

The Mutual Life of Canada is the only Canadian representative of this ideal system that has ever been developed during the whole history of the Dominion. You "Turn to the Right" when you turn to the Mutual Life Assurance Company of Canada for protection.

The Mutual Life Assurance Company of Canada
Waterloo, Ontario

534

Palmer's Summer Packs



are sometimes called plough shoes or harvest shoes because they are especially designed for wear in the ploughing and harvesting seasons.

You will not be troubled with tired, aching feet after doing a hard day's work in Palmer's Summer Packs, because they are light in weight, durable, roomy, comfortable and waterproof.

Ask your dealer for a pair of these. "Moose Head Brand" shown above is stamped on every pair.

JOHN PALMER CO., LTD.
FREDERICTON, N.B., CANADA 34

The price of bricks has gone up very little in three years. You can build an average-size, warm house on your farm of

MILTON BRICK

for the proceeds of half as many hogs as in 1914.
MILTON PRESSED BRICK CO., LIMITED
Head Office: MILTON, ONT. Toronto Office: 50 Adelaide Street West

The Planter Starts the Crop



You know how much better chance a corn crop has when it gets a good early start with an even stand. It takes a good planter to give it that start, an INTERNATIONAL CORN PLANTER that is easily adjusted and that stays adjusted until the job is done. Consider these planters, feature by feature.

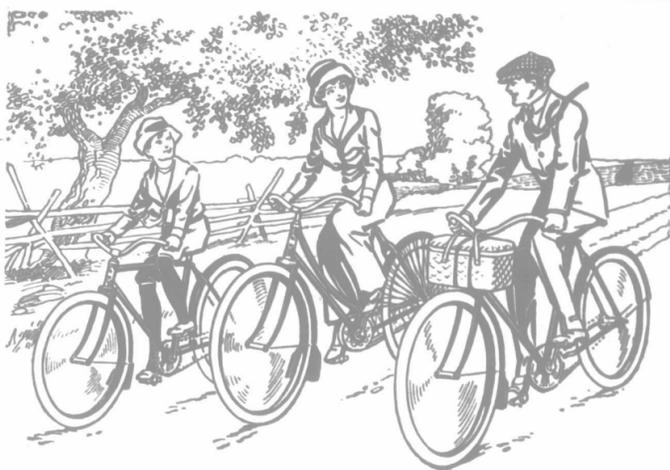
They plant corn accurately, whether used with edge drop, flat drop or full hill drop plates; whether the corn is checked or drilled. The drop clutch can be changed, while the planter is working, to drop 2, 3 or 4 kernels to a hill. The tongue is easily adjustable to the height of the horses. A handy foot-drop lever makes head-row planting easy.

When you look the INTERNATIONAL Planter over, don't miss the automatic marker, a handy feature that saves a lot of work and time. There are fertilizer attachments if you want them, combination pea and corn-planting hoppers, open wheels or closed—your planter will be equipped just as you want it. You can plant in rows as narrow as 28 inches apart by 2-inch adjustments, with four distances between hills.

These planters are so good you will want to know all about them. Drop a line to the nearest branch and let us send you full information.

International Harvester Company of Canada, Limited

East—Hamilton, Ont.; London, Ont.; Montreal, Que.; Ottawa, Ont.;
Quebec, Que.; St. John, N.B.
West—Brandon, Man.; Calgary, Alta.; Edmonton, Alta.; Estevan, Sask.;
Lethbridge, Alta.; North Battleford, Sask.; Regina, Sask.;
Saskatoon, Sask.; Winnipeg, Man.; Yorkton, Sask.



Do You Want a Wheel?

You Can Earn a \$50 Brantford Red Bird Roadster

A machine which will save you time, and give you pleasure, equipped with coaster brake, mudguards, tool-kit, pump, and all that goes with a first-class, high-grade wheel.

This is not a cheap bicycle put up for competitions, but a well known standard wheel.

You can't get it for nothing, but if you are willing to work for what you want, you can get it without having to spend any money.

If you are interested, and not afraid to work, send the coupon to:

COUPON

THE FARMER'S ADVOCATE & HOME MAGAZINE, LONDON, ONT.

Gentlemen,—I want to earn a bicycle. Please tell me how I can do it. I want to start at once.

Name _____ Age _____

Address _____

Name of subscriber _____

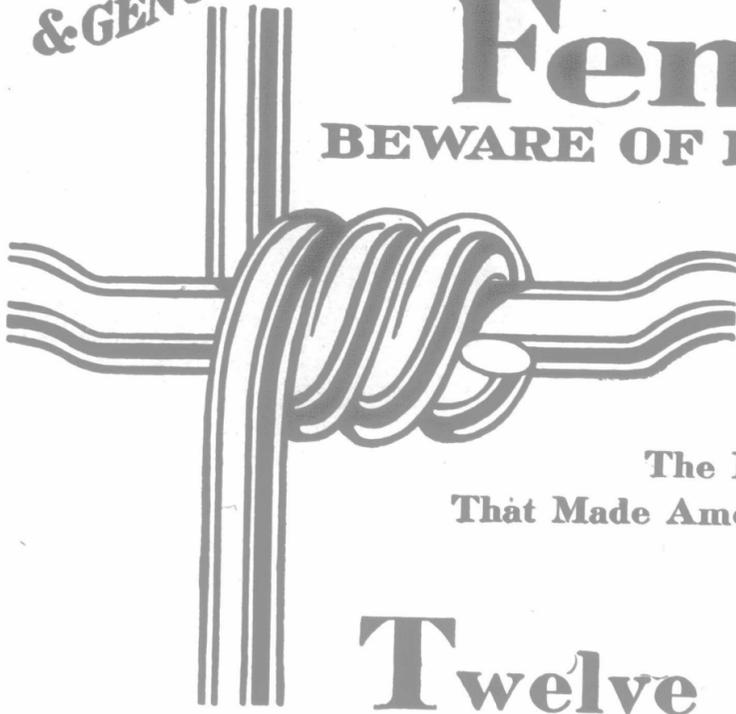
When writing advertisers will you kindly mention "The Farmer's Advocate."

American Fence Original and Genuine—Beware of Imitations

**ORIGINAL
& GENUINE**

American Fence

BEWARE OF IMITATIONS



The Hinge Joint
That Made American Fence Famous

Twelve Reasons

Why You Should Buy American Fence

1. It has stood the test for twenty years.
2. It is the original and genuine hinge joint fence.
3. It is made of wire especially adapted for fence purposes.
4. It is mechanically correct in construction.
5. It is made of full gauge wire throughout.
6. It is put up in full length rolls.
7. It is covered with a heavy coat of high grade zinc.
8. Its hinge joint gives it strength, durability, and flexibility.
9. Its spacing between stay wires and line wires, is just as represented.
10. It keeps your live stock where you want it.
11. It is made in many styles and heights suitable for all purposes.
12. It is the AMERICAN FENCE which guarantees you real value.

Manufactured by

THE CANADIAN STEEL & WIRE COMPANY, LTD.
HAMILTON, ONT. WINNIPEG, MAN.

American Fence Original and Genuine—Beware of Imitations

American Fence Original and Genuine—Beware of Imitations

American Fence Original and Genuine—Beware of Imitations

LIII.

E.

Canadians r
back's to it.

Price contr
decreases produ

Most of M
has not been so

On goes the
means to farm p

The only p
not price but to

Petty differ
of doing someth

Poor-horses
and on the mark

Some peop
different proposi

The calf crop
valuable as is th

Acreage cour
farm is not so pr
would be.

Heavy produ
profits, but big p
production.

Food product
fields, and platfor
bed very much.

Canada's soldi
honor of their cou
pected to hold thi

The boy and
are just beginning
folks mean to a co

When the wou
structors are to be
forces there will be

Any embargoes
the farmers' shoul
Government of thi

The best Canad
of publicity of the
of all the papers in

Now is the time
of green feed for t
the first year is th
life.

Were the roads
cause of the unusu
because they have
maintained?

Agricultural pro
increased by treatin
farmer's years of p
great deal more val
production advanced

The Farmer's Advocate

and
Home Magazine

PERSEVERE
AND
SUCCEED

ESTABLISHED
1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

LIII.

LONDON, ONTARIO, APRIL 25, 1918.

1335

EDITORIAL.

Canadians must get back to the land—not keep their backs to it.

Price control downward increases consumption and decreases production.

Most of March was lamb-like, but some of April has not been so gentle.

On goes the clock, regardless of what the change means to farm production.

The only possible solution of the food problem is not price but to get more food.

Petty differences must be submerged in the glory of doing something for the cause.

Poor horses move slowly on the road, in the field, and on the market. Breeding counts.

Some people seem to forget that farming to-day is a different proposition to what it was fifty years ago.

The calf crop, lamb crop and pig crop was never so valuable as is the case this spring. Save all possible.

Acreage counts on the Canadian farm. A little farm is not so profitable to the owner as a larger place would be.

Heavy production may not necessarily mean big profits, but big profits will always tend towards heavy production.

Food production can only come from the fertile fields, and platform hot air doesn't warm up the seed-bed very much.

Canada's soldiers of the soil will be deserving of the honor of their country if they hold the line they are expected to hold this year.

The boy and girl are real factors in the fight. We are just beginning to properly appreciate what the young folks mean to a country.

When the would-be rioters understand that all obstructors are to be taken into the ranks of the overseas forces there will be no riots.

Any embargoes that would place more burdens on the farmers' shoulders should not be considered by the Government of this country.

The best Canadian papers are favorable to the idea of publicity of the names of owners and management of all the papers in the country.

Now is the time to make arrangements to have plenty of green feed for the calves this summer. Remember the first year is the most important one in the calf's life.

Were the roads in your district good this spring because of the unusually dry condition of the ground, or because they have been well built and judiciously maintained?

Agricultural production can never be very much increased by treating the farmer as a school boy. The farmer's years of practical experience are generally a great deal more valuable than the theories of greater production advanced by men in other business.

The New Live Stock Council.

Agricultural organization is making rapid strides in Canada at present. There is no great flocking of untrained recruits to the banner, but the organizations we already have are consolidating themselves into a strong and effective force for the execution of their aims. In February last the sheep raisers of Canada organized a Dominion-wide association for the purpose of handling their wool so the manufacturers could be supplied with the product in proper form, and the growers in turn could demand market value. Nothing could be more equitable and since the Canadian Wool Growers' Ltd. is in good hands and is being supported by every province, it will be disappointing indeed if the sheep raisers of this Dominion do not profit very substantially through its existence.

Early in the present month a representative body of stockmen assembled in Toronto and cemented the various live-stock organizations into one powerful structure now known as the Canadian National Live-Stock Council. Heretofore we have had our record associations which exerted a considerable influence because they were financially self-supporting; the Western Canada Live Stock Union, operating west of the Great Lakes, has made itself felt because in it all the provincial organizations had vested power to act in their behalf. The Eastern Canada Live Stock Union, still a younger factor of similar make-up, has been forging ahead, so up to the present time both Eastern and Western Canada have gone as far as they could go separately in the great work of live-stock organizations. The Canadian National Live Stock Council, which is now the duly appointed cabinet of the Live Stock Parliament of Canada, is retained by nearly 14,000 breeders of pure-bred live stock; it is empowered to speak for the animal stocks owned by nearly 800,000 farmers, and in effect it represents an industry capitalized at one billion and fifteen millions of dollars, with no watered stock as we generally understand such. Surely this Council of eleven representative men should be heard, and farmers from ocean to ocean should render them moral and financial support.

Tell the People Who Own the Press.

In the 1917 session of the Federal Parliament, Col. Currie proposed that full publicity should be given to the power behind the press in Canada—that is that periodic publication of the names of shareholders, managers and editors of the various publications in this country be made law. The step was not taken. At the present session the Hon. Rodolphe Lemieux has brought up the same question. The plain people are talking about it on every hand. Many seem to think that we have a muzzled press in this country. Hints are sometimes made that influential papers are "bought up" or controlled by men of money for their own ends. In order to dispel such a fear and to clear up the whole situation, it would be better to have full publicity in regard to the powers operating the press. Some of our best dailies are coming out editorially in favor of the suggestion. The Canadian press, we believe, has nothing to cover up. If there is any paper or group of papers in such a predicament the people have a right to know about it. The press exists only for the good of the people. If they are asking about the ownership and control they should be given what they desire to know at once. Such a law would safeguard free speech if it requires any safeguarding in this democratic country. The Farmer's Advocate has long stood for full publicity in regard to ownership and management of the press. Surely no paper in Canada is so tied up with any "interests" as to object to the people having the fullest knowledge of its control. If the people want to know, let them.

Should Exhibitions be Abandoned?

In the Dominion Government Estimates for 1918-19 the appropriation for exhibitions is reduced from \$50,000 to \$25,000, and recently a member of parliament announced that he would introduce a resolution providing for the abandonment of all fairs in 1918. If such an idea should meet with any favor in the House, we should be inclined to believe that production is not very important after all, and that Parliament treats agricultural affairs in a manner altogether too flippant. Agriculture and production are now subjected to that unnecessary obstacle, "Daylight Saving," which means the waste of the best hour of the day on the farm, and the ridiculousness of this ruling will become more apparent as the season progresses. Any action which may lead to the discouragement of fairs will meet with universal disfavor, for they have become a tradition in the agricultural life of this country, as well as a remarkably effective medium for the dissemination of advanced or modern ideas. Any move to abolish them will strike at the very foundation of agriculture and take away from it a propelling force that makes for improved quality and increased quantity.

For nearly a century rural Ontario has had its "Fair Day" once a year, and this, in many cases, was the only holiday enjoyed during the busy summer and autumn. In the case of larger exhibitions, it requires almost a quarter century to put them on their feet and get them running smoothly. Any disturbance such as has been suggested will affect them unfavorably for years. Anyone with experience knows that an exhibitor of live stock must start one year or more ahead to prepare his entries so as to have the cows freshening at the most favorable date and the calves dropped so they can be entered in the classes where they may be shown to the best advantage. This is only one example to intimate what preparations must be made. Farmers will make any sacrifice that may help to bring victory to the Entente Allies, but they will object strenuously to legislation that will inflict hardships without resulting in a gain to anybody. The saving in feed would be negligible, for show animals come from pure-bred herds which are usually kept in moderately good condition all the time. Herdsmen say that the fitting of entries will entail little extra labor or feed. The actual work of staging the exhibition is contributed by a class of labor that might be termed more or less transient, so the essential industries do not suffer. Any move to discourage the holding of fairs should not be considered very seriously, for it is quite possible to interfere too much with the established order of things and decrease production without effecting any good.

Making Capital to Farm

We were talking with a man a few days ago who had left the farm and taken up other work in a Western Ontario city in his younger days. As is usual in such conversation at this time, the subject of farming came up for discussion. Our friend remarked: "I intend to return to the farm when I have sufficient capital to start on a fair basis." It occurred to us that we had heard that same expression several hundred times from several hundred different people. They all plan to return to the farm when they get sufficient capital to start. Surely farming is a queer business. Surely something is wrong with the economics of this country when it is necessary for the farm-bred and farm-raised boys to go elsewhere to get enough money to make a start in the business they like best and know most about. What is wrong with the farm? Men trained in other business can make a start in that business. Men trained on the farm leave for other business in order to make enough money to come back to their chosen calling and start on the farm. Surely farming must be at a disadvantage in the economic

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

Published weekly by
THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.

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

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday.

It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.

2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries, 12s., in advance.

3. ADVERTISING RATES.—Single insertion, 20 cents per line, agents. Flat rate.

4. THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.

5. THE LAW IS, that all subscribers to newspapers are held responsible until all arrears are paid, and their paper ordered to be discontinued.

6. REMITTANCES should be made direct to us, either by Money Order, Postal Note, Express Order or Registered Letter, which will be at our risk. When made otherwise we will not be responsible.

7. THE DATE ON YOUR LABEL shows to what time your subscription is paid.

8. ANONYMOUS communications will receive no attention. In every case the "Full Name and Post office Address Must be Given."

9. WHEN A REPLY BY MAIL IS REQUIRED to Urgent Veterinary or Legal Enquiries, \$1.00 must be enclosed.

10. LETTERS intended for publication should be written on one side of the paper only.

11. CHANGE OF ADDRESS.—Subscribers when ordering a change of address should give the old as well as the new P. O. address.

12. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve "The Farmer's Advocate and Home Magazine," Descriptions of New Grains, Roots or Vegetables not generally known. Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.

13. ADDRESSES OF CORRESPONDENTS ARE CONSIDERED AS CONFIDENTIAL and will not be forwarded.

14. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

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

system when such is the case. We simply raise this point that our readers may do a little thinking. Is farming fast becoming an expensive hobby for rich men, or is it, compared with other industries, not a paying business? Think it over and suggest a remedy.

The Telephone For Weather and Market Reports.

The rural telephone has been the means of improving social conditions and business relations all over the farming districts of Canada. It has saved dollars—thousands of dollars—to the producers in this agricultural country, and it has given the farmer and his family just one more of the conveniences which, in the past, made city life a little more attractive than country life. At the session of the Ontario Legislature recently brought to a close, some changes in the Telephone Act were made. The following clauses relating to receiving and transmitting weather bulletins will interest our readers:

1. It shall be the duty of every telephone company, its operators and agents, to whose central office the daily weather forecast bulletin issued by the Meteorological Bureau is delivered or transmitted, to receive the same and forthwith transcribe such bulletin legibly in writing or type on a form to be prescribed by the Board, and to file the same in said exchange, and to communicate, free of charge, the contents of such bulletin to any subscriber of such company requesting the same.

2. The Board may by Order or regulation direct any telephone company to whose central office the daily weather forecast bulletin is delivered or transmitted as aforesaid, to transmit the contents of the same to any connecting company whose operators and agents shall thereupon in like manner as in the previous subsection receive, transcribe and file the same, and communicate its contents free of charge to any subscriber of such last-mentioned company requesting the same.

Every farmer should know of these regulations, and should plan to make the fullest possible use of his telephone in order to get the latest Weather Bulletins which are furnished by the Meteorological Bureau to a majority

of the exchanges of the Bell Telephone Company in Ontario, which exchanges have connecting arrangements with approximately 500 rural telephone systems within the jurisdiction of the Ontario Railway and Municipal Board. Arrangements have been made whereby the Bell Telephone Company will furnish these daily weather forecasts to the rural systems, and the legislation referred to makes it incumbent upon the officials operating these systems to communicate, free of charge each forecast to any subscriber requesting it. Farmers are altogether dependent upon the weather. No other factor means so much to them. Very often a knowledge of the forecasts would be worth dollars in saving crops from rain or frost and in planning work generally. Make use of the telephone for weather reports.

We are pleased to note this important step in telephone service to farmers, and in doing so have just one suggestion to offer. The Dominion Government has made arrangements to secure, and is getting out, the best available market reports, but they do not reach the readers in time to be of greatest value. Could not something be done by which farmers could get daily, over their telephones, the latest prices on their nearest large market, say Toronto or Montreal, for such farm produce as butter and eggs, such stock as cattle, hogs and sheep, and such grains as wheat, barley and oats for instance? This would prove a boon to farmers generally. The men are already engaged by the Government to get these reports on the big markets. Surely arrangements could be made by which the farmer could get the daily reports in much the same manner as the weather reports have now been made available. We commend the Ontario Government for making the weather reports available. We also commend the Dominion authorities for their work in connection with the live-stock market reports, but the latter should be carried a step farther, and the reports should be made available to the farmer in a similar manner to that by which he may now get his weather forecasts.

World Benefactors.

Florence Nightingale.

The scientific mind of man has allowed itself to devise and perfect machinery for the wholesale slaughter of human beings, and in the past the war lords directed their efforts more to the art of effecting casualties in the enemies' ranks than to the preservation of life in their own battalions where disease, pestilence and infected wounds exacted a heavy toll. Under such conditions Florence Nightingale launched her campaign for the alleviation of human suffering on the fields of battle, and while armies fought against armies, and man against man, she led her corps of nurses against the forces of disease, infection, pain, suffering and sorrow. No one could accuse Florence Nightingale of commercializing her skill, or practicing her profession for the furtherance of her own aims. She exhausted her physical strength and permanently impaired her health in the Crimean campaign, where her philanthropic efforts made her name immortal. Few personalities have been so revered and no earthly name stands for a greater degree of self-sacrifice in the interests of mankind than does that of Florence Nightingale.

The heroine of this short story was, incidentally, born in Florence, on the 15th of May, 1820, but she was the daughter of William Edward Nightingale, Embley Park, Derbyshire, England. Her childhood days were chiefly spent in Derbyshire, and at this stage in her career she was noted locally for her great love of nature and the character of her play. Her love of nursing manifested itself early in life, for she was constantly bandaging her dolls and nursing them through imaginary periods of illness. Her first patient was a shepherd's dog, and from animals she passed to human beings, always presenting herself for service where one could help, and banishing pain or sorrow where her skillful hand or a kind word would avail. As she approached womanhood she devoted her whole time to the acquisition of knowledge concerning the art of nursing. She made thorough investigation at home where hospitals were then badly managed. In addition to this she travelled in France and Germany, and became acquainted with the latest in sanitation and hospital management. After her return to England she devoted herself to the re-organization of certain hospitals, and had the satisfaction of placing them on more satisfactory basis.

In 1854, England was shocked by a report of the deplorable conditions in the Crimea, where no preparation had been made to care for the wounded and dying. Even the commonest and most simple demands of a large army for medical attention and proper nursing had been neglected. The barrack hospital at Scutari was lamentably inadequate and miserably conducted. The English public grasped the situation and began to act at once. Florence Nightingale immediately offered her services, but her letter crossed one from the Secretary of War inviting her to proceed to the Crimea. She, with thirty-seven nurses, reached Scutari on the 4th of November, just in time to receive the wounded from Balaclava. A few days later six hundred casualties from the battle of Inkerman came under her attention. Soon she had ten thousand men under her care, and the

supervision of all the hospitals on the Bosphorus. To this task she applied herself, body and soul, and the story of her wonderful work in that theatre of war constitutes one of the brightest pages in English historical literature. Not only did her executive ability and skilful attention reduce the death rate from forty-two per cent. to around two per cent., but by day and night she visited the patients and cheered them with words of kindness. She herself was stricken with fever but refused to leave her post, and remained at Scutari until the British army evacuated Turkey, in July, 1856. England was aroused to indescribable enthusiasm over the achievement of Florence Nightingale, and a man-of-war was ordered to bring her home. She, however, took passage on a French boat and reached her country home in England before her return was announced. The terrible experiences in the Crimea permanently injured her health, but she was spared to many years of usefulness before her death, which took place on the 13th of August, 1910. Many improvements in the management of hospitals in England were due to the efforts of Florence Nightingale. It was believed, though not officially confirmed, that she submitted a valuable confidential report to the Government on the working of the Army Medical Corps in the Crimea, and to have been consulted at the time of the American Civil War and the Franco-Prussian War. The present marvellous efficiency of the Army Medical Corps and Red Cross organizations depends, to a large degree, on the stimulus given to improved nursing and care of the wounded by Florence Nightingale, whose name is considered almost sacred, not only where the British flag waves but in all countries of the world where self-sacrifice is a virtue and kind words for those in pain or sorrow emanate from a sympathetic heart. She was honored by her King, but the plain and simple name of Florence Nightingale, unencumbered by title, will live centuries after the memory of lords and ladies has faded from the minds of her countrymen.

Testing.

BY ALLAN MCDIARMID.

During the past winter a good deal of discussion has been going on in some of the farm journals in regard to the official testing of dairy cows. The argument was chiefly as to which was the more valuable, the seven-day test or the Record of Performance work, which takes a full year. Opinions were pretty evenly divided on the matter, and it's a question if the ideas of anyone who read all the letters that were written, were changed to any great degree. The dairyman who has a cow that makes a better showing in a seven-day test than in the yearly work naturally stands up for that system, while the man who has a cow that inclines to keep up her production for ten or twelve months will favor the long R. O. P. test. Some of the writers suggested reducing the time of the test to ten months, and I think it would be a step in the right direction. It shows a tendency towards moderation.

It has always seemed to me that there was a weak spot in our methods of cow-testing as they are generally carried on. There is a straining after records that overlooks everything but that one object. The health of the cow, the practical utility of the test, and the wrong impression given as to a particular cow's ability to continue producing up to the high-water mark reached in the test, all are lost sight of. The real purpose of these tests in the minds of many breeders is, I believe, to crowd and force some of their cows into making remarkable records in the way of milk and butter, to advertise these records, and then hold an auction sale, or, if not that, to charge fancy prices for the offspring of any of these animals which they may dispose of by private sale. What has been termed a "fictitious value" has been put upon these animals by means of a trial of production made under abnormal conditions.

I read a pamphlet recently, said to be written by an expert in the business of preparing cows for, and running them through, an official test. A good deal of his advice would have been thought worse than foolish by the breeders and feeders of dairy cows a generation ago, and it seems to me quite possible that the stockmen of the future will hold a similar opinion about it. In the first place, he says, in preparing a cow for the test one should aim to put all the fat they can on them in the shortest possible time. He says he had a cow that gained one hundred pounds in one week. The idea of getting so much soft fat on them is, of course, to make possible an abnormally high production of butter-fat for the short period in which it is being "milked off their backs," as they say. This plan is adopted particularly for the seven-day test. The result is a poor quality of butter, for the reason that it is composed largely of tallow, due to the body-fat of the cow finding its way into the milk pail. Of what particular value is a record made in this way to the practical farmer who wants to know what the cow he buys will do in the course of a year, and what she is likely to do every year, for that matter?

Then our expert goes on to say that during this milking period a cow will require thirty pounds of grain a day, besides, of course, her silage and hay. In addition to this she should get forty pounds of roots. If she shows any signs of going off her feed the ration should be reduced for a short time. He says he has given some cows as high as one hundred pounds of beets a day while they were on test. He has also fed as high as four bushels of potatoes a day to a certain cow that seemed to have a taste for them. That this was not very profitable we must suppose from the fact that he tells us that her milk was unfit for use during the time she was being forced by this means. Another method he recommends for preventing indigestion is to lead the

cow around for had her constitu

Now the imp stand this pace, good as the aver way. Sooner or Such feeding in line, and is com breaking of the can speak from subject. Having test a little over according to the along very well f cows developed u known as a slack formed and brok ever since. The fied all right, but she cannot be quantity of milk me simply a case and Nature exact the balance. An official testing i goes with it. I are to have any invest in high-gr they will do for should be made b only. No farmer or any other time cows four times a by it. It would b seriously. That f reasonable thing t it necessary for t to normal conditi this country?

We farmers cla but if this system ing, that is practi of dairy cattle, is to the industry, it upon further evid As purchasers exactly what we a stock we want our their bargains that wants that we can business, but anyt

Among the mar and garden there a than the cut-worm come and eat hole but what renders ticularly aggravati plant for the sake gets in the proces tantalizing feature is that they so freq been set out—pla tomato, which we h seed, plants which and thinned out, u specimens. Then a them to the garden the night, and in th the majority, of the

Cut-worms are t the family Noctuid or Owlet Moths. of this family. All a brown or brownish the moths which a "Dusty Millers," a lights on summer e worms.

The different sp in their life-historic season and others tw state, some in the la winter in the egg. feeding habits. Th plants just at, or ju feed on roots, etc. others climb plants some species when fashion of the true A

The larvae are s inch and a half in greenish-gray or gra greasy-looking. Th variously, though u Thus the Spotted C marks along the ba worm has a series o back, the striped Cu with dark brown do Cut-worm has a pal three yellow lines a The eggs of all sp and herbs. They a female lays from a most species they a mer. After hatchin they are full-grow, eathern cells, and ch usually in about two Cut-worms may

cow around for exercise. One individual he mentions had her constitutional of a mile walk every day.

Now the important question is, how long can a cow stand this pace, even if her digestive apparatus is as good as the average of her kind? Not indefinitely anyway. Sooner or later, she will show the bad effects of it. Such feeding is running too close to the danger line, and is contrary to all nature's laws. And the breaking of these laws is the sure road to trouble. I can speak from first-hand and bitter experience on this subject. Having put a couple of cows in the R. O. P. test a little over a year ago, I proceeded to feed them according to the formula of the experts. Things went along very well for a couple of months, when one of the cows developed udder trouble, and to-day she has what is known as a slack quarter. Not only that but a bealing formed and broke, and has been running intermittently ever since. The other cow pulled through and qualified all right, but this year, in spite of the best of care, she cannot be made to produce more than half the quantity of milk that she did a year ago. It seems to me simply a case of over-production for a short period, and Nature exacting the penalty and trying to restore the balance. Another thing in connection with this official testing is the impractical system of milking that goes with it. If these records that are being made are to have any real value for the man who is going to invest in high-grade stock and wants to know what they will do for him under ordinary conditions, they should be made by cows that were milked twice a day only. No farmer in these times of hired-help scarcity, or any other time, for that matter, is going to milk his cows four times a day for any extra profit he may make by it. It would be slavery, and no farmer thinks of it seriously. That fact being admitted, would it not be a reasonable thing to ask for legislation that would make it necessary for those doing official testing to conform to normal conditions obtaining on the average farm in this country?

We farmers claim, above all things, to be practical, but if this system of forced feeding and frequent milking, that is practiced by many of our leading breeders of dairy cattle, is of any real use or any lasting benefit to the industry, it will be believed by some of us only upon further evidence than we have yet received.

As purchasers of pure-bred stock we want to know exactly what we are getting, and as sellers of this same stock we want our customers to be so well pleased with their bargains that they will return as often as they have wants that we can satisfy. This is no more than good business, but anything less is not business at all.

Nature's Diary.

A. B. KLUGH, M.A.

Among the many insects which are pests in the field and garden there are none which are more aggravating than the cut-worms. It is bad enough when insects come and eat holes in leaves or devour whole plants, but what renders the work of the cut-worm so particularly aggravating is the fact that it destroys a whole plant for the sake of the little ring of tissue which it gets in the process of cutting it down. The second tantalizing feature about the activities of cut-worms is that they so frequently attack plants which have just been set out—plants of cabbage, cauliflower, and tomato, which we have carefully raised from early-sown seed, plants which we have watched over, and watered and thinned out, until they have become fine, strong specimens. Then after we have carefully transplanted them to the garden, the cut-worms come along during the night, and in the morning we find many, sometimes the majority, of the plants lying wilting on the ground.

Cut-worms are the larvæ, or caterpillars, of moths of the family Noctuidæ, otherwise known as the Noctuid or Owlet Moths. There are a vast number of moths of this family. All are stout-bodied, and they are mostly brown or brownish-gray in color. A large number of the moths which are commonly termed "Millers" or "Dusty Millers," and which are so abundant about lights on summer evenings are the parents of the cut-worms.

The different species of cut-worms vary a good deal in their life-histories. Some have but one brood in a season and others two broods. Some winter in the adult state, some in the larval state, but the majority pass the winter in the egg. They also vary considerably in their feeding habits. The majority of the species cut off plants just at, or just above, the level of the soil; some feed on roots, etc., beneath the surface of the soil; others climb plants and feed upon their leaves, and some species when abundant march along after the fashion of the true Army Worm.

The larvæ are smooth caterpillars, usually about an inch and a half in length when full grown. They are greenish-gray or grayish-brown in color, and are usually greasy-looking. The larvæ of different species are variously, though usually somewhat obscurely, marked. Thus the Spotted Cut-worm has a series of elongated marks along the back (see fig. 2), the W-marked Cut-worm has a series of blackish W-shaped marks on the back, the striped Cut-worm has a pale stripe margined with dark brown down the centre of the back, the Black Cut-worm has a pale, yellow line down the back and three yellow lines along the sides.

The eggs of all species are laid on the leaves of shrubs and herbs. They are deposited in clusters, and a single female lays from a hundred to a thousand eggs. In most species they are laid in early summer or in mid-summer. After hatching, the larvæ feed and moult until they are full-grown, when they enter the soil, make ethern cells, and change to pupæ, emerging as moths usually in about two weeks.

Cut-worms may be combatted in three ways—pre-

vention, protection and destruction. The most effective method of prevention is the elimination of the eggs by burning all old tops and weeds in gardens and fields. The best method of protection for plants which are set out is to place a collar of stiff paper around each plant, allowing the collar to project two inches above the soil and to be embedded two inches in the soil.

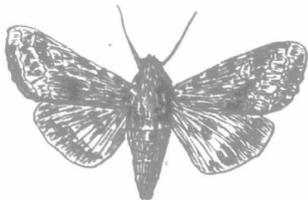


Fig. 1—Moth of yellow-headed cutworm. (Hadena arctica). Nat. size.

The most effective method of destruction is by poisoned bait. This bait is prepared as follows: Moisten fifty pounds of bran with two gallons of water in which half a pound of sugar has been dissolved. Mix in half a pound of lead arsenate, stirring very thoroughly. This bait must be scattered in the evening, since it is essential for success that the bait be moist, as otherwise the cut-worms will not touch it. The effectiveness of this poisoned bait has been clearly proved at the Central Experimental Farm, by Mr. Gibson, who found from eight to seventeen dead cut-worms round each plant, about which the bait had been scattered.



Fig. 2—Spotted cutworm full-grown larva. Nat. size.



Fig. 3—Spotted cutworm in characteristic curled-up attitude.

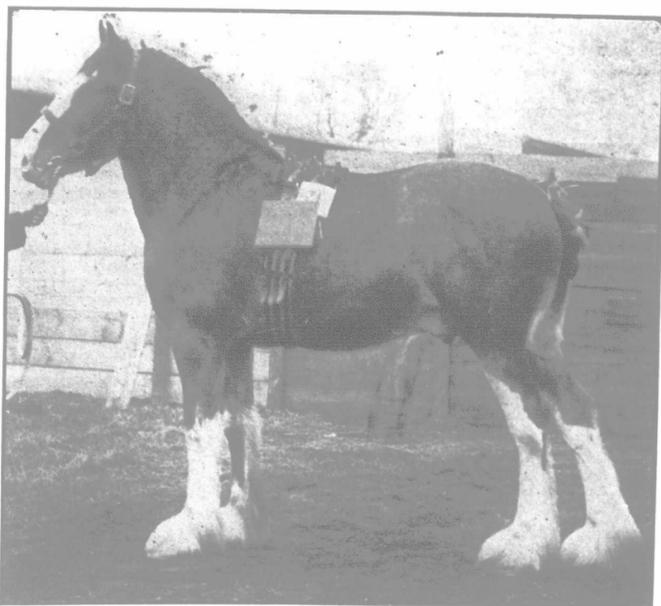
In the case of plants which have been cut down, if the soil is carefully turned over for about two inches round the plant, the perpetrator of the outrage will usually be found curled up in the characteristic attitude shown in fig. 3.

THE HORSE.

Veterinary Prescriptions for Farm Use.

Tonics.

Tonics are medicines that gradually, but reasonably permanently improve appetite and general vigor. They give tonic to the secretive glands of the digestive tract and the accessory organs of digestion, regulate the secretion, hence tend to aid digestion, which is ac-



Dunure Expression.

Three-year-old winner of the Glasgow premium, 1918.

complished or followed by increased appetite and general vigor. Tonics are indicated in a run-down state of the system, due to lack of appetite or non-assimilation of the food, or both, dry, staring coat, and general unthriftiness. Especially in horses, when symptoms of this nature are observed, it is wise to have the teeth examined by a veterinarian, and, if necessary, dressed. Even in quite young horses unthriftiness is often due to inability to properly masticate, and, while in such cases it is good practice to follow the removal of the cause with a course of tonics, it can readily be understood that the administration of such cannot be success-

ful until the cause has been removed. The cause of unthriftiness in colts between two and a half and three years, and between three and a half and four years of age, often is failure of the crowns of the temporary molars to shed. In the younger animals the first two in each row, and in the older ones the third tooth in each row, are those that are at fault. In older animals and rarely even in the young ones, the cause is sharp points on the molar teeth scarifying the tongue and the cheeks, or possibly a long tooth that requires shearing, or a decayed tooth that requires extraction. Allow us to repeat: "It is always wise to have the teeth of an unthrifty animal, especially a horse, examined and if necessary dressed." For horses and cattle, the following makes a good general tonic:

Powdered sulphate of iron,
Powdered gentian,
Powdered ginger,
Powdered nux vomica; of each, 3 ounces.

Mix and make into twenty-four powders. Give a powder three times daily. The results of the administration of tonics are not quickly noticed. It is generally necessary to continue their administration for two weeks or longer. The above prescription can be repeated as often as necessary. For the smaller animals the same prescription, given in doses proportionate to the size of the patient, can be used with success. Practitioners often use the tinctures of the various drugs, but for the amateur it is probable that the powders are the better.

Vermifuges and Vermicides.

Vermifuges are medicines that cause the expulsion of stomachic or intestinal worms, but do not necessarily cause their death, while vermicides cause the death of the parasites. As the action is practically the same we will not discriminate. For the removal of round worms from the digestive tract of horses and cattle, the following gives good results and is safe to use:

Powdered sulphate of iron,
Powdered sulphate of copper,
Tartar emetic; of each, 3 ounces.

Mix and make into twenty-four powders. Give a powder every night and morning, and follow the administration of the last by a purgative. Some add to this prescription, calomel in about forty-grain doses, which acts well, but the prescription usually gives good results without it, and, as it is not uncommon for druggists to refuse to put up the prescription when it contains this compound of mercury, telling the patron in some cases that "One dose would kill the horse," we usually now omit it, in order to prevent trouble of this kind.

The above prescription in proper doses also acts well in cases of round worms in sheep or pigs, but as it is usually hard to get each patient to consume its proper proportion, we usually prescribe oil of turpentine as a vermifuge for these. For the purpose, one part of oil of turpentine is mixed with seven parts of new milk and well shaken. The animals, having been starved for about sixteen hours, are then given two to four tablespoonfuls, according to size, and in many cases it is wise to repeat the treatment in ten days or two weeks, and

in rare cases the third treatment is necessary, as a fresh crop of worms may hatch out after all living ones have been expelled. This treatment is also effective in most cases of tape worm, even in the larger classes of animals, the dose being in proportion to the size of the patient. After treating for worms, it is good practice to keep the patients confined for a few hours, and gather and destroy all the worms that are expelled. This applies particularly to tape worms, as each segment contains very many larvæ, and, if these are consumed by an animal, there is great danger of further trouble at a later date.

For tape worm in dogs and cats, powdered areca nut is really a specific. Why this should give better results for this purpose in these than in other classes of animals, we cannot say, but our authorities on Veterinary Materia Medica tell us that it is so, and experience teaches us that they are correct. The dose is about two grains of the powdered areca nut to each pound of the patient's weight. The patient should be starved for about sixteen hours, the powder mixed with a little new milk, or put into a capsule, and administered. The patients should be confined for a few hours, and all worms that are voided should be gathered and burned.

WHIP.

No one can blame the laborer for going where he can get the best job. The point which must be remembered is that conditions should be such that farm work would appeal to him as strongly as city employment. Re-adjustment of wages and work would be necessary.

LIVE STOCK.

Car Lot Policy of the Live Stock Branch.

EDITOR "THE FARMER'S ADVOCATE":

The following revised statement of the Car Lot Policy will become effective May 1, 1918, and will replace all statements with regard to same previously issued.

Under this Policy the Dominion Live Stock Branch will pay reasonable travelling expenses of a farmer residing in Canada, or authorized agent of farmers residing in Canada, who purchase one or more carloads of breeding stock under conditions as hereinafter set forth:

1. Assistance under the Policy will be confined to purchases of female breeding stock (cattle, sheep or hogs) made at the Union Stock Yards, Toronto; Point St. Charles Stock Yards, Montreal; or the East End Yards, Montreal.

2. No assistance under this Policy will be allowed when the stock is purchased for speculative purposes.

3. A car lot shipment must include not less than twenty head of cattle, forty sheep or forty hogs. In a mixed shipment, two sheep or two hogs will be accepted as equivalent to one head of cattle in fixing the minimum for one car.

4. Any person desiring to take advantage of the Policy must make formal application to the Representative of the Branch at his nearest stock yards, and, before commencing to purchase, must receive from him a certificate authorizing assistance under the Policy. This certificate will indicate the stock yards at which the purchase must be made if the benefit of the policy is allowed. In all cases the certificate will direct the purchaser to his nearest stock yards, unless, in the judgment of the Representative of the Branch, the condition of the market at the time warrants an exception being allowed.

5. Expenses will be allowed covering railroad transportation from the home of the purchaser to the stock yard at which the purchase is made, also hotel expenses for a reasonable time required to make the purchase.

6. The purchaser should secure a receipt for his hotel expenses, and should attach this receipt to his account. The account should be forwarded in triplicate on forms which will be supplied for the purpose.

7. The purchaser is further required when forwarding his account to include on forms supplied by the Branch a statement regarding the purchase. The certificate secured from the Representative of the Branch previous to purchasing should also be attached to the account.

8. Parties purchasing female breeding stock under the terms of the Car Lot Policy and who comply with the terms of the Free-Freight Policy of the Branch will be entitled to the benefit of both policies on one shipment.

9. If desired by the purchaser, the services of the Representative of the Branch at the market will be available in an advisory capacity. The actual purchasing must be done, however, by the buyer himself or by his authorized agent. Under no circumstances will any responsibility in this connection be assumed by any officer of the Branch.

The Markets Representatives of the Branch at the different stock yards in Eastern Canada are as follows: W. H. Irvine, 1127 Keele St., Toronto, Ontario; S. H. Chipman, Live Stock Exchange, Bridge St., Montreal, P.Q.

Live Stock Commissioner. H. S. ARKELL.

Live Stock in England and Wales.

The official figures regarding live stock in England and Wales in 1917 have just been published by the Board of Agriculture. They were collected in June last. Many changes in our system of agriculture have brought about alterations in our number of commercial farming stocks, but, generally speaking, we stand where we have always been—on quite safe ground.

The total number of horses on agricultural holdings in 1917 was 1,372,822, an increase of 13,256, or one per cent. over the number returned in 1916. With very few exceptions every county in England and Wales contributed to this increase. Actual agricultural horses showed an increase of 3 per cent. on the year. The number of foals returned in 1917 was 101,362, a decrease of 5,415, or 5 per cent., as compared with 1916. The decline was general throughout the country, but the diminution was mainly in light horses. Among stallions there was a decided increase in heavy weights, the light stallions showing a falling off. The number of unbroken horses one year old and over, was 228,992, an increase of 19,078 over the figures of 1916.

The total number of cattle returned in 1917 was 6,227,118, a small increase of 11,367 as compared with 1916, but 447,196 below the average of the preceding 10 years. This is the lowest number returned in England and Wales since the statistics were first collected. The total milk yield in 1917 was larger than that of 1916. It was 1,146,791, or an increase of 6,112, and 19,968 more than the average of the 10 years of 1907-1916. The principal increases were in the northwest division, where the almost pure-bred Ayrshire Shorthorn predominates. The reason for this increased number of dairy cows was that farmers have begun to buy back with their first sale.

The total number of sheep returned in 1917 was 17,169,887, a decrease of 754,340, or 4 per cent., as compared with 1916. The total number of ewes compared in the West Midlands, where there was a fall of 116,000

head. The number of ewes kept for breeding decreased 175,078 on the year and, of course, that reduction was accompanied by a decrease in the number of lambs. The total number of 1917 lambs was 6,734,308, a deficit of 572,747, or nearly 8 per cent. below the 1916 figures. This is 830,018 below the average of the preceding 10 years and is the smallest number recorded since 1882, when the total number of lambs was 6,407,811.

The number of pigs again showed a decline, being 11 per cent. less than the aggregate of 1916. The full return was 1,918,541, a decrease of 249,400. The number of sows kept for breeding purposes was 254,291, a falling off of some 28,706 as compared with 1916. This decrease was general throughout the country.



A Winning Cotswold Ram.

Champion at Toronto and London for Norman Park, Norwich, Ont.

It should be explained that the reason for the falling off in sheep was due to a large increase in cultivated arable land and a considerable decrease in the acreage of permanent grass, brought about by the necessity of war-time production. The areas under wheat, barley and oats showed considerable increases; likewise under potatoes, turnips, swedes and other roots. ALBION.

Former Standards For Measuring Milk Values.

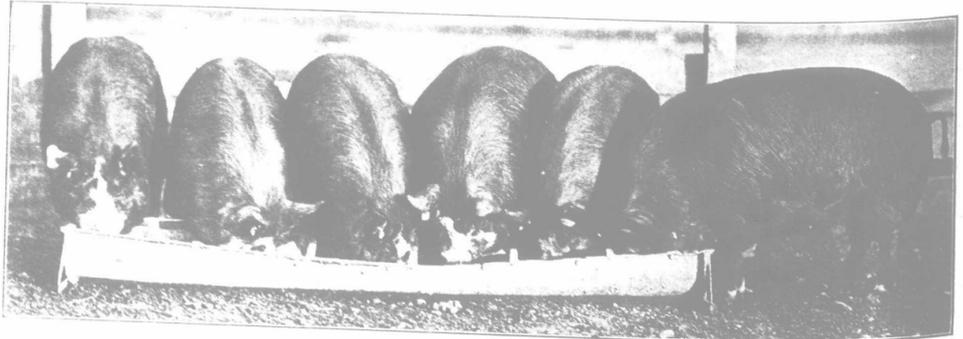
EDITOR "THE FARMER'S ADVOCATE":

An article in your issue of March 7, entitled "The Value of Milk By-products in Hog Production," quotes several authorities in regard to the value of skim-milk and buttermilk. My idea is that the Hoard and Gurler methods place too high a value on milk. I started in the cheese business in the year 1873, and continued in it without intermission until 1900, total 27 years. Part of that time the late D. MacPherson, of Lancaster, was in partnership with me, and we had 66 factories in the combination, the largest combination in Canada at the time. I managed the Quebec end of the business, and he the Ontario part of it. The best authorities at that time placed the value of whey equal to that of 1 lb. of pork, and skim-milk and buttermilk at 2 lbs., or just double of the price of whey. Now at Montreal in the same issue of your paper, pork was quoted at \$28 to \$28.50 per 100 lbs., and at that price whey per 100 lbs. would be worth 28 cents, and skim-milk or buttermilk about 55 cents for pig feeding.

I do not think it is advisable to feed too much of either whey or milk, to young pigs especially. I see that you advise pasturing them during the summer season, and I think there is nothing better than oats and vetches; oats and peas also make a good crop. It is a good idea to slow clover with the mixture of oats and vetches, and the following year you will be surprised at the harvest, you will have perhaps 2½ to 3 tons per acre where you have pastured your pigs during the season.

Just imagine 213½ cents a lb. for cheese, when I sold cheese in Montreal in the seventies for 5½ to 5¾ cents a lb., and the highest price I ever sold cheese at was 13 cents, and then the farmers thought they were doing extra well.

I see where lately there are some cheese factories installing the cheese vats so that the whey can be pasteurized to improve it. I had several factories



A Bunch of Well-fed Berkshires.

about 35 years ago arranged with steam pipe connected with the boiler, and when the whey was run off at 98 degrees the steam was then run into the whey tank and the contents heated up to 150 to 155 degrees. The whey was improved and the farmers were so anxious to get it that we had to put a boy on the whey tank or they would take more than their share. To cover the cost of the extra wood for heating the whey the patrons contributed 10 cents per cow, and this was found sufficient to pay for same.

We have had a very severe winter here this year since December last until now, end of March, four months of it, and more than half of that time down below zero. The salt air from the sea with a gale of wind blowing makes it very much colder than you have it in Ontario, even when you have 20 to 25 degrees below zero. We have had a snow fall of some 9 feet, but I think it is over for this year. Hay is very scarce in this Province, and so is millfeed of all kinds. Usually when we have had a heavy snow fall, the crops are very good. We are anticipating a greater production than formerly. Many lawns were broken up last year, and I think most people were surprised at the bountiful harvest they had where they cultivated it as it should be, and more will follow the example set them last year. It is an old saying and a very true one that "God helps the man who helps himself." If he manures the ground, plants and cultivates the soil, mother earth will do her part. God will send the rain and sunshine and most people will be pleased to see the results of their labors.

Pictou Co., N. S.

P. MACFARLANE.

THE FARM.

The Crop Situation in Canada.

BY ERNEST H. GODFREY, F. S. S.

In the present critical condition of the world's food supplies, it is worth while reviewing the recent agricultural progress of the Dominion of Canada and attempting to ascertain what are the possibilities of further development in the immediate future, especially with regard to the production of wheat.

Progress During the Present Century.

According to the census of 1901, Canada, with a population not exceeding 5,322,000, had, in 1900, field crops under cultivation of about 19.8 million acres, of which 4.2 million acres were wheat, 5.4 million acres were oats, and 6½ million acres were hay and clover. For the same year, in a poor season, the total production of wheat was about 55½ million bushels, of oats 151½ million bushels, and of hay and clover 7.8 million tons. Canada then occupied only the ninth place amongst the countries of the world for total wheat production, the relative order in size of the wheat crop being as follows: 1, United States; 2, Russia; 3, France; 4, British India; 5, Austria-Hungary; 6, Italy; 7, Spain; 8, Germany; 9, Canada; 10, Roumania; 11, Argentina, and 12, Great Britain. In 1910, when the population of Canada had increased to 7,206,000, the total area under field crops was 34½ million, of which 8.8 million acres were in wheat, 8.6 million acres were in oats, and 8.3 million acres were in hay and clover. For this year, when the season was again a poor one, the total wheat production was about 132 million bushels, oats yielded 243.5 million bushels, and hay and clover 11.3 million tons. During the decade 1900-1910, Canada had climbed from the ninth to the sixth place amongst the world's wheat producing countries. Five years later, in 1915, the season following the outbreak of the war, with an estimated population of 7,928,000 Canada had under field crops a total area exceeding 37 million acres, of which 15.1 million acres were wheat, 11.5 million acres were oats, and 7.8 million acres were hay and clover. In this year, which will long be remembered for the wonderful coincidence of circumstances favorable to the growth of grain, the total production of wheat exceeded 393.5 million bushels, oats 464.9 million bushels, and hay and clover 10.6 million tons. Last year (1917), with efforts to increase production unrelaxed but handicapped by insufficient labor and a poor season, both for seeding and growth, the total area under field crops was 42.6 million acres, the highest yet reached. The total yield of wheat was 233.7 million bushels from 14¾ million acres, of oats 403 million bushels from 13.3 million acres, and hay and clover 13.6 million tons from 8.2 million acres. The largest area sown to wheat in Canada for a single year was 15.4 million acres in 1916; but the yield was so greatly reduced by the outbreak of

rust that it

poor season of
Comparing
wheat and o
century, we fi
1900 and 1915
million acres f
centages respec
and 1915, the
million acres fo
acres for oats o
acreage reveal
especially wher
the 3 million
the years 1901
on the land.

Perhaps, ho
the people of
comparing the
three crops abo
tion. The resu

Year	Field Crops	Acres	Acres
1900	3,713	7	
1910	4,794	1.2	
1915	4,937	1.9	
1917	5,095	1.7	

It will be s
under field crops
increased during
not less than 1
1917. For whe
tion were in 19
population was
the production
in 1900. For o
was 58,647 bush
with 28,485 bush
clover do not sh
yield of 1917, w
Eastern Canada,
tion, as compar
the acreage unde
due to the latene
ers to sow other

Exp
The following
and value of wh
during each of th

Crop	Value
Wheat
"
Oats
"
Barley
"
Hay and clover
"

From being ni
in order of whea
the third place, a
only by the Unite
estimated value o
creased from \$55
1917, that is to
years has practica

Prospects

With areas su
unlimited extent,
portation to the
appealed to by th
the production of
issued an appeal
he states that the
possibility of exag
that the farmers
to meet the deman
coming season do
the wheat area.
success in this d
half of the land i
ploughed in the fa
for the whole of C
largest wheat grow
40 per cent. of th
proportion was larg
years.

There was a c
wheat, which was
of the soil in the fa
latest reports indic
too well, but as th
small proportion o
the character of t
been exceptionally
snow should prov
crops. Present in

rust that it did not much exceed that of the equally poor season of 1917.

Comparing the progress made in the production of wheat and oats since the beginning of the present century, we find an increase in areas sown as between 1900 and 1915 of 10.9 million acres for wheat and of 6.2 million acres for oats, these increases representing percentages respectively of 257 and 115. As between 1910 and 1915, the increases for these two crops are 6.3 million acres for wheat, or 72 per cent., and 3.3 million acres for oats or 39 per cent. The expansion of the sown acreage revealed by these figures is very remarkable, especially when we remember that a large proportion of the 3 million immigrants who entered Canada during the years 1901 to 1915 settled in the towns instead of on the land.

Perhaps, however, a clearer view of the effort of the people of Canada to produce grain is afforded by comparing the proportions of area and yield of the three crops above mentioned per 1,000 of the population. The result is as follows:

Year	Field Crops		Wheat		Oats		Hay and Clover	
	Acres	Bush.	Acres	Bush.	Acres	Bush.	Acres	Bush.
1900	3,713	10,442	1,008	28,485	1,229	1,175		
1910	4,794	18,325	1,200	33,792	1,149	1,568		
1915	4,937	27,596	1,457	58,647	993	1,338		
1917	5,095	27,596	1,592	48,201	983	1,636		

It will be seen from this statement that the area under field crops per 1,000 of the population has steadily increased during this century, this increase representing not less than 1,382 acres in the eighteen years 1900 to 1917. For wheat the maximum acreage and production were in 1915, when the acreage per 1,000 of the population was 1,906 as compared with 794 in 1900, and the production 47,465 bushels as against 10,442 bushels in 1900. For oats, in 1915, the production per 1,000 was 58,647 bushels, and the acreage 1,457 as compared with 28,485 bushels and 1,008 acres in 1900. Hay and clover do not show an equal expansion of area, but the yield of 1917, which was an exceptionally good year in Eastern Canada, was 1,636 tons per 1,000 of the population, as compared with 1,475 tons in 1900. In 1917 the acreage under wheat shows a falling off, this being due to the lateness of the spring, which compelled farmers to sow other crops instead of wheat.

Expansion During the War.

The following is a statement of the area, production and value of wheat, barley, oats and hay and clover during each of the last three years, 1915, 1916 and 1917:

Crop	Year	Area	Yield	Value
Wheat	1915	15.1	393.5	356.8
"	1916	15.3	262.8	344.1
"	1917	14.7	233.7	453.0
Oats	1915	11.5	464.9	171.0
"	1916	11.0	410.0	211.0
"	1917	13.3	403.0	277.1
Barley	1915	1.7	54.0	28.0
"	1916	1.8	42.7	35.0
"	1917	1.7	54.0	28.0
Hay and clover	1915	7.8	10.6	152.5
"	1916	7.8	14.5	168.5
"	1917	8.2	13.7	141.4

From being ninth amongst the countries of the world in order of wheat production Canada has now risen to the third place, and in total yield of wheat is surpassed only by the United States and British India. The total estimated value of the field crops of Canada has increased from \$552,771,500 in 1913 to \$1,144,636,450 in 1917, that is to say, their value during the past four years has practically doubled.

Prospects for the Immediate Future.

With areas suitable for wheat-growing of almost unlimited extent, and with abundant facilities for transportation to the seaboard, Canada is being urgently appealed to by the Allies for still greater exertions in the production of food. Sir Robert Borden has just issued an appeal for greater food production in which he states that the "crisis is grave and urgent beyond possibility of exaggeration." All reports tend to show that the farmers of Canada will endeavor strenuously to meet the demand, and it will not be their fault if the coming season does not result in a great expansion of the wheat area. What are the present indications for success in this direction? In the first place, about half of the land intended for seeding this season was ploughed in the fall, a proportion well up to the average for the whole of Canada; but in Saskatchewan, now the largest wheat-growing province, and in Alberta, nearly 40 per cent. of the land was fall ploughed, and this proportion was larger than in either of the two previous years.

There was a decrease in the area seeded to fall wheat, which was owing to the hard and dry character of the soil in the fall wheat districts of Ontario, and the latest reports indicate that the crop has wintered none too well; but as the area sown to fall wheat forms only a small proportion of the total, more will depend upon the character of the coming season. The winter has been exceptionally severe, but the melting of the deep snow should provide ample moisture for the growing crops. Present indications are for an early spring,

which will be a welcome change from two successive late ones. On the other hand, farmers are faced with the scarcity of farm help, which each year since the outbreak of the war has become more acute. An indication of the labor difficulty is afforded by the large increase in farm wages since 1914. The average wages, with board, during the summer season for males, which were \$35.50 per month in 1914, rose to \$63.63 in 1917, and the average cost per month of boarding laborers increased from \$14.25 in 1914 to about \$19.50 in 1917. To overcome this difficulty, at least in part, arrangements are being made for the supply of mechanical tractors by the use of which it is hoped that a large increase will be made in the areas sown to wheat and oats. In the ingathering of the crop efforts will again be made to organize economically the migration of temporary labor, and the assistance of school boys is

the due provisionment of their troops in the field. These anticipations may be too sanguine, but in the writer's opinion they are not impossible of realization if circumstances should prove favorable. The question as to the extent to which the food requirements of the Allies can be met by the Dominion of Canada will be followed with deep interest as the coming season progresses from seed-time to harvest.

Three and Four-horse Eveners.

I would be pleased to see a diagram of a three-horse doubletree, for use with the tongue, published in "The Farmer's Advocate." I would like to use three horses, and am at a loss to figure out the measurements of a doubletree that would work satisfactorily. W. J. E.

The accompanying illustrations show a three-horse doubletree for use on a tongue, and also a number of other styles of doubletrees for using three and four horses on the farm implements. Where labor is scarce horse-power can very often be used to make up for what is lacking in man power. Three and four-horse teams are quite common on Ontario farms. One man can handle three or four horses quite easily. While this sized team will handle a wide implement, they can also be hitched to the two-horse sized implements and allowed to walk along quite freely without tiring. Where the small implements are used it is becoming common to hitch one implement behind the other; for instance, we have seen the harrows hitched behind the cultivator, also behind the seeder and behind the roller. Thus once over the field with the team and man accomplishes two purposes in practically half the time that it would take if the implements were used singly. Of course, where the wide harrows and cultivator are used they are possibly enough in themselves for three or four horses. Another way of securing good cultivation with the smallest amount of man power is to use the double cut-away disk. If one of these implements is not already on the farm, a substitute for it can be made by attaching a throw-in disk behind a throw-out, or vice versa. A short tongue would have to be put in the rear disk. It sometimes happens that a disk can be secured quite reasonably at a sale that can be used behind the present disk on the farm. The illustration showing the doubletrees on the tongue can be used with a reasonable amount of satisfaction, although it is claimed that there is a slight side draft. This type of evener can be used on the wagon when heavy loads are being drawn. The measurements are given on the illustration. By utilizing large implements or doubling up the small ones one man can accomplish practically as much at spring cultivation, working the summer-fallow or fall plowing, as can two men with a two-horse team each. Several different types of eveners are herewith published. Some are more suitable for one type of implement than another. It may be necessary to adjust some of these eveners somewhat to make them fit a particular implement which you purpose using them on. Some of these types of eveners are furnished by the implement manufacturers with the farm machinery, or the whippetrees from certain implements can be combined with others when making up a set for a four-horse hitch. In making eveners it is necessary to construct them according to the mathematical principle which involves the law of leverages. For instance, where two horses are drawing against one it is quite obvious that the single horse should be attached twice as far from the point of draft as the two horses against which it is pulling; or, in other words, the two horses should have one-third of the doubletree and the single horse two-thirds. This is plainly illustrated in Figure 1, which is a common three-horse evener. The dimensions are given on the illustration. This evener will work on a plow, harrow, etc., and can be used on the implements which have tongues that can be moved to one side of the machine. The majority of drills and cultivators are so constructed that the tongue can be used in the centre for two or four-horse hitch, or can be moved so a three-horse team can be worked. Figure 2 illustrates an attachment for three horses which has given very good satisfaction. It is frequently used on implements where the tongue is replaced by large shafts. The draft is equalized fairly well. The measurements are given in the illustration of an evener to be used on a tongue. The four-horse evener is not difficult to construct, as it is simply a matter of securing a large doubletree and attaching two ordinary doubletrees to it.

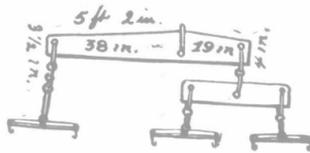


Fig. 1—A common three-horse evener.



Fig. 2—A satisfactory evener where a tongue is not used.

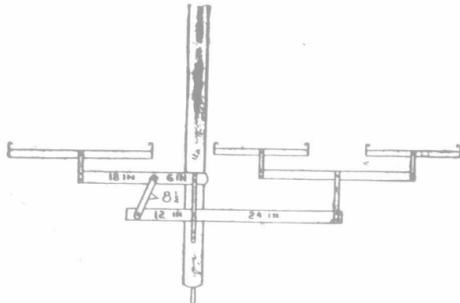


Fig. 3—Three-horse evener for tongue.

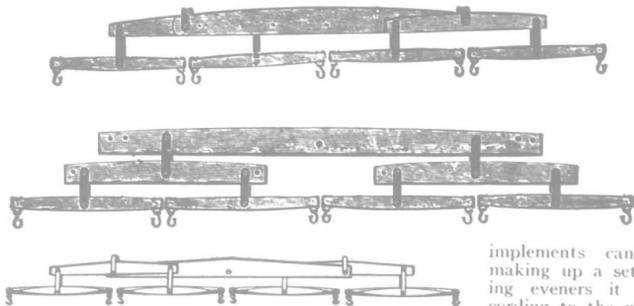


Fig. 4—Designs for four-horse evener.

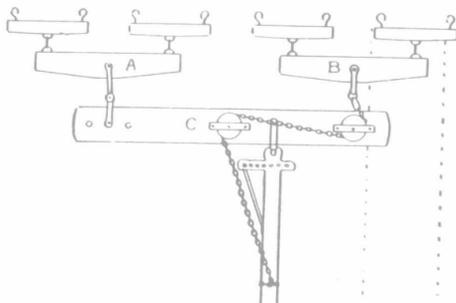


Fig. 5—Four-horse evener for plow.

being arranged for by scouting corps and other bodies. Women and girls will again assist in the lighter forms of agricultural work. Another difficulty lies in the transportation and distribution of sufficient supplies of suitable seed. This has been met by the appointment of a Government Seed Purchasing Commission, the main purpose of which is to guard against possible seed shortage by purchasing and holding in store supplies of food grains for seeding purposes.

It is too soon to state with any certainty what the acreage of the wheat crop for 1918 is likely to be, but considering the large increase in mechanical traction and assuming a favorable seeding season, it is not impossible that the wheat area for the whole of Canada may be increased by about 5,000,000 acres, which would mean a total of about 20,000,000 acres. If so excellent a result should be achieved, and if the yield should be the average one of say 20 bushels per acre, we might look for a total production of about 400,000,000 bushels. This would give an exportable surplus of at least 300 million bushels, sufficient to provide for the home deficits of Great Britain and France, and ensure

There are frequent requests for an illustration of an evener for a riding plow, so that three horses can be used on the land and one in the furrow. Figure 5 shows an arrangement which a number of our subscribers have found to work very satisfactorily. C is a strong doubletree 5 feet 4 inches long. From the right end to the centre of the first pulley is 7 inches, and from there to where the plow-head clevis is attached is 15 3/4 inches. From the centre of the first pulley to the centre of the second pulley is 24 inches. It will be noticed in the illustration that there are three holes on the left-hand side of the doubletree. The first one is 2 1/2 inches from the end, and the other two are 2 inches apart. The idea is to hitch the high team into whichever hole will give the most even draft. A chain attached to the doubletree of the off team, passes through the pulley and is wrapped around the beam of the plow, or to the axle of the riding plow. It may take a little experimenting to get the exact place to hitch the chain on the plow so as to get it the right tightness. However,

we understand that it can be arranged so there will be no side draft.

Undoubtedly some farmers will have improvements on the eveners herewith published, and we would appreciate it if our readers would send suggestions whereby these doubletrees and eveners or methods of work could be improved.

Greater Production From the Farmer's and Laborer's Viewpoint.

BY THE COUNTRY SCRIBE.

It is not necessary to go into figures to show the extreme need of the greatest possible production in Canada—in North America this year. France, we are told, is from three to five days from famine all the time, and if the steady stream of foodstuffs crossing the British Channel were stopped for one week France would be starving. Britain herself is on rations. Piles upon piles of wheat are ready for shipment in Argentina and Australia, but the distance is too great and this food, normally available, does not exist in so far as the immediate needs of the Allies are concerned. North America must step into the breach. Canada must help fill the gap and Canadians are ready to do all possible. City business man, manufacturer and laborer are willing to do what they can, and we must not forget that the farmer and farm laborer are also competent as well as patriotic. They understand the need. While they are amused from time to time at the advice which emanates from tilting chairs, and are inclined to laugh at the city man's ideas, they realize that all shoulders must be put to the wheel to help win. In this connection I was amused to read the other day a little skit which deals very well with the advice to farmers propaganda.

The Know-It-Alls.

In our little town, Oh! sad to tell,
There is a merchant who doesn't know how to sell;
A sawyer who doesn't know how to saw,
A teacher who doesn't know how to teach,
A preacher who doesn't know how to preach,
A painter who can't paint very well,
A printer who doesn't know how to spell,
An odd-jobs man with never a job,
A cobbler who doesn't know how to cob,
A miller who doesn't know how to mill,
A butcher who doesn't know how to kill,
A racer who doesn't know how to race,
A mason who doesn't know how to mace,
A clocksmith who cannot mend a clock,
And a doctor who doesn't know how to doc,
And since none of these are busy men
You will find them again and yet again,
Ever anon and a few times more,
Round the stove in Mendelson's store
Each talking freely and through his hat,
Doing the one thing they are expert at,
GIVING ADVICE TO FARMERS.

The farmer realizes the need, and if we stop to consider the matter we must conclude that he is in a better position than any other to outline his work and lay his plans. What he needs is labor and here is where we reach the heart of the matter we are to discuss. Can labor necessary for increased production be provided? If so, where from?

Before going into this matter it might be well to take a short resume of the situation. Labor has been flowing from the country districts cityward for many years. These figures may interest you. According to the Bureau of Industries report for Ontario, there were in Ontario in 1872, 406 townships with a population of 1,047,931, and 122 cities, towns and incorporated villages with a population of 374,854. Forty years later, in 1912, Ontario had 554 townships (138 more), but the population had fallen to 1,013,595, an actual decrease of 34,336, while the urban population, taking in cities, towns and villages, 292 in number, then had 1,429,271, an increase in four decades of 1,054,417, while the township population dropped 34,336. This goes back to the period before the war. Since the war came we all know what has happened. Labor has grown scarcer in city and in country, but the fact we must face is that the city or urban population in this country has been getting top heavy in comparison with the rural. Notwithstanding all this Canada, per capita, is the heaviest producer of foodstuffs of all the best producing countries. To show you that the farmer and his wife and children together with the hired help are doing well, let me quote these figures from the United States Year Book for 1916. For the three years previous to the war, 1910-11-12, estimates were made regarding the six important food crops, including wheat, corn, oats, barley, potatoes and rye for a number of the principal countries of the world, and the estimated production per capita of these selected foods in terms of bushels of wheat was as follows: Canada, 70.4; Argentina, 56.3; United States, 45.3; Australia, 24.7; Germany, 21.3; Austria-Hungary, 21; France, 17.9; Russia, 17.1; Italy, 9.6; India, 7.8; Great Britain and Ireland, 5.6. Canada produces per capita more food materials from farm crops than any other of the principal countries of the world. There is no country where the labor of a man counts for so much in agricultural production as in Canada. The wide prairie lands of the West are the greatest fields for increased production in the world. Our farmers were illustrious producers before the war, but they have been greater producers since. Last year the total crop of Canada was worth over \$1,000,000,000. It is the best that has ever been produced in the Dominion.

If production has been heavy and yields per acre large, why have men and women left the rural dis-

tricts for the city? First, because higher wages beckoned them away. Second, because hours were shorter and there was greater opportunity for advancement, and thirdly, because of the social conditions.

Before the war wages were higher in the cities than in the country. To-day the disparity between these wages is even greater. Compared with a few years ago, farm wages have trebled. I well remember my father hiring a first-class man for \$15 per month, with board and washing. To-day the same man could get \$40 to \$50 per month. But in the city this man would probably draw nearer \$100 per month, and he is in the city.

Last year farm wages averaged for Canada, including board, \$610.60 for men hired by the year, and \$364 for women. By the month, including board, they averaged \$63.63 for men and \$34.31 for women—or about \$2 per day for men and \$1 per day for women. And yet we hear it said that the farmer is too mean to pay his hired help—and some of them are, but on the whole the farmer pays according as his returns will let him.

Let us look at the actual returns from farming last year for one moment. The Ontario Government has recently finished an agricultural survey of the best township in Peel County, and the results will interest you, as they did me. We must remember that last year was the best year the farmers of that particular district ever had. Crops were good, and prices averaged around 100 per cent, higher than in 1914. And yet it was found that approximately one-third the farms were under 85 acres in area, and their owners or renters got for their labor income last year \$507. On those farms of 86 to 100 acres the labor income was \$891. On those from 101 to 150 acres, it was \$1,091, and on those from 151 to 240 acres it was \$1,581. And this, mark you, in the best year these farmers ever had. The average investments ran from \$6,944 on the smaller farms to \$8,942, \$12,635, and \$16,111 on the larger.

In considering these figures we must remember that as working manager of a business with considerable capital invested the farmer at present high prices is not getting rich quickly, particularly when we remember that in 1916 crops were practically a failure. The farmer's problems are different from those of any other business man. His entire season's labor may be swept away by frost or hail, as is so often the case in the West, or by hot winds or rust, or by drouth or downpour, or by insect pests. He is at the mercy of the weather continually. Sometimes we do not appreciate these facts as we should, and we are inclined to criticize him for not doing better when we ourselves might do a great deal worse.

The agricultural survey just referred to has an important bearing on our efforts toward increased production. It showed clearly that the larger farms pay best and are the place to put our efforts at the present time. Acreage counts. The small farm in a labor crisis is not in it. It requires too many men to carry on intensive cultivation where much hand work is necessary. What is needed now is men for the larger farms—men to drive four and five-horse teams or tractors on wide implements and machinery. And in passing I might say that the greatest need in this district surveyed, as is the case in most parts of Old Ontario, was found to be more and better live stock. We must have live stock in abundance to feed the land and grow bigger crops to feed more stock. It is a sort of endless chain to success.

So much for the farm side of it. What about the laborer? No one can blame the laborer for going where he can get the best job at the highest pay with the shortest hours and the most congenial social conditions. He has found all these in the cities, and many farmers have left their farms and gone to the cities too. All must live, and the better all classes of the community live the better country we have.

Two courses of compulsion have been suggested in order to get the men for increased farm production, and neither has been found feasible. We read a great deal about forcing alien enemies in our country to work on the farms. This is impossible. International law will not permit it. To get a hold on the alien he must first be interned, and interned men, according to international law, cannot be forced to work against their will. The next suggestion was that men of the first military class and not physically fit for the front lines in France and Flanders be conscripted for the second line in the fields of Canada, and this was opposed by organized labor, and perhaps rightly. They contended that it was not fair to compel men to work for others when these others would be making a profit on their efforts. Labor was ready to give its best service to the country, but not where someone was to have a profit on its compulsory efforts.

The only road left open was voluntary enrolment for the farms. First, an effort is being made to get all the boys of teen age who are able and willing to go on the farms. The objective for Canada was 25,000, for Ontario 15,000. Ontario, I understand, has already gone over 20,000, and the Dominion is now expected to enroll 35,000 or more of these lads. The scheme was tried last year. As was to be expected, some of the were hard on the boys, but in the main both sides were well pleased.

Then for the men. If my memory serves me well, 7,500 is said to be the objective for Ontario. This refers to men from the cities who will be willing to go out for several months this summer, and 12,500 are asked for the short periods of haying and harvesting. The best of these are those who have had farm experience and know how to do things. Farmers will have trouble enough teaching the boys and will not be able to afford much time for instruction of the men. The work is hard. The days are comparatively long. Farm work

under the best of conditions is no snap, and when farms have to be worked short-handed, the rush is greater. There are always chores to be attended to. Chores have been defined as a term invented to enable the farmer to squeeze a few extra hours of work a day out of his hired man without pay. I am not in a position to say who should go and who should not. Wages are a consideration. Home conditions must not be forgotten. But above all, we must remember that food is necessary to win the war, and if we lose nothing else matters. I have contended that every able-bodied man should, in such a crisis, be placed in that position in which he is of most use to his country—all on a fair and equitable basis, but it is a slow process toward any such goal. Too many selfish and private interests must be overcome, and the task is of such colossal magnitude as to stagger any government. Then we must do the best we can. Compared with former years, farm wages are high this year. Compared with city wages they are still so low as to place farming at a disadvantage in the labor market. The individual is the only one to decide what he should do this year. If he feels that he can go on the land his work will be appreciated by the farmer and by the nation. If he believes his effort will be of more value in the city, let him stay there and do his work well, and if possible put in and care for a backyard garden. For the man who is not accustomed to farm work I would advise that in case he decides to go to the country that he get in touch with friends on the farm and plan to help them. It is generally more pleasant than going among entire strangers, although the latter in most cases will be found human and considerate. A great deal depends upon the individuality of the man. Those who go to the farms must go with the expectation of working hard and not as summer boarders. I have little faith in the totally inexperienced man for the farm. Jobs can be found for boys and they work in, but the inexperienced man is all too often physically unfit for hard farm work and would do better to stay on his city job. I would not, however, discourage any, with the will, from trying. Farming is not the same job it was fifty years ago. To-day the farmer and farm laborer must be an all-around man. He must be handy enough to drive a four-horse team on expensive machinery and keep all in repair. He must use his head as well as his hands, and for these reasons the men who were born and raised on the farms and who have left for city work would be the most valuable of those who will return. Under the best of conditions possible this year we doubt whether there will be more than one man to each 100 acres of tillable land in Old Ontario. This will give you some idea of the farmer's problem in 1918.

A word regarding food control. Did it ever occur to you that attempts to arbitrarily keep down prices can never make for increased production? Low prices will never put farming on the plane that will ensure great production, because low prices inevitably drive labor away from the farm. If the consumer will not pay a price which leaves a fair margin of profit to the producer, I care not what the goods may be, the producer is forced to stop producing that particular line. The law of supply and demand cannot be set aside by any Board of Food Controllers yet extant. Price control increases consumption and decreases production. The only solution of the food problem is to get more food. Labor is necessary.

All Canadians must get together. City dwellers should put from their minds the idea that farmers as a class are profiteers. The facts show that they are not. And farmers must realize, as they do, that the great masses in the cities are hard-working, straight-forward, good people ready to meet them half way. This is a day when no one should be for class or party, but all for the welfare of Canada, Britain, the Allies, Democracy. We must get back to the land, not turn our backs on it. Petty differences are submerged in the glory of doing something for the cause. City business men have done well, city laborers have toiled nobly, and farmers have done their part. All must do just a little better, and with the help of a Divine Providence 1918 should be Canada's greatest year in production.

Conditions in York County.

EDITOR "THE FARMER'S ADVOCATE":

Just a few lines regarding the outlook for the coming season. During the past week most of the farmers throughout this locality in York County have gone on the land, and most with the intention of producing to the uttermost in this year of need. The land is working very well, and although there have not been very large quantities of grain sown, things are in shape for a big drive this week if weather conditions will permit. Most farmers are striving to produce wheat where they have land at all suitable. Fall wheat and new seeds (alfalfa and clover) have stood the winter fine and are looking very well.

If we can get help from the cities and high schools to the extent we expect, it will wonderfully help the farmers, the nation and, no doubt, help themselves. But those seeking farm labor ought to obtain it at once in this way, giving the farmer a better chance to make his calculation in regard to what crops to sow.

York Co., Ont.

W. E. THOMSON.

Remove and burn all dead wood from the pear trees, and cut well back into the healthy part of the branch. Pear blight is the cause of much dead wood, and the disease is usually hidden beneath apparently healthy bark below the line which divides the dead from the living tissues. Pear blight should be closely watched all summer and cut out on first sight.

It is an
can neglect a
one. The p
infinite are
an inch. C
work itself i
true of an a
implement.
care you giv
smoother it
have purchas
that you tak
made your d
justments. C
in looking af
thoroughly w
count upon a
suggest a gre
day, but may
hundred and
inspection an
either the lef
the motor, p
cylinder oil.
also locate an
oil for the p

Some

EDITOR "THE

With spring
call to the far
everyone is do
handicapped, t
fore many di
maintain the
the need for
but there mus
is as necessa
situation is be
in vogue, whe
entered to he
of these me
and may be of
of expectation
useful if willing
place at many
help out many
but they are
owned, on 100
to the great est
We will need a v
our corn crop th
be procured so
supply. This

T

The Eff

Men to fight
food. The cry
for fat. The cry
stitutes for butt
called substitut
to eat with othe
of butter.

Milk fat diffe
contains certain
for promoting t
Creator has pla
all mammals.
prominent physi
plants.

Before discus
few remarks con
butter is one of
told that the Hin
of Christ. The c
very different, no
Butter standards
duct was known
placing the who
severe agitation.
of casein, water

We are told
not use butter a
medicinal purpos
the first to deal
we find records
twelfth century.
wine to Norway
until the Scandi
injurions to his s
thirteenth centur
porting butter.
of the Irish makin

Automobiles, Farm Machinery and Farm Motors.

Tuning Up.

It is an axiom in the automobile business that you can neglect an old car but that you cannot abuse a new one. The parts of every power plant are made with infinite care and adjusted to the thousandth part of an inch. Any new machine, however, must gradually work itself into perfect running order. This is not only true of an automobile but of a printing press or a farm implement. It is, therefore, obvious that the greater care you give your auto during its first season the smoother it will run throughout its life-time. If you have purchased a new car this spring we would suggest that you take it frequently to the agent with whom you made your deal and insist upon his making careful adjustments. Of course, lubrication is the main thing in looking after a car. When the oil and grease have thoroughly worked into every part you can absolutely count upon almost frictionless performance. We can suggest a great many things that you might do every day, but may we insist at the end of your first three hundred and fifty miles you give your car a thorough inspection and lubrication? You will find a plug on either the left or right side of the timing gear case of the motor, pull out this plug and insert steam engine cylinder oil. This is for the timing gears. You will also locate another plug which you must fill with motor oil for the pump and generator shaft. The location

of these plugs varies on different cars, but it should not be difficult for you to determine which one takes care of the timing gears and which one the pump and generator shaft. There is generally an opening in the steering gear worm housing through which you can send oil that will lubricate the steering gear worm. Take up the floor boards of the car, uncover the clutch housing, and you will find a pipe plug which should be pulled out and the opening filled with grease. You should not fail to apply grease to the forward and rear sockets of the steering connecting rod. You will find a filler cap some place on the transmission gear case. Fill it with oil until it stands at the level on the vent. Do not neglect the universal joint, and never forget to give a turn or two to all the grease cups around the front and rear axles. The brake shaft also demands attention, and the grease cups on the brake cam shaft must be constantly turned and the grease in them kept working. It is just as well to give a drop or two of oil to the joints of the spark and throttle control rods and levers. Not only will they work with greater freedom but rust will be prevented. Of course, the rocker arms should not only be oiled upon this occasion but practically every time you make a trip. The grease cup on the fan spindle and those on the spring shackles can very easily stand for a turn almost any time. Usually you will find grease cups on the king bolts of the steering knuckles. Keep these properly turned down.

It will not be a bad idea to jack up the front axle and unscrew the front hub caps. Take out any cotter pins that may be necessary and unscrew the spindle nuts. When you have slipped off the wheels thoroughly smear the spindles and ball races with soft cup grease. In replacing the wheels tighten the nuts until the wheels have no noticeable shake on the spindles. Either move the car or jack up the rear axle until the pipe plugs in the rear hubs are on top. You can then remove them and fill the openings with cup grease. Do not refrain from draining all the oil out of the crank case of the motor and the transmission and putting in a new supply. Oil wears out just like clothing or any other commodity, and when it loses its vitality it is a detriment rather than a remedy. It is far better to remove the oil too often than too infrequently. You may at first seem to be wasting lubricant, but you will finally come to realize that old oil is bad for the power plant.

There are four kinds of lubricant usually used on automobiles, motor oil, steam cylinder oil, hard cup grease and soft cup grease. The motor oil should have a flash point of not less than four hundred degrees Fahrenheit, and the hard cup grease should have a melting point of not less than two hundred and fifty degrees Fahrenheit. Never use any vegetable or animal oils upon your motor, as they contain acids which decompose at high temperatures and injure any metal with which they may come in contact. AUTO.

Canada's Young Farmers and Future Leaders.

Some Good Points For 1918.

EDITOR "THE FARMER'S ADVOCATE":

With spring well on hand now, and the very urgent call to the farmer for increased production, no doubt, everyone is doing his utmost in that direction. Many are handicapped, though, by the shortage of labor and therefore many difficulties must be encountered, even to maintain the average acreage of crops. True, too, the need for men at the front cannot be exaggerated, but there must be no falling off in production, as this is as necessary as the men are for the army. The situation is being partially met by the different systems in vogue, whereby school boys or city men have volunteered to help on the farm during the harvest. Some of these men have had some experience on the farm and may be of great help; others, again, may fall short of expectations. The school boys, too, will be very useful if willing to work or learn, as they can fill a man's place at many jobs. The Government tractors also help out many farmers in getting their plowing done, but they are hardly a paying proposition, privately owned, on 100 acres or less. Production will depend to the greatest extent on what kind of a season we will have. We will need a very favorable one at least to fully mature our corn crop this year, as not much home-grown seed can be procured so we have to look to the States for our supply. This corn will not mature as early here as

where grown, owing to that being a warmer climate. Perhaps seed corn will be handled differently this fall owing to the experience with it in 1917, and if it gets as fully matured even as last year perhaps we will have enough seed for the following year, if we take the care with it that our experience has proved necessary. Any corn that gets past the milk stage and is kept in a warm, dry place will be all right for seed. Here is one instance worth remembering. We bought our seed last fall, which was fairly well matured we thought, and braided it all up and hung it in the barn, as in other years. This spring we tested it and less than twenty per cent. would grow. A neighbor bought some of the same corn and happened to hang his in the basement of his house. The germination test for his was better than ninety per cent., which goes to show that corn not fully matured will be all right for seed if kept in a warm, dry place. We would not have needed corn from the States for seed if this precaution had been taken last fall. To get the most value from immature corn, I believe a silo is necessary. We put up a prepared stave silo last year 12 by 30 feet. It took about fifteen acres of corn to fill it, but I would judge that seven or eight acres of good corn would have been enough. What was left over stayed out in the field till this spring, and was practically worthless. Many other fields were hacked at during the winter, by people having no silos, but a great many were left till this spring. We wintered

about thirty head of cattle, nine being milk cows, and the rest from calves up to two-year-olds. We fed the silage twice a day and hay or straw at noon. They wintered well on this and are in a good, healthy thriving condition to turn out on the grass. We consider that the silo nearly paid for itself this winter, as we could not have wintered over half that number, to say nothing of what condition they would have been in this spring. Of course, riper corn would have been much better perhaps, but an immature crop—to get much value from it—should be put in a silo, so we must be prepared this fall to handle it to the best advantage.

The wheat crop has not a very bright outlook in many parts of Ontario, and a large acreage of it has been torn up and planted with spring crops. Quite a number have sown spring wheat, but it seemed difficult to procure it in time for seeding. A very large acreage of oats and barley has been sown, owing to the very favorable spring and easy working condition of the ground.

Later crops are being prepared for now, such as corn, beans and sugar beets. The result though of all these remains to be seen, but we have a very fair start to greater production this year, and with a favorable season and the co-operation of all, we hope to supply our country's needs with an abundance of foodstuffs.

Elgin Co., Ontario.

FARMER'S SON.

THE DAIRY.

The Effect of Margarine on the Dairy Industry.

Men to fight well must have an abundant supply of food. The cry has gone up from practically all armies for fat. The result is that a great many would-be substitutes for butter have been brought forth. These so-called substitutes are probably all right as lubricants to eat with other foods, but they cannot take the place of butter.

Milk fat differs from other fats from the fact that it contains certain life-giving substances that are essential for promoting the growth of the young. The all-wise Creator has placed this substance in the milk fat of all mammals. The same substance, we are told by prominent physiologists, is found in the leaves of some plants.

Before discussing oleomargarine I wish to make a few remarks concerning butter. Historians tell us that butter is one of the oldest foods known to men. We are told that the Hindus used it 2,000 years before the birth of Christ. The quality of butter at that early date was very different, no doubt, from what we are using to-day. Butter standards were unknown at that time. The product was known then as cow-cheese, and was made by placing the whole milk in sacks and subjecting it to severe agitation. It undoubtedly was a conglomeration of casein, water and fat.

We are told that the Greeks and the Romans did not use butter as a food, but as a cosmetic and for medicinal purposes. The Scandinavians appear to be the first to deal in butter as an article of commerce, and we find records of their exportation of butter in the twelfth century. The Germans shipped carloads of wine to Norway in exchange for butter and dried fish, until the Scandinavian king, considering such traffic injurious to his subjects put an end to it. During the thirteenth century Norway was the only country exporting butter. In the seventeenth century, we read of the Irish making butter and burying it in their peat

bogs. Whether this was done to store it against invaders or to develop flavor is not known. During this early period in the history of butter we find that it was regarded not only as a food, medicine and cosmetic, but also as a source of wealth. Its possession distinguished the rich from the common people. To-day it is one of the staple foods of mankind in all civilized countries.

Notwithstanding the number of years butter has been used as a food and the number of analyses that have been made in many countries by chemists, it is less than four years since the physiologists discovered that butter contained certain food elements that had hitherto escaped the investigations of the chemist. Dr. E. V. McCollum, of Johns Hopkins University, one of the greatest physiologists of the day says:

"One of the most important things to realize is that the chemical analyses of foodstuffs, no matter how complete or by whom made, cannot give the slightest evidence as to the biological values of the foods. Such knowledge can be gained only by properly conducted feeding tests."

Chemists base the nutritive value of foods on the number of calories of energy it produces. Estimating along the same line, machine oil would be more valuable as a food product than butter, and pure tallow would be almost twice as valuable as oleomargarine. Chemists also tell us that the thistle contains about as much nutriment as almost any other plant, but the only animal that believes this is the jackass, as he is the only animal that will tackle it.

Basing food value on the calories of energy alone that it produces, even at the present prices, butter is one of our cheapest foods.

The discovery that butter contains what the physiologists called two unknown substances that were essential to the growth of the young, was made by a Dr. E. V. McCollum, formerly of the University of Wisconsin, but now of Johns Hopkins University. And strange to say, that about the same time the same discovery was made by Dr. F. G. Hopkins, of Cambridge University, England. The investigations by Drs. Mendal and Osborne, of Yale, confirm the work carried on by Dr. McCollum and Hopkins. This discovery was made through feeding experiments with white rats. It was

found when using a concentrated ration of animal fats or of vegetable fats the rats at a certain age ceased to grow and breed, and that their eyes became sore and swollen. When milk or butter-fat was added to their rations it was found that they soon became normal and began to grow.

Dr. E. V. McCollum in a recent address said:

"A physician named Block, at Copenhagen, has observed about forty-five cases in the last five years of children in the country who were fed on separator skimmed milk and vegetable food, who suffered from eye troubles. The eyes became swollen, inflamed and infected, and blindness results unless something is done to correct the faulty diet. The introduction of whole milk causes an immediate response and recovery, providing the eyes are not too badly injured."

We can see, therefore, that butter-fat has no substitute for children. Our leading chemists and medical men are now recognizing this fact. Both Dr. Wiley and Dr. Woods Hutchinson state that it is necessary for growing children to have butter or milk fat as part of their diet, and that so-called butter substitutes cannot take the place of butter.

Dr. Halliburton, the celebrated London writer on foods, has recently completed an important investigation of the butter substitutes on the British market, particularly with reference to the fat soluble growth factor. He found by feeding experiments on animals that what he calls the "Accessory growth substance," which is present in milk fat in great abundance, is absent from the majority of oils of vegetable origin. Nut-butter and lard substitutes are also destitute of growth substance. Dr. Halliburton states that the results of his investigations show the importance of butter as an essential part of the diet of a nation at war. In his opinion, war imposes different standards of diet on people. In the case of children he thinks that the growth substance of fat must be supplied, and the way to accomplish this is to provide an abundance of fresh milk.

In the February issue of Good Housekeeping one or two subscribers asked that noted food authority—Dr. Harvey Wiley for his views concerning nut-butter and other so-called substitutes. One subscriber states that since she and her husband used nut margarine for

several weeks they both have been troubled with indigestion and headaches. Dr. Wiley attributes this to the benzoate of soda used as a preservative in nut-butter. He added:

"As far as I am concerned, I should never give my children nut margarine, oleomargarine, or any other margarine, as a substitute for butter. Butter contains a vital principle necessary to the growth of children which none of its substitutes possesses. I should never give children nor grown persons in my family food products containing a preservative, such as benzoate of soda. Benzoic acid is regarded as a toxic agent by all physiologists. The human body also regards benzoic acid as a toxic agent, and immediately converts it into hippuric acid, in order that it may do as little harm as possible. Food products that contain benzoate of soda are inferior in quality to similar foods manufactured without it."

Trying to make a comparison between butter and oleomargarine would be a good deal like trying to compare brass with gold. Even though a little gold was mixed with it, it would not have the value nor utility of gold.

Ever since the leading scientists discovered that butter contained a vital principle necessary to the growth of children, which none of the would-be substitutes possesses, the oleo manufacturers have been using the same tactics in their advertisements that the faker does in selling bogus jewelry for the genuine. By the little wash of gold on the surface he tries to palm it off on the public as genuine gold. So the oleo manufacturer calls the attention of the public to the virtue of the butter and milk used in the manufacture of his product, with the object of convincing them that oleomargarine is as good as butter.

I was sorry to learn that the bars were let down to the sale of oleomargarine in Canada. This, no doubt, was done for the purpose of getting a cheap substitute for butter during the war period. I think by this time that the people have discovered that they cannot buy oleomargarine cheap. The people who are back of it have always followed the price of butter, approaching it as closely as they could. Some claim they use margarine solely for cooking purposes. To such people I would say buy your own tallow, cottonseed oil and lard, and do your own mixing by melting them up slowly together. In 1914 statistics credit the packers with 47 per cent. profit for this mixing. Now that you have permitted oleomargarine to be sold in Canada your next step will be to keep it from camouflaging as butter and at butter prices. My understanding is that your law prohibits the artificial coloring of it. You must remember that they use certain oils for the purpose of giving color in imitation of butter. These they maintain are part of their ingredients.

I do not know what the regulations are here concerning the display of signs in hotel dining-rooms and all public eating places, where oleomargarine is served. If regulations do not already exist the dairymen of the country should make an effort to have such legislation passed. There should be a line of demarcation between butter and oleomargarine as a protection to the public. Canada is a nation of producers. Your local price of butter will be governed in normal times by the price paid in England, and not by the use of oleomargarine. After visiting the leading dairy countries of the world, I would say that there was no country better adapted for dairying, than the Province of Ontario, Canada.

As dairying and the keeping of live stock are essential to the best agricultural interests of the country, the same should be encouraged in every way possible.

The sale of oleomargarine seems to be conducive to the production of crooks. A little over a year ago there were forty some odd men from St. Louis sent to the penitentiary for a term of years for the fraudulent sale of this product. From Chicago we sent about fifteen. One of the largest manufacturers of oleomargarine in the United States, reported to be a multi-millionaire, is under sentence of two years imprisonment in the penitentiary with a fine of \$10,000.00, for defrauding the government out of its revenue or of evading the laws in the sale of oleomargarine. He is now making his appeal to the Supreme Court of the United States.

The control of the sale of margarine, as it is commonly called in the European countries, has challenged the legislative powers of all countries where it is sold, hence special restrictions have been placed upon its sale. The product in its original form was invented in 1869 by Mege Mauries, born of the necessities of the French garrison then beleaguered in Paris. Its similarity to butter made it possible to offer it for sale as butter and it was in fact so used until 1887, when numerous complaints led to the enactment of the law whereby the French reserved the designation of "butter" exclusively to the product of the milk of the cow, and it was prohibited to sell any imitation of butter under any name other than margarine. The trouble began immediately, for the law only prohibited the substitution of margarine for butter, it did not define margarine, nor refer to mixtures or fix any maximum or minimum of margarine that might be permitted. To locate fraud in such a case was well nigh impossible. The complaints would not down. The French no more than Americans would choose to use margarine after the stress of the siege was over. They would not use it as butter at butter prices. The Law of 1887 proved ineffective and led to the enactment of the law of 1897, the purpose of which was to both punish and prevent the fraud. In every civilized country laws have been enacted in the line of regulating this product, and these are being strengthened as experience dictates, and are nowhere being weakened. Everywhere the trade in oleomargarine has been a fruitful source of fraud. Everywhere it masquerades as butter, evades the rules of

common honesty, poses as the poor man's friend and food, usually to cheat him in purse and stomach.

A little over four years ago when visiting European countries, investigating the sale and control of margarine, I found that France had the most stringent laws of any country I visited. They not only prohibited the coloring of margarine any shade of yellow in imitation of butter, but they prohibited its being sold where butter was kept. Factories where the product was made had to display large signs in conspicuous places bearing in large letters "Margarine Manufacturers." The wagons that carried it to retail stores had to be branded "Margarine Wagons" in large letters. Retail stores had to display big signs with letters about a foot high in conspicuous places. A man to engage in the manufacture of margarine had to get permission from the police magistrate. Oleomargarine factories and materials used are subject to continual government inspection. The manufacturers are taxed to pay the salaries of the said inspectors. Belgium compels oleomargarine manufacturers to incorporate a certain per cent. of sesame oil, and potato starch so that the product can be quickly detected. The same restrictions as to selling in separate stores existed both in Belgium and Germany. Germany and Denmark both prohibited coloring margarine in imitation of butter. England permits the coloring and also the selling of it in the same stores that keep butter. I found more complaints of fraud in connection with the sale of oleomargarine in England than in all the countries that I visited. Margarine was not only sold there as butter and at butter prices, in some cases, but it was said that dishonest buttermen mixed margarine with their product and sold it as butter.

In the United States the first oleomargarine law was enacted by Congress in 1886. Grover Cleveland, then President, deemed it proper, in view of the importance of the subject and the public interest aroused, to accompany the notice of his approval to Congress in a memorable message, from which I quote:

"The Constitution has invested Congress with a very wide legislative discretion, both as to the necessity of taxation and the selection of the objects of its burdens.

"Those who desire to see removed the weight of taxation now pressing upon the people from other directions may well be justified in the hope and expectation that the selection of an additional subject of internal taxation, so well able to bear it will in consistency be followed by legislation relieving our citizens from other numerous burdens rendered by the passage of this bill, even more than heretofore unnecessary and needlessly oppressive.

"I am convinced that the taxes which it creates cannot possibly destroy the open and legitimate manufacture and sale of the thing upon which it is levied. If the article has the merit which its friends claim for it, and if the people of the land, with full knowledge of its real character, desire to purchase and use it the taxes enacted by this bill will permit a fair profit to both manufacturer and dealer. If the existence of the commodity taxed and the profits of its manufacture and sale depend upon disposing of it to the people for something which it deceitfully imitates, the entire enterprise is a fraud and not an industry.

"Not the least important incident related to this legislation is defense afforded to the consumer against the fraudulent substitution and sale of an imitation for a genuine article of food of very general household use. Notwithstanding the immense quantity of the article described in the bill, and notwithstanding the claims made that its manufacture supplies a cheap substitute for butter, I venture to say that hardly a pound ever entered a poor man's house under its real name and in its true character. Having entered upon this legislation it is manifestly a duty to render it as effective as possible to the accomplishment of all the good which should legitimately follow in its train."

This wise statesman evidently had investigated the character of some of the people who were back of this would-be substitute for butter. The law of 1886 placed a straight tax on oleomargarine of two cents per pound and permitted it to be colored in imitation of butter. So prevalent had the frauds become in its sale for butter that the butter business became somewhat demoralized. In 1889 our venerable statesman and dairyman, Governor Hoard, of Wisconsin; H. B. Gurler, of Illinois, and Charles Y. Knight, former editor of The Chicago Dairy Produce, and who later gained fame and fortune as the inventor of the silent Knight automobile engine, brought forth an organization known as the Dairy Union. The object of this organization was to try to get some legislation that would protect the public from fraud in the sale of oleomargarine so that a line of demarcation would be drawn between it and butter. For nearly three years the Dairy Union kept up a constant fight in Congress trying to get a bill through, that would protect the consuming public and the dairy farmer as well. They succeeded in getting our present law through on May 9, 1902. The bill passed was known as the Groat Bill.

This Bill placed a tax of ten cents per pound on colored oleomargarine, that is when it is artificially colored to imitate butter, and only one-fourth of a cent per pound when put up in its natural shade—white or very light yellow. The "Joker" in the present law was inserted by the late Senator Foraker of Ohio. So close was the fight in the Senate that one vote would have defeated the measure. Senator Foraker came to the dairy people saying that unless they used the words "artificially colored" he would defeat the measure. Therefore, the dairymen were forced to accept this compromise in order to get the law enacted. The result is that they use certain oils as ingredients to color this product in imitation of butter.

The law, in its present form is not perfect, but it furnishes the public, at least, a certain amount of protection from fraud. Our dairymen I am sure have no desire to tax oleomargarine if any measure could be found to prevent its fraudulent sale, which has taxed the ingenuity of every country where the product has been sold. The temptation is great for fraud, due to the cheapness of the material used in oleomargarine. Butter-fat cannot compete in price with the offal and intestinal fats used in the manufacture of oleomargarine in combination with cheap vegetable fats.

From the census report of 1914 we gather the following statistics:

Capital	Cost of materials.	Value of products.	Value added by manufacturer.
\$2,994,000	\$10,257,000	\$10,080,000	\$4,823,000

Calculation shows that the profits added to it for mixing were 47 per cent. The packers alone in 1914 manufactured 60,387,881 pounds of oleomargarine valued \$8,818,557. Therefore, the cost would be 12.94 cents per pound.

Ever since the passage of the present oleomargarine legislation in the United States, the big packing interests of Chicago and the cotton-seed interests of the South have kept up a continual agitation for the repeal of this law, and have had different bills introduced in Congress for this purpose, which so far have not been adopted owing to the united opposition of the dairymen.

Does the lack of coloring of oleomargarine handicap its sale? My answer to this is yes and no. It does handicap its sale as butter, but not as oleomargarine. The best evidence of this is found in Denmark. The Danes prohibit the coloring of oleomargarine in imitation of butter, that is, the color cannot be deeper than the shade they call No. 9, which leaves oleomargarine almost the same shade as lard. In addition to this Denmark requires that it must be sold in oblong-shaped packages. And yet the Danes eat more oleomargarine per capita than any people in the world, averaging about 41 pounds annually per capita.

Pennsylvania, the great manufacturing and mining State, has a law that requires oleomargarine to be sold white or very light in color, and this law is rigidly enforced. Instead of decreasing its sale it actually increases it. So we find that the only effect lack of color has is to prevent it from being palmed off as butter on the public. When it is sold in its natural color, white or very light yellow, the public can buy it at prices somewhat commensurate with the cost of production.

The packers and oleomargarine manufacturers have shed a good many crocodile tears over the necessity of furnishing the poor with a cheap substitute for butter, and yet they were back of Senator Underwood's amendment to our revenue Bill that would tax oleomargarine two cents per pound as against one-fourth of a cent in our present law. The Underwood amendment, however, would have permitted oleomargarine to be colored yellow in imitation of butter. This extra tax on the consuming public would amount on our present make of oleomargarine to something over \$4,000,000 annually. There is no use discussing the ten-cent tax on colored oleomargarine, as this is only paid on about two per cent. of the entire product. It is not reasonable to suppose that the oleomargarine manufacturers would pay the cent and three-quarters per pound extra out of their own pockets.

I am inclined to think that farmers have not fully realized the full importance of the fraudulent sale of a substitute for butter, or how it would effect their business. As an illustration of the effect of substitutes on the price of the genuine article, I will cite an incident that came under my own observation. About two years ago it was my privilege to give a talk on dairying at Phoenix, Arizona. While there I visited a number of ostrich ranches. The price of their birds at that time was from \$5.00 to \$7.00 each. A few years previous the owners stated that the birds had been selling from \$100.00 to \$125.00 each. Substitutes came in for the ostrich feather, and the result was the price for the birds diminished. The same thing will occur with dairy cattle, especially when we get back to normal times. At the present time there is a great demand for all the fat that can be produced, whether butter or oleomargarine. The result is that many new would-be butter substitutes are constantly being developed.

With us there is grave danger at the present time that some legislation will be attempted under the guise of patriotism that would be injurious to the dairy business. Ben Johnson said, "The last refuge of the scoundrel is patriotism."

I am pleased that the dairymen of Ontario are organizing, as in organization there is strength. The importance of organization and co-operation is possibly illustrated better by the labor unions than by anything else. In the city of Washington, D.C., the labor organizations have a large building of their own. This is headquarters for Mr. Gompers. Whenever anything comes up pertaining to labor, Congressmen usually get in touch with Mr. Gompers and other labor men to get their views. The result is that very little legislation is passed detrimental to the labor interests.

On the other hand the farmers or agricultural interests have no permanent organization with headquarters at Washington. In a severe contest, a few years ago, between the dairy and packing interests a prominent senator remarked that they would have to protect their friends who were contributing heavily to the campaign, but as far as the farmer vote was concerned, they did not need to worry as they always voted according to their political affiliations.

The success of all good business depends on organiza-

tion and Co. the late Mr. was due to hi place in hi work, wheth fields of spor co-operation undesirable t

This rem who boasted black-snake brought him understand replied, "Shu whip than a see you get your time su comes the fly there on the surely am a comes the sp there, let me dey am organ

Very few of the big p control the fo are the same the same. V stock condit European fac tions of the C

You peopl in London, I every packing of beef there, To the peopl want to say i in the world. a floor space o markets that products from market open

All meats mus that have be again. The thousands of L supplies. The who deal in cl close of the m meat on displ for sale again is thoroughly c dition for th visiting this representing o I thought one of meat than fidentially tha operated under was a real cam

While in L with a Mr. Bri of the largest in-law is a ve me that the S of poultry in F pounds of milk

The meats market came l and Australia. grasp of the pa The question i dairy business told that they fruits, cereal fo and in all kind

In many sm the live stock l be killed and t the meat back about through

The packers If they were su still be the sar are merely mar be a very sad trol of the food citizens if they l

The methods cerns that oper country, are sin oleomargarine. flagging, such as in large letters

On the end in following: "Th packed. Owing tion and other weigh at time of age, but sale is s

I have had s did not find any In some of th poultry in the s to sanitary condi

It should be all the animal f margarine. The terest of the Sou ness. It will be this and all cour the same control meat products. C line of business c

tion and co-operation. It is said that the success of the late Mr. Harriman—the great railroad magnate—was due to his ability to pick the right man for the right place in his organization. Co-operation and team work, whether in educational lines, business or in the fields of sport, usually spell success. Organization and co-operation for the purpose of creating monopoly is an undesirable thing.

This reminds me of the old colored man down south who boasted of his ability to do more things with black-snake whip than anyone else. One day his master brought him a new black-snake whip saying, "Mose, I understand you are an expert with a whip." Mose replied, "Shure Boss, I reckons I ken do more with a whip than any nigger in the south." "Mose, let me see you get that fly up there." Mose said, "Mr. fly your time sure kum," crack goes the whip and down comes the fly. "Mose, let's see you get that spider up there on the beam." Mose says, "Mr. spider youse surely am a gonner." Crack goes the whip and down comes the spider. "Mose, see that hornet's nest up there, let me see you get that." "Nmph, nmph, no boss, dey am organized."

Very few people fully realize the powerful influence of the big packers. Their ambition seems to be to control the food products of the world. Their methods are the same as the Prussians, and their object seems the same. When visiting Europe to investigate livestock conditions just before the war, I found some of the European farmers were rather alarmed at the operations of the Chicago packers.

You people who have visited the Smithfield market in London, England, have, no doubt, observed that every packing company in Chicago has a great display of beef there, and not a pound of it comes from America. To the people who have never visited this market, I want to say that this is the largest wholesale market in the world. If my memory serves me right they have a floor space of 90 acres. It is one of the most sanitary markets that I ever visited. Here you will find food products from all civilized countries of the world. The market opens up about five o'clock in the morning. All meats must be sold by twelve o'clock, and no meats that have been in the market can be brought back again. The market is surrounded by hundreds or thousands of butcher's wagons waiting to purchase their supplies. The best meat is usually sold first. Butchers who deal in cheaper meats wait there until almost the close of the market for bargains, as they know all the meat on display must be sold, and cannot be offered for sale again. In the afternoon the market building is thoroughly cleansed and put in perfect sanitary condition for the next day's market business. When visiting this place I remarked to a superintendent representing one of Chicago's big packing concerns that I thought one of his competitors had a larger display of meat than they had. He answered rather confidentially that several of the large stalls that were operated under different names belonged to them. This was a real camouflage affair.

While in London I had the honor of eating lunch with a Mr. Brill and his son-in-law. The former is one of the largest poultry dealers in the world. His son-in-law is a very bright young Siberian. He informed me that the Swifts of Chicago were the largest feeders of poultry in Russia. They were producing millions of pounds of milk-fed chickens in that country.

The meats that the packers displayed in the London market came largely from the Argentine, New Zealand and Australia. The foregoing gives a faint idea of the grasp of the packers on the food products of the world. The question may be asked, how can they affect the dairy business? By controlling the millfeeds. I am told that they are interested in canned vegetables, fruits, cereal foods, the cotton industry of the South, and in all kinds of grain, stock feeds and even fertilizer. In many small and large towns in the United States, the live stock has to be shipped to the packing houses to be killed and then extra freight has to be paid to get the meat back again. This condition has been brought about through unfair competition.

The packers, as a rule, are not producers of food, if they were suddenly to go out of business there would still be the same amount of food as formerly. They are merely manipulators and controllers, and it would be a very sad thing to have this combination get control of the food products of the world. They are useful citizens if they keep to their own line of business.

The methods pursued by one of the big packing concerns that operates a large string of creameries in our country, are similar to the tactics used by dealers in oleomargarine. That is there is a good deal of camouflage, such as marking on side of package of butter in large letters one-half inch high, "one pound net." On the end in small type 1/20 of an inch high in the following: "The within contents weighed 1 lb. when packed. Owing to natural shrinkage due to evaporation and other causes, contents are not guaranteed to weigh at time of sale the amount marked on the package, but sale is made at packed weight."

I have had several of these packages weighed, but did not find any that weighed sixteen ounces.

In some of their creameries they feed, kill, and dress poultry in the same building, which is not conducive to sanitary conditions.

It should be remembered that the packers control all the animal fat used in the manufacture of oleomargarine. Their connection with the cotton-seed interest of the South gives them a monopoly of this business. It will be a bad thing for the dairy business of this and all countries if the packers succeed in getting the same control over it that they now have over the meat products. Giving a few people monopoly of any line of business creates dissatisfaction, especially in this

age of democracy.—Address delivered by Dr. George L. McKay, Secretary American Association Creamery Butter Manufacturers, at meeting of dairymen recently held in Guelph, Ontario.

Holsteins on Test.

During the month of March, 17 Holstein cows and heifers qualified in the yearly Record of Performance test. In the mature class, Nathalie Clothilde Perfection was first with 17,448 lbs. of milk and 576 lbs. of fat. All the mature cows qualifying produced over 10,000 lbs. of milk and 408 lbs. of fat during the lactation. Calamity Snow Mechthilde 2nd, a three-year-old, made an exceptionally good record. In the lactation she produced 23,274 lbs. of milk and 842 lbs. of fat. This gives her the championship for the class, displacing Plus Pontiac Artis. She sets a new standard in milk and fat production. Freshening again within fifteen months of the commencement of her year's work, she has made, according to preliminary reports, better than 32 lbs. of butter in seven days, and over 100 lbs. of milk in one day. In the two-year-old class, Highlawn Helen comes first with a record of 15,771 lbs. of milk and 548 lbs. of fat.

A large number of Holstein cows and heifers qualified in the official Record of Merit test. Hillcrest Pontiac Susie, a six-year-old cow, made a seven-day record of 755.6 lbs. of milk and 27.27 lbs. of fat. Her thirty-day record was 3,221.5 lbs. of milk and 108.41 lbs. of fat. In all there were 19 mature cows which qualified. Alice Tensen's Canary made the highest record in the senior four-year-old class. Her milk yield was 625.5 lbs. The junior four-year-old class was headed by Hillcrest Vale De Kol with a record of 560.2 lbs. of milk and 21.08 lbs. of fat. The senior three-year-old class was headed by Hillcrest Sadie Ormsby. Her milk yield was 534.5 lbs., which yielded 23.46 lbs. of fat. Het Loo Korndyke Boon, a junior three-year-old, gave 458 lbs. of milk in the seven days. Lakeview Dutchland Calamity Rose, a senior two-year-old, gave 496.9 lbs. of milk and 25.37 lbs. of fat in seven days. The highest record in the junior two-year-old class was made by Het Loo Clothilde Korndyke. Her seven-day test was 328.2 lbs. of milk and 18.45 lbs. of fat.

POULTRY.

The Sitting Hen.

EDITOR "THE FARMER'S ADVOCATE":

Though the sale of incubators has greatly increased in the last few years still a large percentage of the poultry of this country is still hatched under the hen, and I think I am safe in saying that better results are obtained by natural incubation than by artificial, when proper care is taken of the sitting hens. Where a fifty per cent. hatch is received from an incubator, I can generally get about seventy per cent. from the hens. Of course where a large number of chicks are required it would be almost impossible to hatch them under hens.

First of all pick out a tame hen. One that flies off the nest every time you approach is likely to break her eggs by the sudden dash, and even should she succeed in hatching some of the eggs she would make a poor mother. Wild hens have no place as sitters. Don't set a hen at the first sign of broodiness; better test her on some eggs for a few days before giving her the eggs to be hatched. In this way less trouble will be had with poor hatches, hens leaving the nests, etc.

As it is scarcely any more trouble to care for a number of sitters than for one, it is a good idea to set six or seven at one time. Very early in the season you may not have this many become broody at once, but later on this plan can be adopted. Then, when you test your eggs at the end of the fifth day, you may be able to give all the eggs to four or five hens and re-set the others. Also, when the chicks hatch you can give the chicks to at least half of the hens and get the others back to laying again.

These hens you set should be removed away from the laying hens, to some place where it is quiet and they will not be disturbed by other hens. Always have the nests ready and move your sitters at night.

I find orange boxes about as good as anything in which to make the nests. Remove the top board at one side of the box, then nail a strip up at each end of the box—not nailing it up tight. You can then slide the board you removed in behind these strips, thus making a convenient way of letting the hens off the nests. Don't have your nests too deep so that the hens will have to jump down on the eggs as they may break some in this way. When making the nests put about two or three inches of earth in the bottom, then some nice clean straw. Always fill up the corners of the nest and have the centre a little lower than the outsides, so the eggs are inclined to roll together towards the centre of the nest.

Give the hens eggs according to the size of the hen, and the weather. If the weather is cold and too many eggs are given, the frequent changing of positions will very likely cause all the eggs to become alternately chilled. If the weather is moderate and the nests in a warm place, more eggs may be given than in cold weather.

When placing the hen on the nest give her a thorough dusting with a good insect powder. Repeat this the second week and again a couple of days before the chicks are hatched, for lice breed very fast on a sitting hen. Do not grease the hen as some will likely get on the eggs, with the result of closing the pores and preventing hatching. Once every day let the hen off for food and water. As soon as they understand what you want them to do they will do it, coming off as soon as you

appear. Should they not come off the nests the first time, lift them off carefully, after first lifting their wings to see if they have any eggs under them which you might pull out and break. The first week the hen's absence from the nest should be short, ten or fifteen minutes, and less if very cold weather, as the embryo in the early stages of growth is easily chilled. Later on it generates heat of its own and the hen may stay from the nest then for fifteen or twenty minutes without any harm being done.

Should any eggs in the nest be broken, remove the soiled straw and wash the dirty eggs in warm water for if any eggs were left coated the pores of the shell are closed and the embryo could not breathe. In washing the eggs handle them carefully.

If any valuable eggs should become cracked during incubation they may be saved to complete the hatch by covering the crack with strips of strong court plaster, crossing the strips until the broken parts are held together securely.

One of the best feeds to give the sitting hen is corn, as it is a fat and heat-producing food. Do not feed any soft feed or green feed as they are apt to relax the bowels with the result that the nest will get soiled and then the contents will have to be cleaned out and replaced with clean straw.

Shortly before the chicks commence to hatch the hen should be taken off the nest and given a good feed of hard grain and not let off again until after the hatch is finished. While the eggs are hatching it is well to remove the shells from the nest at intervals, as they are in the way and sometimes get on the unhatched eggs and prevent the chicks from getting out of the shells. It is not necessary to remove the hen to do this and she should be disturbed as little as possible at this time.

If you wish to make a hen hatch two broods in succession, be sure she is free from lice for if she is not it will be very hard on her and she may even leave the nest. Sometimes when they get real bad the hen will die on the nest.

Middlesex Co., Ontario.

W. A. SHANKLIN.

Feeding the Newly-hatched Chicks.

In order to avoid a high mortality in the newly-hatched chicks it is necessary that care be exercised in the feeding. Where only a few chicks are raised and brooded by the natural method, difficulties are not so great nor the mortality so high as when artificial methods are employed. The hen looks after her brood, securing for them a certain amount of food and giving them shelter. On a large poultry plant it is customary to withhold the feed for the first forty-eight or sixty hours, except for a little milk and water. Some use the infertile eggs from the incubators, boiled hard and mixed with breadcrumbs, as the first feed. The proportion which one plant uses is one part egg to three of bread. This diet is quite satisfactory for the first few days at least, and the chicks should be fed four or five times a day. After the third day cracked wheat or chick feed can be used to replace a couple of feeds of bread and at the end of the first week two feeds of chick grain and two feeds of mash will make a good ration. A mash made of a mixture of 100 pounds bran, 100 pounds cornmeal, 100 pounds fine, sifted meat meal, and 33 pounds of fine bone meal, is satisfactory. This should be moistened with sour or skim-milk. When the chicks are hatched early it is necessary that they have a little green feed. Sprouted oats will meet this need up to the time the grass commences to grow. A good many make the mistake of not giving the chicks a liberal supply of fresh, clean water and of not furnishing them with chick-grit. Grit is essential, as it assists the bird in grinding its food. If the greatest success is to be obtained drinking fountains and feed troughs must be kept scrupulously clean. As the birds become older fewer feeds a day may be given, or a hopper containing a variety of feeds may be placed within reach so that the birds may help themselves. In this way they are never short of feed. If the birds are to be developed sufficiently to commence laying by fall; they must be kept growing throughout the entire summer. On another poultry plant rolled oats, mixed with hard-boiled eggs, replaces breadcrumbs. They are fed in the proportion of one of egg to five parts oats. For the first few feeds one ounce of this mixture is considered sufficient for fifty or sixty chicks at a meal but the chicks are fed every two hours. The chick feed and other grains are withheld until the birds are a couple of weeks old. When the birds are three weeks old boiled turnips and shorts are mixed and the chicks are fed all they will eat. This is found to give excellent results. The pen and runs should be kept clean if mortality is to be kept low. This is essential whether the chicks are raised by the natural or artificial means.

With the prices of feeds as high as they are this spring, it is advisable that every precaution be taken to keep the birds healthy and thrifty. A little care may prevent disease getting into the flock. What chicks are raised should be raised well and a good deal depends upon the start they get.

Feed For Ducklings.

Cornmeal and bran and plenty of green feed make an ideal ration for ducklings. Where a large number of ducks are kept, water is usually supplied only while the ducks are feeding. It is claimed that to grow and fit ducks for market in reasonable time, they should have a limited supply of water. If properly fed, ducks should be in condition for marketing ten weeks after they are hatched. It is claimed that if kept longer than this the profit is materially decreased. Ducks are a water fowl and where only a few birds are kept the

general custom is to give them access to water at all times. While this may be the natural method of raising ducks experience has proven it to be faulty if the ducks are to be marketed to best advantage.

Feed Conditions Improving.

During the past winter poultrymen have experienced considerable difficulty in securing the proper kinds of feed in sufficient quantities to keep their birds at the maximum production. After being accustomed to feeding wheat and corn, it was found rather difficult to compound a ration with the other feeds that would give as satisfactory results as were usually secured from the feeding of the above mentioned grains. In commenting on the situation in the "Egg and Poultry Markets Report" for the week previous to April 16, the "Feed Division of the Live Stock Branch" states:

"With the approach of spring and the consequent improvement in traffic conditions, the feed situation is much better than was the case a month ago. Corn is now moving freely to Canadian points and in many sections car lots have already arrived. Owing to the risk involved in handling the natural grades, the dealers are, for the most part, importing nothing but kiln-dried grain of a grade equal to, or better than No. 4. On a basis of present Chicago values, this corn should retail at most Canadian points for from \$3.50 to \$3.75 per hundred pounds and as traffic conditions are improving daily, it is expected that from now on the supply of corn will be quite sufficient to take care of all requirements.

"Feed wheat is still quite scarce and likely to remain so until the new crop is harvested. According to the regulation of the Canada Food Board, the dealers are not permitted to sell, as a poultry feed, wheat that is suitable for milling purposes. In view of such regulations, it will be necessary for poultrymen to make considerable use of corn and cut down materially on the percentage of wheat.

"Millfeeds are still in great demand, due chiefly to the fact that at the fixed prices they are the cheapest feed obtainable. The supply is, however, not nearly adequate and feeders will have to be content with a very limited amount and to supplement same with ground oats, barley or any other ground grain that may be obtainable."

HORTICULTURE.

A Word About Asparagus.

Asparagus is considered a luxury of the first order, and yet only a very small percentage of farm gardens include a bed of this vegetable. After the roots become established the crop is produced each spring without any seed planting, and it is one of the earliest if not the earliest vegetable ready for use in the spring. More than that, there is a good market for any surplus product that one may have to sell.

Owing to the nature of growth and season of asparagus it does better on warm, deep, sandy loam, with a clay sub-soil. It is better, too, to have a southeastern exposure, and it should be apart from any trees or shrubs that might cast a shadow or shade. The soil should be carefully and thoroughly prepared, since the crop, when once established, is a perennial of many years' standing. In a general sense of the word, asparagus will do well on any soil which will grow corn or potatoes successfully.

Asparagus can be produced on a bed established from either seeds or roots. We believe the latter way is preferable for the farm garden, since when the roots are once planted one is more likely to take care of the bed and bring it to maturity. Crowns or roots are sold by all the leading seedsmen, and a purchaser should be sure of getting one-year-old crowns only. Two-year-old and three-year-old crowns are not such heavy yielders after they become established. For varieties Argenteuil, Palmetto, and Conover's Colossal are reliable and considered amongst the best. However, at the Vineland Experiment Station Columbian White has proved itself superior as a yielder; Dreer's Eclipse comes second, and Barr's Mammoth third.

In planting asparagus, dig a trench 10 to 12 inches deep; this can be done with a plow by throwing a furrow each way. It is also advisable to have the rows running north and south. In commercial plantations asparagus is planted one and one-half to two feet apart in the row, with rows five feet apart, but under small garden conditions where the soil is rich the plants can be crowded together more than is advisable under commercial conditions. When ready to plant take a shovelful of surface soil and make a small mound in the bottom of the furrow. Set the crown on this mound of earth, spread the roots out carefully in every direction and cover with two or three inches of fine soil. Pack the soil firmly around the roots and fill the furrows between the plants so it will be uniform throughout the length of the furrow. Some growers scatter well-rotted manure in the row after setting the plants. A considerable portion of the furrow will still remain unfilled, but subsequent cultivation will tend to fill the trench. Asparagus crowns gradually grow upward as the plants get older, so it is necessary to have them fairly deep in the soil. Furthermore, manure can be worked into the land to better advantage without injuring the crowns.

No cuttings should be made until the third season. During the first and second seasons the spurs or shoots should be allowed to grow up and manufacture food which is stored in the roots. Each fall or spring the patch should be cut over and the growth burned. A

heavy application of well-rotted barnyard manure applied each fall and harrowed in is a profitable investment.

Start the Garden Early.

Farmers, as a rule, do not worry much about gardening until the farm crops are nearly all seeded or planted. In one sense this is a necessary practice because so much depends on early planting of crops, but on the other hand, a few minutes' time would prepare a small portion of the garden and seed it with those vegetables that come on early in the season and are much relished. A well-thought-out plan for a vegetable garden would be found beneficial. Of course, the site for the garden is frequently changed under farm conditions, but this is not absolutely necessary where the weeds are kept down and the soil well fertilized. Any plan for a garden should provide room for perennials, such as asparagus, rhubarb and other crops which require only annual cultivation and fertilization.

A few of the earliest kinds of vegetables to be planted are first, leaf lettuce, of which Grand Rapids is a popular variety. Early radishes should have been planted ere this. White Icicle is an excellent variety for a white kind, and it cannot be improved upon by any color. For early turnips, Purple Top Milan is recommended. Peas can be planted successfully very early in the spring, and as for variety Alaska is one of the best. A small row of spinach, if relished, might be planted, and Victoria chosen as a variety. Onion sets, beets, carrots and other vegetables should be planted now as soon as the ground warms up and is fit to work, but for winter storage these vegetables should be planted again in May, or even as late as the first of June.

FARM BULLETIN.

Edmonton Spring Live-stock Show

Edmonton, the capital city of Alberta, was the scene of a very successful live-stock show from April 2 to 6. This year marked several well-defined changes in the intent and scope of this annual event. In other years the heavy draft breeds vied with a formidable array of high-stepping light horses for the admiring plaudits of those attending the event, and arguments could well be raised as to whether the lordly Scottish drafter or the impressive product of La Perch made more impression on the crowd than the light-legged Hackney. In keeping with the times, the Edmonton Spring Show featured practical agricultural events, which included a strong horse show, excellent beef classes for boys and girls, and a successful bull sale.

The Clydesdale exhibit contained much quality, although J. M. Gardhouse, of Weston, Ont., who judged the various line-ups, had experienced harder work at Edmonton in past years. In the aged-stallion class, Bonnie Flisk, shown by W. Grant, Regina, headed a useful class of fourteen. Esperanto Heir, a clean-boned horse, shown by L. Rye, Edmonton, headed the two-year-olds, and in the yearling class W. Grant stood first again with Bonnie Scot. The female classes were strong, and in the aged class no fewer than a dozen matrons came forward. Diana's Choice, shown by A. H. Forbes, Regina, was the choice for the premier award, but many at the ring-side thought that Poppy, shown by G. Cresswell, Edmonton, should have received the highest honor. In the three-year-olds, N. A. Weir, Ohaton, Alta., stood first with Rose of Kilallan. W. W. Wilson, Veteran, headed the two-year-olds with Gloaming, and the yearling class with Veteran Belle. The stallion championship went to Grant, on Bonnie Flisk, reserve going to Rye on Esperanto Heir. The female championship went to Forbes on Diana's Choice, reserve going to Weir, on Rose of Kilallan.

A successful sale was held in conjunction with the Spring Live Stock Show, where 138 bulls were sold. Of these, 116 were Shorthorns, 14 Herefords, and 8 Aberdeen-Angus. The total sales amounted to \$31,970, making an average of \$231.70. The Shorthorns averaged \$233.44; the Herefords, \$212.15; and the Aberdeen-Angus, \$225.62. The highest-priced bull of the sale was Iron Lad, a Shorthorn, bred by Roberts Bros., Vegreville, and purchased by L. E. Marr, Millett, for \$1,000. The highest-priced Hereford was Krose, contributed by Wm. Burdick, Clover Bar, and purchased by E. Scabott, Hinton, for \$290. The highest-priced Aberdeen-Angus was Maywood Averex, He was contributed by J. J. Bell, Islay, and purchased by J. McCallum, Mundare, for \$435.

Directors Appointed for National Live Stock Council.

The Board of Directors has been appointed for the Canadian National Live Stock Council, mention concerning which was made in our issue of April 11. The Council will consist of the following representatives: Wm. Smith, M.P., Columbus, Ont., President; Dr. J. C. Rutherford, Calgary, Alta.; F. W. Auld, Regina, Sask.; Dr. S. E. Folmie, M.P., Victoria, B.C.; L. J. Walter, Clive, Alta.; Andrew Graham, Pomeroy, Man.; Robt. Miller, Stonyville, Ont.; W. A. Dryden, Brooklin, Ont.; J. D. Brien, Ridgeway, Ont.; W. F. Stephen, Huntingdon, Ont.; George Pepper, Toronto, Ont.; J. W. Brant, Ottawa, Secretary. This is a representative and strong committee, but it seems too bad that the Maritime Provinces do not have one representative on the organization. However, the influence of the Council in behalf of the live-stock industry and agriculture in general should be marked indeed.

Stocks of Grain on Hand.

The Census and Statistics Office, Ottawa, issued April 17, a bulletin giving the results of inquiries as to the stocks of wheat, oats, barley and flaxseed in Canada at the end of March, the stocks of all agricultural produce remaining in farmers' hands at the same date and the proportion of the crops of 1917 that proved to be of merchantable quality.

The compilation of returns collected from elevators, flour mills, railway companies and crop correspondents shows that on March 30, 1918, the quantity in Canada of wheat and wheat flour expressed as wheat was 77 million bushels, as compared with 126 million bushels last year, 197 million bushels in 1916 and 79 million bushels on February 8, 1915. The total for 1918 comprises 25 million bushels in the elevators, flour mills and in winter storage in vessels, 32 million bushels in farmers' hands and 20 million bushels in transit by rail. Of oats, including oat products expressed as oats, the total quantity returned as in Canada on March 30, 1918, was 155½ million bushels, as compared with 184 million bushels last year, the total for 1918 comprising 24½ million bushels in elevators and flour mills, 124 million bushels in farmers' hands and 7 million bushels in transit by rail. Of barley the total quantity in Canada on March 30, 1918, was returned as 16 million bushels as compared with 15 million bushels last year, the total for 1918 comprising 4 million bushels in elevators, 11 million bushels in farmers' hands and 1 million bushels in transit by rail. Of flaxseed the quantity in Canada on March 30, 1918, was 2,420,000 bushels as compared with 5,662,000 bushels last year, the 1918 total consisting of 1,459,000 bushels in elevators, 516,000 bushels in farmers' hands and 445,000 bushels in transit by rail.

According to the reports of crop correspondents out of the total wheat production of 1917 14 per cent., or nearly 32 million bushels remained in farmers' hands on March 30, 1918. This proportion is lower than last year (21 per cent.) and than in 1916 (23 per cent.) and compares with 13 per cent. in 1915. Of the remaining field crops the proportions and quantities estimated to be in farmers' hands on March 30 are as follows: Oats 31 per cent., or 123,910,400 bushels; barley, 20 per cent., or 10,944,600 bushels; rye, 13 per cent., or 491,800 bushels; buckwheat, 18 per cent., or 1,251,500 bushels; corn for husking, 12 per cent., or 937,000 bushels; potatoes, 30 per cent., or 24,130,500 bushels; turnips, etc., 14 per cent., or 8,644,100 bushels; hay and clover, 26 per cent., or 3,536,300 tons. The stock of potatoes, viz, 24,130,500 bushels, compared with 15,969,000 bushels last year, with 12,960,800 bushels in 1916, and with 32,310,000 bushels in 1915. Flax 9 per cent., or 515,800 bushels.

The returns received from crop correspondents show that of the total wheat crop of 1917: 223,007,000 bushels were of merchantable quality, the proportion being 95 per cent. as compared with only 85 per cent. last year. The proportions per cent. of other crops estimated to be of merchantable quality last year are as follows: Oats, 91; barley, 90; rye, 89; buckwheat, 76; corn for husking, 50; flaxseed, 89; potatoes, 77; turnips, etc., 83; hay and clover, 87. For corn the proportion is the lowest on record, and compares with last year's estimate of 58 per cent.

The following telegram has been received from the Saskatchewan Department of Agriculture: "Seeding became general April 15. About 25 per cent. wheat sown. Estimated 10 per cent. increase in wheat acreage. No shortage of seed wheat. The early spring has solved the difficulty of labor shortage."

Wm. Channon's Death.

In the death of William Channon, of Oakwood, on March 18, 1918, Victoria County and the Province of Ontario loses one of its most prominent and most successful farmers. Mr. Channon was for many years connected with the Farmer's Institute, the Lindsay Central Fair, and other local organizations. He was also a well-known figure among the live-stock men of the province, being for many years a department judge at fall fairs; and also a prominent breeder and exhibitor, first of Shorthorn and latterly of Aberdeen-Angus cattle. His familiar figure and genial disposition will be sadly missed by all. The business will be carried on by his son, G. C. Channon.

Black knot in plum and cherry trees should be removed before the spores begin to detach themselves into the air. Burn all diseased branches and twigs.

That part of the garden which is not planted early should be cultivated frequently. This will make the soil mellow and destroy the young weeds that are just starting. This will save time and labor later on.

Seeding has been going on apace in Southwestern Ontario, and on many farms seeding was finished last week. East and north of that part of the Province the season was more backward and the work was just getting nicely under way at the first part of this week. The land worked up splendidly, but grass, wheat, etc., needed rain which it got recently, and now the country is taking on a deeper shade of green. Wheat in many cases, which appeared dead, is coming on, and the loss may not be so severe as was at first expected.

Toronto (U) Montreal (E) Winnipeg Calgary Edmonton

The week's fifty-eight hundred thirty-two Monday, seven fourteen hundred on T run, on the w of exceptional the offering liberal. On active, and prices per hundred Montreal and operating, an tional tone prices eased slightly lower however, the tone and price Monday. The Harris Abatte terval between on account of plant on Monday have been on tors in affecting closed with a day. Included a load of steers fourteen hundred the market at were shipped A load of alfalfa from the farm spere, Ontario dred, while others were made from dred. Steers v to twelve hundred number of hea dred, several l large number \$12 to \$12.75 eight hundred sold from \$11. good quality, made from \$1 in these weights A few cows sold larger proport quality sold fro of good quality medium from \$ sold as high as good animals b and medium fr stocker and feed prices were a eight hundred country for feeders sold fro hundred, and el to \$10.25. Ca freely, twenty-o A few choice o per hundred, w best veal calves medium from \$ dred calves wer market, and full to Ontario farm

Only seventy sale. A new p lished, when a te sold at \$21 per sold up to \$13 lambs are not ye only one or two

Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending April 18.

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	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
	Apr. 18	1917	Apr. 11	Apr. 18	1917	Apr. 11	Apr. 18	1917	Apr. 11	Apr. 18	1917	
Toronto (Union Stock Yards)	5,769	4,991	5,035	\$13.25	\$12.00	\$13.00	2,158	2,184	2,296	\$16.50	\$15.00	
Montreal (Pt. St. Charles)	788	706	647	13.25	11.35	13.00	3,083	2,960	2,431	12.00	11.50	
Montreal (East End)	477	459	380	13.25	11.35	13.00	2,484	2,391	2,357	12.00	11.50	
Winnipeg	1,406	2,665	1,575	14.00	11.20	12.50	63	65	58	15.00	13.50	
Calgary	1,153	1,325	1,397	12.25	9.50	12.25						
Edmonton	267		500	11.45		11.50						

	HOGS						SHEEP					
	Receipts		Top Price		Selects		Receipts		Top Price		Good Lambs	
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
	Apr. 18	1917	Apr. 11	Apr. 18	1917	Apr. 11	Apr. 18	1917	Apr. 18	1917	Apr. 11	
Toronto (Union Stock Yards)	5,597	13,774	6,075	\$20.50	\$16.75	\$21.00	76	291	178	\$21.00	\$15.25	
Montreal (Pt. St. Charles)	1,274	1,495	1,465	21.00	17.35	21.50	28	48	18	*14.00	15.25	
Montreal (East End)	777	1,019	670	21.00	17.35	21.50	25	65	31	*14.00	15.25	
Winnipeg	4,406	6,463	5,589	19.75	16.15	20.35	8	6	5			
Calgary	2,286	1,958	2,102	21.10	14.75	20.85	100					
Edmonton	642		1,070	20.50		20.75						

*Each.
xOff car weights.

Market Comments.

Toronto (Union Stock Yards)

The week's receipts of cattle totalled fifty-eight hundred head, of which number thirty-two hundred were on sale on Monday, seven hundred on Tuesday, fourteen hundred on Wednesday and five hundred on Thursday. The quality of the run, on the whole, was good, many loads of exceptional merit being on sale, while the offering of heavy cattle was quite liberal. On Monday, trading was very active, and prices were advanced fully 25 cents per hundred on all grades of cattle. Montreal and Hamilton abattoirs were operating, and their presence gave additional tone to the market. On Tuesday, prices eased up and sales were made at slightly lower figures. The following day, however, the market assumed a brisker tone and prices were fully as high as on Monday. The lack of buyers from the Harris Abattoir Company during the interval between Monday and Wednesday, on account of the destructive fire at their plant on Monday night, may probably have been one of the contributing factors in affecting the prices. The market closed with a steady undertone on Thursday. Included in Monday's receipts was a load of steers of choice quality averaging fourteen hundred pounds, which topped the market at \$14.75 per hundred; these were shipped in from Fergus, Ontario. A load of almost equal weight and quality from the farm of Mr. J. Crearer, Shakespeare, Ontario, sold at \$14.50 per hundred, while other good sales of heavy cattle were made from \$13.50 to \$14.25 per hundred. Steers weighing from one thousand to twelve hundred pounds sold well; a number of head realized \$13.25 per hundred, several loads sold at \$13, while a large number of sales were made from \$12 to \$12.75. Steers and heifers of eight hundred to nine hundred pounds sold from \$11.75 to \$12.50 for those of good quality, while one or two sales were made from \$12.75 to \$13; common cattle in these weights sold from \$10.25 to \$10.75. A few cows sold as high as \$11.25, but the larger proportion of those of choice quality sold from \$10.25 to \$10.75, those of good quality from \$9.25 to \$9.75, and medium from \$8 to \$8.75. Butcher bulls sold as high as \$11.10, while most of the good animals brought from \$10 to \$10.75, and medium from \$9.25 to \$9.75. The stocker and feeder market was active and prices were a shade higher. Almost eight hundred were returned to the country for further feeding. Choice feeders sold from \$10.50 to \$11.25 per hundred, and choice stockers from \$9.50 to \$10.25. Calves continue to move freely, twenty-one hundred being on sale. A few choice ones sold as high as \$16.50 per hundred, while the majority of the best veal calves sold from \$14 to \$15, and medium from \$11 to \$13. Several hundred calves were shipped to the Buffalo market, and fully a hundred were shipped to Ontario farmers, during the week. Only seventy sheep and lambs were on sale. A new price record was established, when a few head of yearling lambs sold at \$21 per hundred. Light sheep sold up to \$15 per hundred. Spring lambs are not yet moving to any extent, only one or two being on the market.

CLASSIFICATION	No.	TORONTO (Union Stock Yards)			MONTREAL (Pt. St. Charles)			
		Avg. Price	Price Range Bulk Sales	Top Price	No.	Avg. Price	Price Range Bulk Sales	Top Price
STEERS heavy finished	251	\$12.75	\$12.25-\$13.50	\$14.75				
STEERS good	846	12.27	11.75-13.00	13.25	144	\$12.65	\$12.50-\$12.90	\$13.25
STEERS 1,000-1,200 common	34	11.26	10.75-11.75	11.75	9			
STEERS 700-1,000 good	1,532	11.75	11.50-12.25	12.50	123	12.40	11.75-12.50	12.75
STEERS 700-1,000 common	411	10.28	10.00-10.75	10.75	90	11.00	10.00-11.25	11.25
HEIFERS good	590	12.00	11.50-12.50	13.25	47	12.50	12.50-12.75	13.00
HEIFERS fair	392	10.50	10.00-10.75	10.75	19	11.00	10.50-11.50	11.50
HEIFERS common	13	9.43	9.00-10.00	10.00	19	9.75	9.50-10.00	10.00
COWS good	236	10.00	9.50-10.50	11.00	31	10.80	10.25-11.75	11.75
COWS common	560	8.25	7.75-8.75	8.75	161	8.60	8.00-10.00	10.00
BULLS good	99	10.00	9.50-10.50	11.00	14	10.25	10.00-10.50	10.50
BULLS common	48	8.50	8.00-8.75	10.00	47	8.25	7.00-9.50	9.50
CANNERS & CUTTERS	139	6.75	6.50-7.00	7.00	46	6.25	5.50-6.75	6.75
OXEN								
CALVES veal	2,144	13.97	13.00-15.00	16.50	3,083	10.40	10.00-11.00	12.00
CALVES grass	14	8.00	7.00-9.00	9.00				
STOCKERS good	117	9.78	9.50-10.25	10.25				
STOCKERS 450-800 fair	109	8.50	8.00-9.00	9.75				
FEEDERS good	262	10.75	10.50-11.25	11.25				
FEEDERS 800-1,000 fair	130	10.25	9.75-10.75	11.00				
HOGS selects	5,287	20.25	20.00-20.50	20.50	1,128	20.80	20.75-21.00	21.00
HOGS (fed and watered) heavies								
HOGS light	164	18.58	18.00-19.50	19.80	131	20.25	20.00-20.50	20.50
HOGS sows	139	18.70	18.00-19.50	19.50	14	18.75	18.75-	18.75
HOGS stags	7	16.36	16.00-16.50	16.50	1			
LAMBS good	52	20.15	19.50-20.50	21.00	3		*12.00-14.00	*14.00
LAMBS common					5			
SHEEP heavy	15	12.00	11.00-13.00	13.00	6			
SHEEP light	9	14.00	13.00-15.00	15.00	14	12.75	12.00-13.50	13.50
SHEEP common								

*Each.

Notwithstanding the light supplies during the week, hog prices were again lowered. Packers claim that they are unable to compete with American abattoirs on the British market, with hog prices over the line about \$2 per hundred lower than at the Toronto market. The American hog being a "fat" hog, has a higher dressing percentage than the Canadian hog, and the question of quantity at the present moment is being given greater consideration than is customary in the export market. On Monday, select hogs sold at \$20.50 per hundred, fed and watered, with one deck reaching \$20.60. On Wednesday the price dropped to \$20 with a few bringing \$20.25. The market closed at this range on Thursday. Of the disposition from the Yards for the week ending April 11th, Canadian packing houses bought 1,288 calves, 83 bulls, 130 heavy steers, 3,857 butcher cattle, 6,664 hogs and 90 sheep and lambs. Local butchers purchased 825 calves, 230 butcher cattle, 109 hogs and 95 sheep and lambs. Canadian shipments were made up of 112 calves, 93 milch cows, 6 butcher cattle, 767 stockers, and 267 feeders. Shipments to United States points consisted of 93 calves.

The total receipts from January 1st to April 11th, inclusive, were 68,874 cattle, 13,401 calves, 115,271 hogs and 10,437 sheep; compared to 63,668 cattle, 12,972 calves, 148,119 hogs and 10,906 sheep, received during the corresponding period of 1917.

Montreal.
Receipts of butcher cattle were more by two hundred and fifty-eight than those of the previous week, but supplies were inadequate to meet the demand. The market opened steady and continued so throughout the week and closed firm, especially for cattle of good quality, on Thursday. While quotations for steers of a quality equal to that of the best offered the previous week, were fully as high, the majority of the sales were made at slightly lower prices, owing to the lesser degree of fat and finish of the general run of the stock. One load made up of twenty-four steers and three heifers, which averaged about twelve hundred and sixty pounds, sold at \$12.90 per hundred; while a number of the animals in this load would have sold for \$13 per hundred, the remainder were of poor quality. Most of the loads on sale showed a similar unevenness. Twenty-eight steers averaging

twelve hundred and forty-five pounds, the heaviest lot of cattle on sale, were weighed up at \$12.50 per hundred. About one hundred steers ranging in weight from ten hundred to ten hundred and fifty pounds also sold at \$12.50 per hundred. Heifers were weighed up in mixed lots with the steers. The majority of the cows offered were of medium quality and of fair finish, and sold from \$9.50 to \$10 per hundred. One carload of thin cows was returned to the country for grass fattening; these cows sold at \$7.75 per hundred. Receipts of calves were of considerable volume and constituted the heaviest run of the present year. During the week, seven car loads were shipped to United States points and two carloads to Laval Rapids, Quebec, at prices ranging from \$10 to \$11 per hundred; most of the sales were made from \$10 to \$10.50. Sheep and lambs were light in number; a few early spring lambs sold from \$12 to \$14 each, while sheep sold from \$12 to \$14 per hundred. The market for hogs was keen throughout the week at a reduction in price of from 50 cents to 75 cents per hundred. Long-run selects sold at \$21.25, off car weights, and short-run selects at \$21.

Sows were weighed up at \$18.75 per hundred.

Pt. St. Charles.—Of the disposition from the Yards for the week ending April 11th, Canadian packing houses and local butchers purchased 2,431 calves, 31 canners and cutters, 24 bulls, 550 butcher cattle, 1,465 hogs and 18 sheep and lambs. Canadian shipments were made up of 42 milk cows. There were no shipments to United States points during the week.

The total receipts from January 1st to April 11th, inclusive, were 8,971 cattle, 10,642 calves, 18,683 hogs and 5,065 sheep; compared to 10,489 cattle, 13,496 calves, 19,019 hogs and 4,679 sheep, received during the corresponding period of 1917.

EAST END.—Of the disposition from the Yards for the week ending April 11th, Canadian packing houses and local butchers purchased 1,873 calves, 339 butcher cattle, 658 hogs and 31 sheep and lambs. Canadian shipments were made up of 364 calves, 41 butcher cattle, and 12 hogs. Shipments to United States points consisted of 120 calves.

The total receipts from January 1st to April 11th, inclusive, were 8,445 cattle, 9,776 calves, 10,876 hogs and 4,823 sheep; compared to 11,675 cattle, 11,455 calves, 14,714 hogs, and 5,955 sheep, received during the corresponding period of 1917.

Buffalo.

Cattle.—The highest cattle market within the history of Buffalo and the East, was had last week, when all classes of steers were advanced a half dollar to seventy-five cents, bringing a good but not choice to prime kind of shipping steers up to \$15.75 and elevating Canadian shipping steers, which were far from the most desirable class up to \$14.50. Fat cows and heifers sold equally as high, and on a medium and common butchering class of cows the market ruled strong. Best bulls sold a half dollar higher, with medium and common ones firm. Stock and feeding cattle sold a big quarter higher, milk cows and springers ruling about steady but were slow sale. Government contracts for steer beef for the armies are requiring heavy consignments in this line. Sellers generally are taking a most favorable view of the outlook for the future. Receipts last week totaled 3,600 head, as against 4,225 for the previous week, and as against 4,475 head for the corresponding week last year. Quotations:

Shipping Steers.—Natives, choice to prime, \$15.25 to \$16; fair to good, \$13.75 to \$14.50; plain, \$12.75 to \$13.25; very coarse and common, \$11.75 to \$12.50.

Shipping Steers.—Canadians, best, \$14 to \$14.50; fair to good, \$13 to \$13.50; common and plain, \$12 to \$12.50.

Butchering Steers.—Choice, heavy, \$14.50 to \$15.25; fair to good, \$13.50 to \$14; best handy, \$14.50 to \$15; fair to good, \$13 to \$13.75; light and common, \$12 to \$12.50; yearlings, choice to prime, \$14 to \$15.50; fair to good, \$13 to \$13.50.

Cows and Heifers.—Best heavy heifers, \$13 to \$13.50; good butchering heifers, \$12.50 to \$13; fair butchering heifers, \$11 to \$12; common, \$8.50 to \$10; very fancy fat cows, \$12 to \$13; best heavy fat cows, \$11 to \$11.50; good butchering cows, \$10 to \$10.50; medium to fair, \$9 to \$9.50; cutters, \$8 to \$8.25; canners, \$6.50 to \$7.25.

Bulls.—Best heavy, \$11.50 to \$12; good butchering, \$10.50 to \$11.50.

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 carloads, \$80 to \$100.

Hogs.—Last week started with prices ruling lower, but after Tuesday the trade was considerably improved. Monday heavy hogs sold from \$18.25 to \$18.40, bulk of the light grades moved at \$18.60, few \$18.65 and pigs, which were up a dime, sold in the same notch as Yorkers, bulk \$18.60. Tuesday's trade was steady to a dime lower, and Wednesday values were jumped 15 to 25 cents. Thursday prices showed another small gain, top being \$18.90, with extreme heavies selling down to \$18.45, and Friday values were still higher range on the light grades, Yorkers selling up to \$19. Mixed grades brought from \$18.75 to \$18.90, and heavies, which were slow, landed down to \$18.25 and \$18.35. Pigs were a quarter higher than Thursday, bulk going at \$18.75. Roughs sold from \$16.50 to \$16.75, and stags \$14 down. For the past week re-

THE ROYAL BANK OF CANADA

Capital Authorized - - - \$25,000,000
Capital Paid Up - - - 12,911,700
Reserve Funds - - - 14,564,000
Total Assets - - - 321,000,000

HEAD OFFICE, MONTREAL

Branches throughout every Province of the Dominion of Canada

ACCOUNTS OF FARMERS INVITED
SALE NOTES COLLECTED

SAVINGS DEPARTMENT At all Branches

The Molsons Bank

invites farmers to discuss their financial requirements at any of their many branches.

If reasonable accommodation will enable them to increase production, they should apply to the local manager for it.

Savings Department at Every Branch.
Interest at Highest Current Rate.

FARMERS' BUSINESS

For the past 54 years, this Bank has given particular attention to the business of Farmers.

We have helped many over the rough places, and have aided many more to the highest plane of success.

We are prepared to extend you every aid within legitimate banking practice.

Come in at any time and talk over your affairs with us. You are always welcome.



THE MERCHANTS BANK OF CANADA

Head Office: Montreal. Established 1864.
with its 102 Branches in Ontario, 32 Branches in Quebec, 19 Branches in Manitoba, 21 Branches in Saskatchewan, 53 Branches in Alberta, and 8 Branches in British Columbia serves Rural Canada most effectively.
WRITE OR CALL AT NEAREST BRANCH.

ceipts were 21,800 head, as compared with 22,543 head for the week previous, and 18,400 head for the same week a year ago.

Sheep and Lambs.—Record-breaking prices were paid at Buffalo again last week. Monday wool lambs sold up to \$21.75, and before the week was out, or on Friday, tops reached \$22.25. The week started with best clipped lambs selling at \$18.50, few \$18.60; Tuesday's top was \$18.65; Wednesday none brought above \$18.60; Thursday the best landed at \$18.75, and Friday several loads reached \$19.15. Cull lambs without fleece ranged from \$16.50 down, some real common light skips going as low as \$10. Shorn yearlings reached up to \$17, best clipped wethers are quotable at \$15 and \$15.50, and shorn ewes from \$14.50 down. Last week's receipts totaled 12,500 head, as against 12,636 head for the week before and 16,100 head for the corresponding week a year ago.

Calves.—Liberal supply was offered last week, grand total being 5,700 head. Offerings were against 5,574 head for the week previous, and 5,375 head for the same week a year ago. Monday top veals sold at \$16.50; Tuesday the bulk landed at \$17, the next two days the bulk went at \$16.50, and Friday the majority landed at \$17. Cull grades the fore part of the week went from \$13 down, and Friday some brought up to \$13.50.

Toronto Produce.

Live-stock receipts at Union Stock Yards, West Toronto, Monday, April 22, consisted of 157 cars, 3,038 cattle, 815 calves, 1,198 hogs, 21 sheep and lambs. Market strong; all classes of cattle 25 cents higher; top price for loads of butcher steers, \$14.50 per cwt.; calves, strong, 25 cents higher. Sheep strong, one dollar higher. Hogs, \$20.25, fed and watered.

Breadstuffs.

Wheat.—Ontario, No. 2, winter, per car lot, \$2.22; (basis in store Montreal). Manitoba wheat, in store, Ft. William—(including 21¢ tax)—No. 1 northern, \$2.23; No. 2 northern, \$2.20; No. 3 northern, \$2.17; No. 4 wheat, \$2.10. Oats.—(According to freights—outside) Ontario, No. 2 white, 91c to 92c, nominal; No. 3 white, 90c to 91c, nominal. Manitoba oats, No. 2 C.W., 91½¢; No. 3, C.W., 88½¢. (in store, Fort William);

extra No. 1 feed, 88½¢; No. 1 feed, 85½¢.

Barley.—Malting, \$1.64 to \$1.65. Peas.—According to freights outside; No. 2, \$3.60 to \$3.70.

Corn.—American (track, Toronto), No. 3 yellow kiln dried, \$1.90, nominal. Rye.—No. 2, \$2.65.

Flour.—Manitoba flour (Toronto, new, bags.) War quality, \$11.10. Ontario flour (prompt shipment, new bags), war quality, \$10.70, Montreal; \$10.70, Toronto.

Hay and Millfeed.

Hay.—Track, Toronto, No. 1, \$17 to \$18 per ton; mixed per ton, \$14 to \$16. Straw.—Car lots, per ton, \$8.50 to \$9, track, Toronto.

Bran.—Per ton, \$35.40. Shorts.—Per ton, \$40.40.

Hides and Skins.

Prices delivered, Toronto:
City Hides.—City butcher hides, green, flat, 10½¢; calf skins, green flat, 20c.; veal kip, 18c.; horse hides, city-off, \$6 to \$7; sheep, \$3.50 to \$5.50.

Country Markets.—Beef hides, flat, cured, 11c. to 12c.; green, 10c. to 11c.; deacons or bob calf, \$1.75 to \$2.50 each; 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 solids, 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 85c.

Farm Produce.

Butter.—All classes of butter kept stationary in price, selling as follows on the wholesales: Creamery, fresh-made, pound squares, at 51c. to 52c. per lb.; creamery solids, at 48c. to 49c. per lb.; dairy, 38c. to 45c. per lb.

Oleomargarine.—32c. per lb.
Eggs.—The egg market declined slightly, No. 1's selling at 38c. to 40c. per doz., and selects at 42c. to 43c. per doz.

Cheese.—Cheese remained unchanged in price; old cheese selling at 30c. per lb.; new at 24c. per lb., and new twins at 24½¢ per lb.

Beans.—Beans continue to be very scarce and therefore firm in price. Japan-

ese hand-picked whites selling at \$6.75 per bushel.

Honey.—Honey is off the market.

Poultry.—Receipts continue to be very light with only a moderate demand. The following priced were quoted for live weight: Chickens, milk-fed, per lb., 30c.; chickens, ordinary fed, per lb., 24c.; fowl, 3½ lbs. and under, per lb., 22c.; fowl, 3½ lbs. to 5 lbs., per lb., 28c.; fowl, 7 lbs. and over, per lb., 30c.; ducklings, per lb., 27c.; turkeys, per lb., 25c.; turkeys, old, per lb., 25c.

Maple Syrup.—Maple syrup is beginning to come in and has declined slightly, selling at \$1.50 to \$2.50 per tin.

Potatoes.—Ontarios selling at \$1.65 per bag, and New Brunswick Delawares at \$1.75 per bag; Cobbler and Green Mountain seed potatoes at \$2.25 per bag.

Montreal Produce.

Horses.—The opening of navigation is at hand, and many of the cartage concerns have not yet filled up their requirements for horses, and in consequence it is said that quite a few purchases were made during last week. Some lighter horses also changed hands for account of farmers. Heavy draft horses, weighing 1,500 to 1,700 lbs., \$250 to \$300; light draft, 1,400 to 1,500 lbs., \$200 to \$250 each; light horses, \$125 to \$175 each; culls, \$50 to \$75; fine saddle and carriage, \$175 to \$250 each.

Dressed Hogs.—The market for dressed hogs was slightly under that of the previous week, it being possible to obtain abattoir, fresh-killed stock at 28½¢ to 29c. On the whole the market was firm and demand good.

Potatoes.—Offerings of potatoes last week were moderately large, and demand continued good. While some car lots of Green Mountains were sold at fairly low prices, the quotation was rather firmer, being \$1.70 per bag of 90 lbs., ex-store; red potatoes being \$1.60, and McIntyres \$1.50.

Maple Syrup and Honey.—There was reason to think that the harvest of maple syrup will be well ahead of that of 1917. Quite a lot of sugar arrived, and quotations in 5-gal. tins were \$2.10 per gal., while 1-gal. tins were \$2.15, wholesale, and ½-gal. tins at \$1.50 each. Maple sugar was steady at around 20c. to 21c. per lb.

Eggs.—Very little change was noticeable in the market. Production seems to be under that of a year ago, taking the country over. Prices were slightly under those of the previous week, being 42c. per dozen for fresh-gathered stock. It looks a little as though packing would begin at around these figures.

Butter.—The time of the year is approaching when a decline in prices may be looked for, but up to the present no evidence of easiness in price is seen. Finest creamery was still quoted at 52c. to 52½¢, with fine at about 1c. less. This alludes to either fall or current makes. Dairies were 43c. to 46c.

Grain.—There was some demand last week for American corn at \$1.70 to \$2.10 per bushel. Oats were steady with No. 3 Canadian Western and extra No. 1 feed, selling at \$1.04½; tough extra No. 1 feed, \$1.03½; No. 1 feed, \$1.03; No. 2 feed, \$1.00½, and tough No. 2 feed, at 99½¢ per bushel, ex-store.

Flour.—Rye flour advanced to \$16.50 per barrel in bags, delivered to the trade, while corn flour was \$13, both being dearer than wheat flour. The latter was \$11.40 to \$11.50 for winter wheat per barrel, in bags, ex-store, while Manitoba spring wheat flour was \$11.10 f.o.b. cars Montreal, and \$11.20 per barrel delivered to city bakers in bags.

Millfeed.—Bran was quoted at \$35.40; shorts at \$40.40 per ton, in bags; pure grain mouille, \$75.

Hay.—The market for hay was still very steady, with No. 2 hay quoted at \$17 per ton; No. 3, \$15.50, and clover mixed, \$12 to \$14 per ton, ex-track.

Hay Seed.—Prices were steady to a little easier, with timothy 8c. to 14c. per lb.; red clover, 36c. to 38c.; and alsike, 23c. to 26c., f.o.b. Montreal. Demand is said to be very active.

Hides.—Veal skins were 2c. up at 40c. and 42c. per lb.; spring lambs being up to 50c.; sheep skins were higher at \$4.50 to \$4.75 each; and horse hides, \$5 to \$6 each. Steers were 18c. per lb., cows, 13c., and bulls 12c. per lb. flat; and 13c., 16c., and 17c., Montreal inspection. Tallow, 31½¢ for scrap fat; 8c. for abattoir fat, and 15c. to 16½¢ for rendered.

Continued on page 742.



For Peace must
tears, and
must pa
And so in our
us bless
And though I
with a p
And the gold
gave, y
dead.
And the sun is
gay, and
still,
So I'm finding t
"O God,

Through Canada

AS I sit down
cannot be
could en
balmy air pouri
opened window,
fresh daffodils
my desk. Who
fall upon the pin
spreading almo
and my senses
fume of wall-flor
high ridge calle
on its slope, w
allotments, wor
ing about like
nation's food.
rows of peas and
ground. Every
beds made enti
by sods. It is
these allotment
with not a weed
fine art in Engl
else, is done in
even if its acco
time than our c
One of our nurse
in the wards ev
off-time working
has taken. It is
British grit she
bit is transformi
fore waste land
and will in a fe
fruits of her labo
(who are strong
time each day)
ing the extensive
one continually
out, their white
soft wind, arme
garden impleme
overhears in the
fragments of con
best kind of cab
tion, or the diff
right kind of fert
jects. Mr. Lloy
more potatoes'
acted upon in a
that numbers of
lished here the
purpose of augm
by making potato

NOT long ago
struck a r
light, so
fully to bed feeli
enemy for one r
twelve I was aw
knocking at my d
come to the gro
raid on," and the
whistles were bein
and was consciou
halls and bed-rou
I hurriedly dresse
ting on my hat to
of coiffure, and a



For Peace must be bought with blood and tears, and the boys of our hearts must pay;
 And so in our joy of the after-years, let us bless them every day.
 And though I know there's a hasty grave with a poor little cross at its head,
 And the gold of his youth he so gladly gave, yet to me he'll never be dead.
 And the sun in my Devon lane will be gay, and my boy will be with me still,
 So I'm finding the heart to smile and say:
 "O God, if it be Thy Will!"
 —Robert W. Service.

Through the Eyes of a Canadian Woman in England.

AS I sit down to write this letter, I cannot but wish that my readers could enjoy the bright sun and balmy air pouring in through my widely-opened window, as well as the bunches of fresh daffodils and fragrant violets on my desk. When I raise my eyes they fall upon the pink masses of bloom on the spreading almond-tree across the way, and my senses are greeted with the perfume of wall-flowers. Opposite here is the high ridge called the "Hog's Back," and on its slope, which is now divided into allotments, women and old men are moving about like busy bees planting the nation's food. I can already see long rows of peas and onions peeping above the ground. Every here and there are hotbeds made entirely of earth, supported by sods. It is a delight to look upon these allotments, all so trim and neat, with not a weed to be seen; gardening is a fine art in England and, like everything else, is done in the most complete way, even if its accomplishment takes more time than our quick Canadian methods. One of our nurses, who puts in long hours in the wards every day, spends her brief off-time working an allotment which she has taken. It is strenuous, but with true British grit she is holding out, and bit by bit is transforming this patch of heretofore waste land into a thing of beauty, and will in a few weeks be reaping the fruits of her labors. Sisters and patients (who are strong enough to work a short time each day) are continuously cultivating the extensive hospital allotment, and one continually meets them going in and out, their white "halos" fluttering in the soft wind, armed with rakes and other garden implements. These days one overhears in the most unexpected places fragments of conversation respecting the best kind of cabbage for early consumption, or the difficulty in procuring the right kind of fertilizer—and kindred subjects. Mr. Lloyd-George's slogan "Plant more potatoes" is being passed on and acted upon in a proper spirit. I believe that numbers of mills are to be established here the coming season for the purpose of augmenting our flour supply by making potato flour.

NOT long ago I was in London and struck a raid. It was not moonlight, so everyone went peacefully to bed feeling quite safe from the enemy for one night at least. But at twelve I was awakened by the porter knocking at my door and saying, "Please come to the ground floor as there is a raid on," and then realized that shrieking whistles were being sounded continuously, and was conscious of great confusion in halls and bed-rooms above and below me. I hurriedly dressed in semi-darkness, putting on my hat to conceal any untidiness of coiffure, and a big coat to cover other

deficiencies, and descended in the crowded "lift." All the way down (I was on the eighth floor, and consequently in rather a dangerous position) I noticed on each landing as I passed it, groups of people huddled together and talking excitedly. Not being Londoners, I suppose to many of them the experience was a new one. When I alighted in the spacious office, I found it crowded with the guests of the hotel, besides many people who had hurried in off the streets to take refuge there. Men, women and children were in all stages of dishabille, and there were some very funny sights. Officers in khaki tunics, the lower part of their persons clad in gaily-striped pyjamas and their feet bare; ladies in fur coats and elaborate boudoir caps, and others in gorgeous evening apparel on their way from theatres and dances. Grotesque as this mingling of incongruous dress was, no one seemed to see the humor of it, and many to whom it was all an old story, looked inexpressibly bored. There we stood for two hours until finally the signal "all clear" was put up, and there was a general scramble to sleeping-rooms. Next morning we heard that little damage had been done, and in a remote part of the city. It was the first dark night raid, and must have been discouraging to the raiders.

MANY people have predicted that this war will be won by our supremacy in the air; and in the light of recent events in Europe one is prone to agree with them. In this connection I must pass on to you a true and pathetic story which I have just heard of a carrier-pigeon—dear, brave little bird doing its part in this great world-struggle! All sea-planes have their

tendant reached it, it dropped dead through sheer exhaustion. But its mission was accomplished, and the message which cost it its life resulted in the immediate despatch of a boat and the rescue of the crew of the sea-plane. The place that these little birds are taking in this war is really wonderful. Tanks carry them for the purpose of reporting progress to their headquarters of their advance in the attack. Infantry brigades and divisions in the field have their lofts, and have specially-trained men to handle the birds. Battleships make use of them, and in the recent campaign for funds in London, applications for thousands of pounds were carried by "pigeon-post" to the tank banks on Trafalgar Square.

The latest war loan has just passed with great success—the "business men's loan" it was termed, and was subscribed to with the usual cheerfulness. The money in this locality was to go towards the manufacture of more aeroplanes, and the method of advertising employed was worthy of note. Aeroplanes and balloons, from the many aerodromes in the vicinity, circled over the city like birds and dropped from the clouds slips of pink paper which came whirling down in all directions. Old and young in the crowded streets strove to catch them as they dropped. I thought once or twice I had captured one, but it was snatched from my grasp. At last I was successful. The paper in my hand bore these words: "We will fight the planes if you will buy them. Cannot Guilford find £100,000? Buy war-bonds to-day."

The first evening the count amounted to £65,000. The total reached £270,000 instead of the £100,000 asked for, and this was the fourth war loan which the

last week, and I am sure no more precious Easter gift could have been presented. Just think of possessing a whole pound at once! One is only permitted to buy a quarter of a pound a week in England—that is where there is any to be purchased. France is better off for many foodstuffs than we are, and we are glad it is so, for our fighting men are entitled to the best that the gods provide. Have you heard the last lines written by the poet, Francis Morris, a member of the Flying Corps who lost his life in an aeroplane accident a year ago at Vimy Ridge? They were found on two separate pieces of paper in his pocket-book, and are full of pathetic interest:

Sublime
 On spreading wing
 We climb,
 Like an unfettered thing.

And He
 Guides us safe home
 To see
 The fields He bade us roam.

FOR some days the wards were almost empty of patients, and the few men in our care were being petted more than was good for them. We were all very busy doing an extensive spring cleaning of the whole interior while there was opportunity. The patients were put into two wards while the rest were made to shine from floor to ceiling. Instead of iodoform and lysol the air was permeated with the mingled odors of soap, ammonia and floor-polish. All worked together and, although aching in every limb, we had our reward in the improved appearance of the place. Last night the convoy came, and to-day every bed is filled with helpless but happy men—happy to get away for a time from the horrors of those greatest battles of the war! The railway station was a busy scene last night when hundreds of them arrived. A few were walking cases, but for an hour one stretcher after another was passed carefully and rapidly out to the waiting ambulances which bore them in all directions to their respective hospitals.

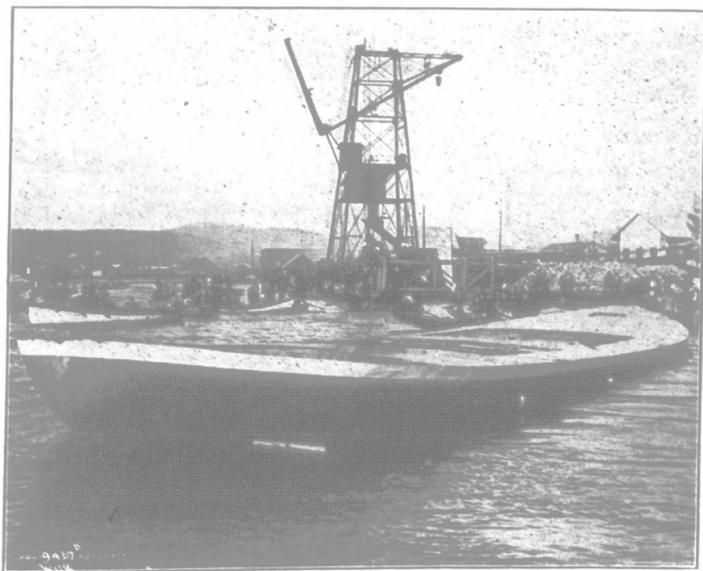
The first day is a quiet one for they all long most for a rest—and sleep if possible—on the clean, soft beds—but in a day or two these irrepressible Tommies will be as lively as crickets, and will be passing on jokes in Cockney and various other accents from one bed to another. Then later on the ones who can get up and move about are soon very busy polishing door-knobs and other brasses, and offering to do all kinds of little jobs to help us. After getting wounded, some of these men were obliged to spend the night in France waiting for the hospital ships to make room for them, and the dastardly enemy bombed the hospitals where they were lying! They all speak very hopefully of the result, and they alone know how hard they have been working in preparation for it for weeks past.

Yesterday afternoon in passing through the town, I was struck with the crowds waiting for latest reports at all the newspaper stands—parents and wives hungry for news, but still with a dread in their hearts for what it might mean to them.

There is a general feeling that this colossal struggle now in progress on the Western front may mean the finish.

SIBVL.

"An unread man feels little interest beyond his own neighborhood—the personal doings of the men and women he sees and knows. Educate him a little, give him his county paper, and the sphere of his interests is widened; a little more, and he takes an interest in his state; more still and he broadens out to his whole country; still more, and the whole world is within his sympathy and ken".



Hull of One of the New Iron and Concrete Ships Now Being Built in the United States.

These hulls are launched upside down, but right themselves at once after going into the water. Photo by Kadel & Herbert, N. Y.

carrier-pigeons which they take with them on flights. In this particular instance, the machine, having suffered damage in an encounter in the air, was forced to alight in the North Sea many miles from land. The weather was rough and the pilot sent out his S. O. S. through the medium of the carrier-pigeon. The little metal tube, attached to its leg, told in a few words his plight and exact whereabouts. After a strenuous battle with the wind the little messenger reached its loft. Its weight on the shell in front of the loft automatically rang the bell announcing its arrival, but before the at-

people of this town of thirty thousand had participated in. Is it any wonder that the king sent them a telegram of congratulation? By such demonstrations as this one can read the determination of the people to bring this struggle to a successful issue.

ALL kinds of cargoes are carried now through the clouds. I heard of a pet dog who was lucky enough to get a passage over to his master who was involved in England. A pound of precious butter was carried to a lady by a French air-man who came on military business

Hope's Quiet Hour.

Victorious Patience.

Ye shall be delivered up even by parents, and brethren, and kinsfolk, and friends; and some of you shall they cause to be put to death. And ye shall be hated of all men for my name's sake. And not a hair of your head shall perish. In your patience ye shall win your souls.—St. Luke XXI: 16-19, R. V.

It was probably on the Tuesday in Holy Week—just a few days before the first Good Friday—when our Lord sat on the Mount of Olives and looked across the valley to that beautiful temple which stood "like a mountain of snow and gold" in the city of Jerusalem. (See St. Mark XIII: 3.) Sadly He told His amazed disciples that a terrible doom was hanging over the guilty people, who had killed the prophets and were even at that moment plotting His death.

Were only the guilty to suffer, and should His faithful disciples escape the sorrows of the world? No. Calmly He announced that even friends and relations should turn against them and deliver them up to death, and they should be hated for His sake. But, while they listened to this warning of coming sorrows, their fears were stilled by the confident tenderness of their Master's wonderful promise: "Not a hair of your head shall perish. In your patience ye shall win your souls."

This young Man, this Carpenter from a despised village, not only looked Death in the face with unflinching courage—for Himself and for His best friends—but spoke of it as if it were only a shadow and not a reality at all. They should be killed, yet not a hair of their heads should perish—it is a figure of speech, expressing God's protecting tenderness for His children. Their most trivial possession is absolutely safe in His care.

As for Himself—He has no intention of leaving His comrades to face the danger and endure the hardships alone. His object is not to save Himself but to save others. Therefore, He will go before them and submit to the humiliation of death—He, the Life of the world!

How weak and helpless a man's tender body is, when exposed to the terrible hail of shot and shell! He goes down so easily, and seems so insignificant when compared with the huge guns and deadly torpedoes of modern warfare. And yet one tiny baby is of more value than all the guns in the world, and a man is greater than the lightning which can so easily kill his body.

Facing a horrible death, our Lord calmly looked through and beyond it, looked beyond the limits of time, and quietly asserted His certain victory. "Heaven and earth shall pass away," He said, "but My words shall not pass away."

On Good Friday, when He hung dying on the cross and His little band of followers forsook Him and fled, that prophecy of history must have seemed impossible of fulfilment. To-day, as we look at the growing power of the Christian religion, and find that after nearly two thousand years the words of its Founder are read and revered by a multitude which no man can number, we see that His confidence in His ultimate triumph was not a mere dream. No infidel can deny that the name of JESUS is above every name—that no other man is worshipped, loved and obeyed with such eager devotion. On Good Friday it seemed as if His words might soon pass away and be forgotten. So far as we know, the only words He ever wrote were traced with His finger in the dust; and yet all the might of earth's greatest kings could not kill His immortal utterances.

It is always a mistake to get discouraged when the outlook seems most hopeless. It surely looked hopeless for the kingdom of the King of the Jews when His own people rejected and killed Him. Yet, when all hope seemed dead, one man—a criminal who owned that he deserved the terrible punishment of crucifixion—saw, by faith, the future triumph of the King, and expected Him to come into His kingdom.

St. James tells us that farmers have "long patience" when they wait and watch and work for the precious fruit of the earth. They are not discouraged because the apple trees have no fruit the first year they are planted.

Let us try to exercise a little patience

in other matters, and refuse to be discouraged when spiritual seeds seem slow in growth. Let us continue to work and sow and pray, waiting in confident patience for the precious fruits.

I know a man whose whole life is consecrated to the service of Christ. I have heard him deliver very beautiful devotional addresses. The reality of his religion is written on his face and shows itself in his daily life. Yet he told me himself that at one time he was an avowed atheist. Perhaps his mother was praying for him for years, fearing that her prayers were availing nothing—because she could not see any result—yet never giving up the fight.

One day that man was invited to attend a service which was being held for prisoners in a jail. He went—more out of curiosity than for any other reason, for he thought he had no belief in Christ. The clergyman who was expected to conduct the service happened to be ill. "Happened!" Does anything "happen" without God's guiding hand?

My friend was asked to read a chapter in the Bible, and then found that he was expected to give a Bible talk to the waiting prisoners. He might have refused, but felt impelled to try. Though he did not believe in the divinity of Christ, at least he was not blind to the beauty and purity of His ideals. So he did his best to explain the moral teaching of the chapter he had read. That was the thin end of the wedge. The seed he tried to scatter that day may have taken root in other hearts. He knows nothing about that, but at least it took root in his own soul. He grew more and more interested in the Bible, and more and more eager to help other souls in their upward climb. Little by little the light came, until the miserable restlessness of doubt changed into the peace which passeth understanding. His soul breathed freely at last, for it had found its right atmosphere.

"My Father is the Husbandman," said our Lord; and He has long patience while He waits for His precious fruits. In His patience He wins souls. He numbers the very hairs of our heads—nothing is too trifling for His careful attention.

Someone has ridiculed the idea of prayer about small matters, suggesting that people approach God as if "He were some idler at a club," having nothing of more consequence to attend to than their little troubles. Of course, if He were a man, and had the affairs of the universe to attend to, He could not spare time for trifles. But the Infinite God would not be Infinite if anything escaped His notice. He has time to clothe the wild flower if the field in its beautiful robes, to be with each common sparrow that falls by the wayside, to order the planets in their tremendous marches through space, and call the millions of stars by their names. Can He, then, possibly be indifferent to anything which concerns one of His children? A child is of more value than many sparrows, or than all the stars put together.

If God cares so much, yet is willing to wait in patience, then we can be patient also. It is not so hard to be patient when victory lies ahead. In your patience you shall win your souls, and win other souls—or help a little in the great work. How can you tell what influences have had their share in building up your character? Yesterday I heard a man say that for many years he had heard about two sermons every week, yet only one out of many hundreds of sermons had influenced him in the least, and that one had changed his whole life. How can he tell that all those other sermons failed to influence him? In these days we are warned by scientific observers that a child is greatly influenced by his surroundings, that beauty passes through the eyes and stamps itself upon the soul, and that ugly and sordid slums leave their indelible mark upon children. We are all unconsciously influenced by innumerable things.

God can afford to be patient, for He knows that His backward children have eternity to grow in. So Christ could calmly look through the black shadow which we call "Death," knowing that it is not a terminus but rather "a station on the line of life between us and the eternal."

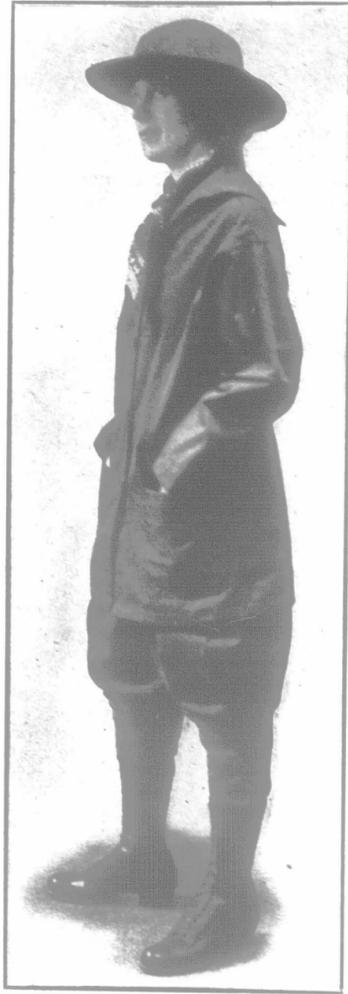
DORA FARNCOMB.

Gifts From Readers.

To-day I received a package of S. S. papers for the "shut-in," and last week a parcel of clothing (for a family of fatherless children) arrived. I also received a dollar from one of our readers "for some

worthy poor person," which went out the same day to help the hard-working mother of seven children, whose husband has been sick for months.

DORA FARNCOMB,
52 Victor Ave., Toronto.



Efficiency Uniform for Women.

Uniform suggested for women who are taking the places of men, and so doing most important war work. It is neat, comfortable, safe, and free enough to permit of the greatest efficiency. We cannot supply pattern for this.

The Fashions.

How to Order Patterns.

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

Send 15 cents per number when price is not marked.

When ordering please use this form:—

Send the following pattern to:

Name

Post Office

County

Province

Number of Pattern

Age (if child or misses' pattern)

Measurement—Waist

Date of issued in which pattern appeared



No. 9645 Blouse with Convertible Collar, 34 to 42 bust. Price, 15 cts.



The Windrow.

Gipsy Smith, the Evangelist, who is with the Y. M. C. A. at the front, has gone through four gas attacks, and has been decorated by the King for the good work he has done in keeping up the spirits of the men.

American surgeons and stretcher-bearers will no longer wear the Red Cross badge of white and red. It is an excellent target, and it has been discovered that the medical men of the American forces have been especially marked by the Prussians for death, one army surgeon's death being considered "equal to the loss of 500 soldiers."

General Foch, Generalissimo of the Allied forces in West Europe, before the war was for five years Director of the Ecole de Guerre, or Military Academy at Paris. During the war he served first in Lorraine, then in the counter-attack at the Marne, and was in general command at Ypres during the famous "second battle," when the Germans were stopped in their drive towards Calais.

In France there is a battalion made up wholly of criminals. When not actively engaged in warfare they are said to be difficult to manage, but when under fire have the reputation of being among the finest fighters in the war area.

The correct pronunciation of the name of Gen. Ferdinand Foch is with a short "o" and with the final "ch" as though it were "sh" a trifle shortened, so that it will rhyme with the English exclamation "Bosh!" or with the French soldiers' name for the Germans, "Bosche." "His name," says New York Herald, "does not rhyme with the German 'Hoch!' The saints forbid."

A correspondent of the "Saturday Review" quotes the original draft of Tennyson's "Hands All Round," published in 1852, but omitted from late editions of the poet's works. It is an apostrophe to America:—

"Gigantic daughter of the West,
We drink to thee across the flood;
We know thee most, we love thee best,—
For art not thou of British blood?
Should War's mad blast again be blown,
Permit not thou the Tyrant Powers
To fight thy mother here alone,
But let thy broadsides roar with ours.
Hands all round!
God the Tyrant's cause confound!
To our great kinsmen of the West, my friends,
And the great name of England, round and round!"

They are Fighting-Dying-for YOU! What are You Doing for THEM?

If only you could be in France, close to your boy, think of the comforts you could send him into the lines, how you could hearten him for the supreme ordeal of battle, shield him by your advice, from temptation, comfort him in pain, help him turn his eyes, not always downward into the chaos of war, but upward to the Right we fight for, and to the higher things he learned on your knee

But no—thousands of miles separate you! Not for you are his furloughs, no visits to camps for you, no privilege of visiting your boy in hospital, if need be. Few and far between are the comforts you can send across the wide seas!

Would that you had a friend over there to perform these offices for you! Thank God, you have that friend. The Y.M.C.A. is ever at your boy's side, from the day he enlists to the day he doffs his uniform—in camps, trains, boats, in the streets of the big city, in hospital, behind the firing lines—and often right into the trenches—everywhere.

"Right on the heels of the dashing Canadian soldiers at Vimy Ridge the Y.M.C.A. men were serving out biscuits and chocolate to the tired men," said the dispatches. The General was enthusiastic and recommended one of the Y.M.C.A. men for the Military Cross!

Said Lord Northcliffe, "I do not think the War could be fought without the Y.M.C.A.!" A general declared, "The benefit to the troops is beyond all calculation." In the words of Ralph Connor, "The Y.M.C.A. is nearer to the boys than anything else."

Think of the tremendous cost of building and maintaining hundreds of huts with all the thousand and one comforts that must be provided. What will you give to show that you care for your boy's welfare? At least \$2,250,000 is needed for 1918. For the sake of your precious boys, be Generous!



War-Work Summary

There are—
89 branches of Canadian Y.M.C.A. in France.
74 branches in England.

More than 60,000 cups of hot tea and coffee distributed daily in France—free. Estimated cost for 8 months, \$48,000.

150,000 magazines distributed free every month. (Estimated cost \$15,000).

\$125,000 used in 1917 to build huts in France.

Thousands of soldiers decide for the better life.

Y.M.C.A. sells many needful things to soldiers for their convenience.

Profits, if any, all spent for benefit of soldiers.

Service to boys in Camp hospitals.

Red Triangle Clubs for soldiers in Toronto, St. John, Montreal and other places. Centres in Paris and London for men on leave.

Out of Red Triangle Fund, \$75,000 is to be contributed to the war work of the Y.W.C.A.

Cost of administration of Y.M.C.A. war work is less than 1%.

Y.M.C.A.

Red Triangle Fund

\$2,250,000, May 7, 8, 9

Canada Wide Appeal

Dozens of Y.M.C.A. dug-outs in forward trenches under fire.

\$100,000 needed for athletic equipment (helps morale of soldiers).

Y.M.C.A. saved hundreds of lives at Vimy Ridge by caring for walking wounded.

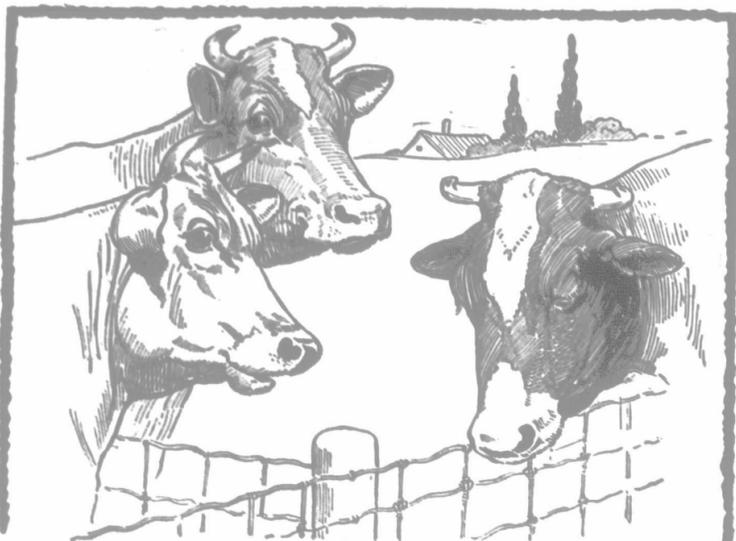
Over 100 pianos in England and France, also 300 gramophones and 27 moving picture machines.

National Council, Young Men's Christian Association

Headquarters: 120 Bay Street, Toronto

JOHN W. ROSS (Montreal)
National Chairman of Red Triangle Fund

G. A. WARBURTON (Toronto)
National Director of Red Triangle Fund



IF COWS COULD TALK

"Good morning, Mrs. Fawncoat. I hear that all the cows in the county are joining the 'Win-the-War' Club."

"Yes, Mrs. Starface, the Dominion Government authorities say we must increase the production of butter-fat, and we cows have all promised to do our 'bit.'"

"There's one thing I want to say right now," spoke up Mrs. Black. "The farmers have got to back us up in this movement. I'm with the rest of you, heart and soul, but what chance have I got?"

"Why, Mrs. Black, what's the matter? You have a fine warm barn and plenty to eat and drink."

"Yes, I know; but what can I do as long as they use that old cream separator on the place? It never was any good, anyway, and now it wastes so much cream I'm just plain discouraged."

"Well, you're not so badly off as some cows, where they haven't any cream separator at all."

"I don't know about that. There's a lot of cream separators in this county that are only 'excuses'—not much better than none at all. I tell you, Mrs. Fawncoat, with butter at present prices and our Allies begging every one to save fat, it's almost a crime to waste butter-fat the way some of these farmers do."

"That's one thing I'm thankful for," said Mrs. Fawncoat, "there's no cream wasted on this farm. We have a De Laval Cream Separator and everybody knows that the De Laval is the closest skimming machine."

"Well," said Mrs. Starface, "we never used a De Laval on our place until last fall, and supposed one separator was about as good as another; but, honest, the De Laval is the first cream separator we've ever had that gave us cows a square deal."

P. S.

Of course your cows can't talk—but if they could you'd never have a moment's peace until you got a De Laval Cream Separator. Remember that a De Laval may be bought for cash, or on such liberal terms as to save its own cost. See the local De Laval agent, or if you don't know him, write to the nearest De Laval office as below.

THE DE LAVAL COMPANY, Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA. Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos. Alpha Gas Engines, Alpha Churns and Butter-Workers. Catalogues of any of our lines mailed upon request.

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

Seed Grains

O. A. C. No. 21 Barley, Bunker King Oats,
O. A. C. No. 72 Oats, Silver Hull
Buckwheat, Centennial Peas.

Also highest grades of Clovers & Timothy.

Ask for our prices on Mangels, Turnips,
Onions, Potatoes, Beets, Cans and garden
seeds of all kinds.

If in need of feeds, write us. We can supply
Linseed Oil Cake Meal, Corn Oil Cake Meal,
Gluten Feed, 23% Protein, Bran, shorts,
Corn Meal, Re-Cleaned Standard Screenings.
Write or phone for prices.

CRAMPSEY & KELLY
Dovercourt Road Toronto, Ont.

Steel Wheels Made to Fit Your Old or New Wagon



Now is the time to place
your order for a set of
"COOKE" Steel Wheels.
They are giving universal
satisfaction in every
province in the Dominion. The
cost is small, and as a labor
saver they are unequalled. A
set of our wheels will make
a new wagon out of your
old one. Write to-day for
illustrated circular and price
list, together with free
chart, showing how to take
measurements correctly, and testimonials from sat-
isfied customers in all parts of Canada. Remember
we quote price delivered to your nearest station,
no matter where you live! The Cooke Metal
Wheel Company, 19 West St., Orillia, Ontario

Women in War-Work.

Dr. E. O. Kane, in a pamphlet recently issued, and quoted from extensively in Literary Digest, deals with women's fitness for railway service, in a way that may apply equally to their fitness for any other kind of work that necessitates endurance, quickness, mental alertness and skill. . . . Women applying for work, he says, should be examined for physical fitness as men are now, then trained gradually in calisthenics, rope-climbing, rings, running, etc., to develop the body for endurance and secure agility. They should be required, while on duty, to wear clothes as rationally safe as those worn by men and should not wear rings, bracelets or chains, which are liable to become entangled in running gear. Corsets, high-heeled shoes and "similar irrational eccentricities" must also be abandoned while on duty, and tea and coffee should be abstained from.

In many respects, Dr. Kane considers women are quite as well fitted as men, and even better, for dangerous employment. The blood-vessels and heart usually bear strain better because they have not been degenerated by the use of tobacco and liquor. The bones of women, too, are more elastic and less liable to fracture, while when anesthetics have to be administered, anesthesia is more rapidly and safely conducted than with men, this, too, being probably due to the more temperate lives led by women.

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.]

I think I have spoken to you before of the Soldiers' Club at which a number of us work in turns, so that the place is open every day and night of the week, including Sundays. The place is furnished with easy chairs, a piano and billiard table; there is also a telephone and a fire-place, and, upstairs, a bath-room and rooms in which "the boys" may write letters, or read in quietness if they choose.

One end of the big hall downstairs has been converted into a restaurant, on the cafeteria plan, and in one corner is the canteen, in which the cooking is done and the dishes are washed, altogether by volunteers who have chosen to help in this bit of war-work.

Always the place is thronged with soldiers, and often "the boys" when giving their orders or getting their trays, stop to chat a bit. They seem to want to talk about some of the things important to them, such as about when they are to "go away" and so on.—Dear lads, how important that event is, to them and to us all!

Since the opening of the Club many have gone never to return; but of late more and more of the "old boys" who used to frequent the place two and three years ago, are coming back, with beaming faces, anxious to tell a little, a very little, about where they have been—at Courcellette, at St. Julien, at Vimy, on the Somme, at Passchendaele. Some of them are limping, on crutches; others have lost an arm, or have been gassed, or have suffered from shell shock. Always they are cheerful, and so happy to be back, but in looking at them one knows that they have faced and are still facing greater tragedy than has ever come to men in this Canada. For they bear about with them not only physical ills but the memory of the greatest and most fiendish war in all history.

The other day one of these lads came up to the canteen, very eager to have a little chat,—it had been so long since he had had a chance to talk to women, except, of course, the nurses, who had been very good to him." His arm had been wounded, and part of one side paralyzed; also one of his eyes had been injured, so that there was considerable disfigurement. He was not the handsome boy that he had been evidently, before he went away. But how smiling was his face! Yes, he was going "home." He was an American; had come over to Canada to enlist, oh—just because he had to, somehow. He was very glad to be back again, chiefly because—well, there was a girl down there in the States.

"Look!"
He took some little snaps from his

pocket. One was of "her" and himself, taken on the Atlantic Coast somewhere, with the billows on one side and the sands on the other. Both were in bathing costume. She was very pretty, and one could see how handsome he had been.

"I have been just dreaming about her night and day," he said. "I sent a telegram to her to-day, and I'll see her on Sunday!"

Then he went off with his tray of toast, poached eggs and coffee.

For a moment not one of us—us four women in the canteen—spoke. Then one said, "I hope she'll measure up."

It was the thought of us all.

Then another said, "She'd be an awful cad of a girl if she turns him down just because he doesn't look as he used to. It would ruin his whole life."

"Yes," said a third, "but he hasn't a doubt of her."

—And so we all hoped she would be "the right sort."

May there not be a single one of the "wrong sort" in all Canada. For this thing will happen over and over. The boys will come home perhaps with bodies that are "not the same as they used to be," but, thank heaven, the men inside of them will be the same, perhaps bigger and nobler than ever.

AND now back to the old story of production—our "bit."

Have you read in the daily papers about Mrs. Cadwell's work in Windsor? Perhaps you have forgotten, but I have not, because for years I have noticed this bright-faced woman at the Horticultural Association Conventions in Toronto, and so, perhaps, I was especially interested.

Four years ago she brought up the question of children's home and school gardens in her town, but met with opposition at every turn. Nothing daunted, she undertook to buy and sell seed to the children herself, and to "mother" their gardens. Last year she extended the programme by letting the children "put up" some of their products in sealers, turning her own kitchen over to them for the purpose, and so successful was the work that some of the products took prizes at the fall fair. Eventually, the worth of what she was doing being demonstrated, the Board of Education decided to give her assistance, and so this year, with the help of the Inspector, she has arranged to distribute 30,000 packets of seed to the children. Her own basement she intends to turn into a canning centre for them.

So much for what a lively imagination, a practical mind, and a spirit of stick-to-it-iveness can do. Not only are the children adding to the world's food supply; they are busy and happy, and proud of their accomplishment, acquiring habits of both thrift and industry, and so laying a foundation for useful citizenship.

I have repeated this account from the daily papers, to emphasize it. Such women are an inspiration to us all. Mrs. Cadwell's "bit" may not be our "bit," but assuredly there is a chance for every one of us, somehow, to help in the world's work. Ours is to find out just what that chance is. If we are as determined as Mrs. Cadwell we too can "make good."

JUNIA.

Needle Points of Thought.

"The object of life is not happiness but perfection."—Madame de Staël.

"The man who will not change his opinion for principle is a dishonor to his country."—Sir John Willison.

Insects on House Plants.

Dear Sir.—I have an oleander tree (about seventeen years old) that has become infested with what looks like a form of scale to me. It has spread to every knot and rough part of bark, as well as the leaves, and unless I can get it checked the tree will soon die.

Just now it is in full bloom and has hundreds of buds to open yet. I have washed it with soap and water several times, but the insects in the early stages seem to travel all over. It has spread to my coleus and ivy geraniums, also asparagus sprengeri. The soft, sticky, white substance is at the base of the leaves next stalk and spreads rapidly, then the leaves turn yellow and fall. I have a sprayer, also nicotine; would that be any use, and if so what strength? One large asparagus sprengeri was just

will
bel
doll
EA
fully
Skirt
Ga
Ext
Valu
Color:
Cholo
Ros, G
56-18
ed mode
back, Co
down fr
front, i
dering a
ter. I
like the
trim, bot
patch p
ible side
pletes t
skirt. W
to 29 in
front in
42 ins
For fu
ulars se
logue, pa
We
deliver
on all
\$10.00
in O
Quebec
Mar
Prov

EATON'S MONEY-SAVING VALUES

CORRECT STYLES AT ECONOMY PRICES

NOTE the low prices, and remember all goods are sold under the EATON guarantee. Months ago, before the present high costs, our buyers bought the materials, hence we can afford these striking values. As prices of clothing of all sorts are steadily advancing, you will be wise to buy now and buy right at EATON prices. You will have to pay more later on for goods not up to the same standard as these. But don't delay if you wish to avoid being disappointed.

Most of the merchandise below will be found in our present catalogue, which is filled with similar big money-saving values. You will be dollars in pocket by taking full advantage of the values shown here, and by making your future selections of requirements in any line from the EATON catalogue. Prices will be higher later on, so order now. If you haven't a catalogue, write to-day for your copy, so that you may share fully in the savings it presents.

Skirt of Striped Cotton Gabardine Extra Good Value at 1.95

Color: White, with Choice of Oxford, Rose, Green or Green Stripes

56-194. This belted model has gathered back, and buttons down full length of front, making laundering an easy matter. Pearl buttons like these on front trim pointed tops of patch pockets. Invisible side closing completes this four-gore skirt. Waistbands: 22 to 29 ins. Choice of front lengths 35 to 42 ins. Price: 1.95

For further particulars see our Catalogue, page 72.

We pay the delivery charges on all orders of \$10.00 and over in Ontario, Quebec and the Maritime Provinces.



Women's Plain Black Cotton Hose Remarkable Special at 14c Per Pair

20-0420. This plain Cotton Stocking has reinforced heels and toes, hem top, and is perfectly seamless. Be sure to include five or six pairs of these in your order. Black only. Sizes: 8 1/2, 9, 9 1/2, 10. Per pair..... 14c For further particulars see our Catalogue, page 186.



Women's Cotton Gloves Very Unusual Value 35c Per Pair

68-0123. These Gloves are made from fine selected cotton yarns, and so knit to resemble fine thread. Neat in seams, three rows of raised points on back and two dome fasteners at wrist. Sizes: 6, 6 1/4, 7, 7 1/4, 8. White only. Specially priced. Per pair..... 35c For further particulars see our Catalogue, page 154.



Save Substantially on this Black Taffeta Silk Skirt 5.00

Color: Black
56-160. The model's straight hanging fullness is controlled by rows of gathers concealed by button-trimmed belt. Pouch pockets showing rows of gathers and little frill at the top are both useful and ornamental. This model closes invisibly at the side, and careful attention has been paid to every detail of the workmanship. Waistbands: 22 to 29 ins. Choice of front lengths 35 to 49 ins. Price..... 5.00 For further particulars see our Catalogue, page 64.

See page 70 of our catalogue for unusually good values in Women's Sweater Coats.



44 IN 22 IN
44¢ 32¢

Attractive Voile Flouncing at a Remarkably Low Price

Voile Flouncing, two lovely patterns, either one of which will please you, and at a most remarkably low price. Comes in two widths. The plain material at the bottom can be hemstitched or cut out at the scallops.
24-222. 44 inches wide, with work 16 inches deep. Price..... 44c
24-223. 22 inches wide, with work 9 inches deep. Price..... 32c
For further particulars see our Catalogue, page 160.



Boy's Tweed Suit with Extra Bloomers 8.95

54-718. Brown English Tweed Suit. Coat has plain front and yoke and box pleats at back. Two pairs of full-fitting strap and buckle bloomers. Sizes: 29 to 33 chest measurements, to fit ages 11 to 15 years. Price..... 8.95
Sizes: 34 to 36 chest measurements, to fit ages 16 to 18 years. Price..... 9.95
For further particulars see our Catalogue, page 253.



OUTFIT | 29 DRESS & BONNET

This Set (including Dress and Bonnet) for 1.29

72-436. The dress has front yoke of lawn trimmed with lace insertion, and the back yoke shows tiny tucks. Insertion and lace edge the neck and sleeves, and skirt is composed of allover embroidery with an effective scallop. The accompanying bonnet of white lawn has cover of scalloped embroidery decorated with band of ribbon ending in rosettes. Sizes: 6 months, 1 and 2 years. Per set..... 1.29 For further particulars see our Catalogue, page 112.

Checked Print Creepers Low-priced at 59c

72-600. Have box pleat in front, and button up back and on inside seam in diaper style. Plain percale binds neck, all-round four-piece belt and wide kimona sleeves. Elastic is run through casing at the knee. Sizes: 6 months, 1 and 2 years. Price..... 59c



For further particulars see our Catalogue, page 110.



Dorothy Wash Dresses Specially Priced at 29c

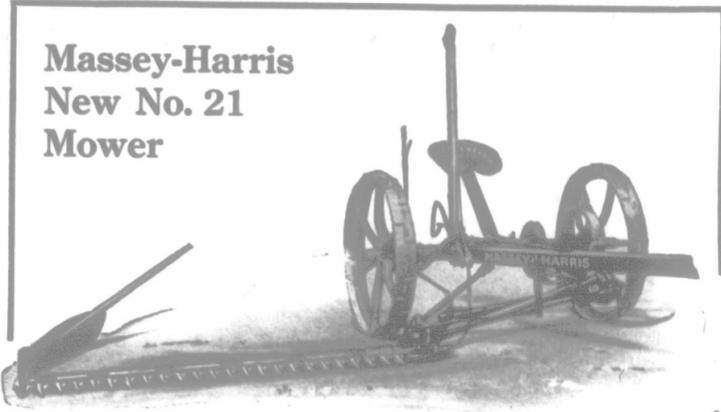
72-256. Striped Print Dress, with prettily colored pattern forming front collar effect, and bands on kimona sleeves, tops of pocket and edge of skirt. Colors: Blue and White, stripe. Sizes: 2, 3 and 4 years. Lengths: 19, 21, 23 inches. Price..... 29c For further particulars see our Catalogue, page 111.



Men! Here's a Good-wearing and Good-looking Suit at the Money-saving Price of 16.00

44-251. The material from which this Suit is tailored is grey worsted in small check or stripe patterns. The coat is tailored in a conservative, yet decidedly dressy, style, with its smartly-cut front, well-noued collar and shoulders, slightly shaped waist and vented back, while the diagonally-cut breast pockets add a smart touch. The vest is well cut and carefully finished in all its details. The trousers are in the prevailing style, have belt loops, and are proportioned to fit correctly. Price..... 16.00 For further particulars see our Catalogue, page 234.

T. EATON CO LIMITED TORONTO CANADA



**Massey-Harris
New No. 21
Mower**

**A Big New Mower
For Heavy Cutting**

- Wide Tread—Wider than on any other Mower—ensuring steady running and overcoming side draft.
- Improved Clutch and Throw-Out Device.
- New Simplified Lift—attached direct to the Frame—Pole may be removed without affecting the Lift or any other parts.
- Push Bars are especially heavy and stiff, have Screw Connections at both ends and both Connections are machine-fitted.
- Hinged Coupling has long, broad Bearings and heavy Pins, doing away with any looseness of the Cutter Bar.
- Lift Spring is placed at the rear, giving a direct connection, and is easily accessible for adjusting.
- The Sections are longer than on any other Mower, giving longer cutting edges and greater clearance.

MASSEY-HARRIS CO., Limited

Head Offices **Toronto.** Branches at **Montreal, Moncton, Winnipeg, Regina, Saskatoon, Swift Current, Yorkton, Calgary, Edmonton, Vancouver, Kamloops.** Agencies **Everywhere**

**Chair or
Rocker \$8.95**

Jacobean design, frames of quarter-cut oak, old English finish. Upholstered spring seat with select tapestry coverings. One of the many good things shown in our large

**Photo-Illustrated
Catalogue No. 7**

Hundreds of the best selected pieces and suites for every room, and all priced freight paid by us to any station in Ontario, Quebec or Eastern Provinces.

**Adams
Furniture Co. Limited
TORONTO**



A SUPREME COURT JUDGE
writes as follows regarding his policy:
"Allow me to express my satisfaction with the result of this investment"
EXCELSIOR POLICIES YIELD SATISFACTORY RETURNS
For Pamphlets and Calendar address
Dept. M. Excelsior Life Insurance Co., Toronto
Head Office: Toronto

covered with little white flowers this winter and looked so pretty.

I have a Boston fern that has a hard form of scales, no white stuff but a sticky, clear matter comes on it. What could I use for this?

I enjoy the "Farmer's Advocate" very much, even though we do not live on a farm, as its interests are so varied.
Que. A. C.

Scale and mealy bug are both routed by applying lemon oil or fir-tree oil, applied according to directions. They may be bought from any dealer in florists' supplies. "Scale" is described by the name, looking like a hard, flat scale on the stems; often it is necessary to apply the insecticide with a small brush to get rid of it. "Mealy bug" appears like tiny, white, downy patches on the stems and leaves. Sometimes soap insecticide alone will be sufficient for it. The soap wash is made by adding a quarter of a pound of Ivory soap, cut in bits and melted in a little water, to a pailful of water. Into this the plants may be dipped, inverted. Hold the hand over the soil and dip the foliage until every part is covered. You might try the nicotine spray.

Rules for Game Wanted.

Will someone who has the rules of the game of Whirlpool kindly send them to Thomas H. Richards, Tyrone, Ont.

Potatoes as War Workers.

Potatoes are among the most valuable carbohydrate foods, and when used with butter, butter and cheese, or fat of any kind, form a combination of value to the body which may very well be served frequently. Try some of the following recipes, and remember, while you are doing so that every dish of potatoes eaten in your home spares so much grain for overseas.

Potato Cream.—Boil and mash six medium-sized potatoes. Season with a tablespoon of butter, salt and pepper, and enough sweet cream to make the mass creamy. Set in the oven to get very hot. Serve for supper with bread and butter.

Potatoes and Cheese.—A Supper Dish. One pint cold potatoes cut into small dice; 1 cup white sauce; 1/2 cup grated cheese, 1/2 cup cracker crumbs, 1 tablespoon melted butter. Put the potatoes in a baking-dish which may be placed on the table. Mix the cheese with them and pour the white sauce over. Cover with the cracker crumbs moistened with the melted butter. Bake until brown.

Maryland Potatoes.—Pare and slice 6 potatoes. Leave in cold, salted water for 15 minutes, drain and put into a dish with milk enough to cover. Put on the lid and bake until tender, then add butter, pepper, salt and minced parsley if you have it. Serve very hot for supper.

Potato Pyramids.—Mould cold mashed potato in little cones, having seasoned the potatoes nicely before moulding. Roll each in breadcrumbs and place on a pan. Put on each melted butter and bake.

Potato Bread.—Two-thirds sweet milk, 1 cup rice potato, 2 cups flour, 1 teaspoon salt, 1/2 yeast cake. Heat the milk to boiling, then cool to lukewarm. Dissolve the yeast cake in the milk. Mix this with the salt, a tablespoon of sugar, the potatoes and one-third of the flour. Beat well and let stand over night. In the morning add the rest of the flour. Let rise until double in bulk, then mould into a loaf. Let rise again to double and bake 40 minutes in a moderate oven.—This recipe and the following are from "American Cookery."

Potato Biscuit.—Two cups flour, 1 cup rice potato, 3 level teaspoons baking-powder, 1 scant teaspoon salt, 1 tablespoon butter or lard, 1 teaspoon sugar, sweet milk to make a soft dough. Sift flour, baking-powder and salt together. Work butter or lard into flour. Add the potatoes, then add milk to make a dough. Make small balls of the dough and place on a greased pan, then flatten each down with the floured bottom of a glass tumbler. Brush the tops lightly with milk or melted butter and bake 15 minutes in a quick oven.

Perhaps, after all this, it will be interesting to note that a poet has been moved to verse by contemplation of the potato:

O Lowly Spud!

O lowly spud, when you are served
As appetizing substitute
For precious wheat, we'll not dispute
That much of it will be conserved!

You easily can constitute
A meal, when served with cheese and fruit,
O LOWLY SPUD!

Our muscle will be well preserved
By your starch granules, so minute;
You'll save the crisis, so acute,
For you the honors are reserved,
O LOWLY SPUD!
—Caroline L. Sumner.

The Scrap Bag.

Vegetables for Medicine.

Plant plenty of vegetables and fruit in your garden. The great majority of diseases are caused indirectly by constipation, and vegetables (especially the "green" ones) and fruits help to prevent it. Also they are of use in preventing rheumatism, as they counteract too much acidity in the blood, caused, paradoxically it would seem, by such apparently non-acid foods as meat, eggs, etc.

The Secret of a Good Garden.

A writer in The Globe, in telling about the wonderful gardens of the Chinese in Alberta and British Columbia, discloses incidentally the secret of their success. "The whole surface," he says, "is fairly packed with well-rotted manure, and every inch of the land is worked over with spades and hoes." Such preparation as this, followed by shallow cultivation of the surface twice a week throughout the growing season, to conserve moisture, will make any garden a spot of luxurious growth.

To Brighten Linoleum.

When you wash your linoleum add 2 tablespoonful of coal-oil to 2 gallons of water. It will freshen it greatly.

To Use Pork Rinds.

Rinds of ham or bacon should never be thrown away. Wash them and use as flavoring for vegetable soups. They are especially good for soup made with ripe peas or beans.

To Freshen Velvet Bows.

An old curling iron is good for freshening a velvet bow that has become crushed. Heat it, cover with a damp cloth and insert into the loops, opening the curler as wide as possible. Finally brush the velvet and the nap will stand up again almost like new.

Before putting a garment with snap fasteners through the wringer, snap the fasteners together. This will prevent the little knob from being crushed.

Frying Pancakes Without Grease.

A writer in a contemporary magazine gives the following: Put a spoonful of salt in a small piece of cotton and tie tightly. When the pancake griddle is hot rub it thoroughly with the salt bag and the cakes will not stick. The pan should be perfectly clean, dry and free from grease before using.

Use for a Broken Egg.

A broken egg may be used at once to make salad dressing for any kind of vegetable salad—cooked beans, beets, peas, etc., or green vegetables such as lettuce or endive. If not needed for this it may be dried on a plate, put through a meat grinder, and saved to use in settling coffee. One egg prepared thus will answer for 2 or 3 days.

A Useful Apron.

Make a strong apron turned up at the bottom and stitched to make 2 or 3 pockets. It will be found very useful when doing housework for slipping things into and so saving steps when going from room to room.

Shoe Lace Ends.

When the tin tips come off shoe laces put a few drops of liquid glue or mucilage on the ends of the laces and roll them between your thumb and forefinger. Let dry before using.

Hint for Cookies.

Instead of rolling out the dough for cookies form it into small balls. Lay these side by side in the pan, then press each lightly and quickly with the bottom of a floured glass. They will flatten out

into circles, w
and cutting, a

Ge

White oilc
out quickly.
quality of
It will wear
Keep 2 or 3
place over it
kettles must l

Cooker

W

Bran Muffin
entire wheat
baking-powder
spoons butter,
thick sour mi
teaspoon soda
baking-powder
bran. Stir th
and molasses,
redients. Ad
in hot, butter
minutes.

Oatmeal Ba

cups oatmeal
shortening, 1/2
water. Mix
with the oatm
drops at a tim
very little wi
stiff paste. D
minutes. Div
piece again, th
down with th
greased tin in
hour and reser
butter and jam

Bran Muffin

entire wheat flo
1 teaspoon (lev
cup molasses
chopped nutm
flour, soda and
the molasses a
nuts. Bake in
minutes. If n
about 45 minut

Buckwheat

buckwheat flo
tablespoon sug
ing-powder. S
mix with 1 cup
spoons sweet m
to a smooth b
on a hot, greas

Oatmeal Bre

milk on 1 cup r
salt, 1 tablespo
and when luke
whole cake co
in 1/2 cup li
enough to mak

Knead 5 to 10

mixing-pan and
bulk. Shape in
again bake 1 h
cups flour.—Am

War Cake.—

2 1/2 cups hot w
dripping or but
1 teaspoon salt,
teaspoon each o
teaspoons soda,
ingredients exce
5 minutes. Wh
the soda and flo
in 2 loaves in m
1 hour in a mod

He was lectur

appreciative aud

"Yes," he d

eloquent winding

along the untrod

can see the footp

Former Presid

on himself:

There is a lad

New Haven who

"See here," saic

day, "if you kee

that, do you kn

you?"

"No," said the

"You'll swell

burst."

The boy believ

ped biting his r

month after the

habit he encour

He surveyed me

Then he walked

cusingly:

"You bite" y

"Herald."

into circles, without the trouble of rolling and cutting, and will be lighter and better.

Good Table Cover.

White oilcloth on a kitchen table wears out quickly. Instead of it use a good quality of linoleum in light covers. It will wear endlessly, with proper care. Keep 2 or 3 bits of board on hand to place over it whenever hot or blackened kettles must be set on the table.

Cookery That Spares Wheat Flour.

Bran Muffins.—Two cups bran, 1 cup entire wheat flour, 3 level teaspoons baking-powder, 1/2 teaspoon salt, 3 table-spoons butter, 1/4 cup molasses, 1 1/2 cups thick sour milk or buttermilk, 1/2 level teaspoon soda. Sift together the flour, baking-powder and salt, and add the bran. Stir the soda into the sour milk and molasses, then stir into the dry ingredients. Add the butter, melted. Bake in hot, buttered muffin pans about 25 minutes.

Oatmeal Bannock.—Two and one-half cups oatmeal, 2 tablespoons melted shortening, 1/2 teaspoon salt, lukewarm water. Mix the salt and shortening with the oatmeal. Add the water a few drops at a time, mixing with a knife (a very little will be needed) to make a stiff paste. Knead the paste several minutes. Divide in 4 and knead each piece again, then round out and flatten down with the rolling-pin. Bake on a greased tin in a moderate oven half an hour and reserve hot, or reheated, with butter and jam or syrup.

Bran Muffins with Nuts.—One cup entire wheat flour, 1 teaspoon (level) salt, 1 teaspoon (level) of soda, 1 cup bran, 1/4 cup molasses, 1 cup sour milk, 1/2 cup chopped nutmeats. Mix and sift the flour, soda and salt. Add the bran, then the molasses and milk mixed, and the nuts. Bake in muffin tins about 25 minutes. If made in a loaf pan bake about 45 minutes.

Buckwheat Griddle Cakes.—One cup buckwheat flour, 1/2 teaspoon salt, 1 tablespoon sugar, 3 level teaspoons baking-powder. Sift these together, then mix with 1 cup cold water and 3 table-spoons sweet milk mixed together. Beat to a smooth batter, then bake at once on a hot, greased griddle.

Oatmeal Bread.—Pour 2 cups scalded milk on 1 cup rolled oats; add 1 teaspoon salt, 1 tablespoon shortening, if desired, and when lukewarm stir in one-third to 1 whole cake compressed yeast blended in 1/2 cup liquid. Add wheat flour enough to make a dough, not too stiff. Knead 5 to 10 minutes. Return to the mixing-pan and let rise until double in bulk. Shape into 2 loaves. When light again bake 1 hour. This needs about 5 cups flour.—American Cookery.

War Cake.—Two cups brown sugar, 2 1/2 cups hot water, 2 tablespoons lard, dripping or butter, 1/4 lb. seedless raisins, 1 teaspoon salt, 3 teaspoons cinnamon, 1/2 teaspoon each of cloves and nutmeg, 1 1/2 teaspoons soda, 2 1/2 cups flour. Boil all ingredients except the soda and flour for 5 minutes. When quite cold again add the soda and flour sifted together. Bake in 2 loaves in medium-sized loaf pans for 1 hour in a moderate oven.

Smiles.

He was lecturing, and had a vast and appreciative audience.

"Yes," he declared, attempting an eloquent winding up of his discourse, "all along the untrodden paths of Nature you can see the footprints of an unseen hand."

Former President Taft tells this story on himself:

There is a lad of my acquaintance in New Haven who used to bite his nails. "See here," said his nurse to him one day, "if you keep biting your nails like that, do you know what will happen to you?"

"No," said the youngster. "What?"

"You'll swell up like a balloon and burst."

The boy believed his nurse. He stopped biting his nails at once. About a month after the discontinuance of his habit he encountered me at luncheon. He surveyed me with stern disapproval. Then he walked over and said to me, accusingly:

"You bite your nails!" — Chicago Herald.

The Beaver Circle

The Right Stuff.

BY FRANK ELLIS.

There are boys who are splendidly dowered,

Who finish their lessons with ease,

They just cast their eyes down the pages,

Then answer as quick as you please.

But the boy who by nature's a dullard,

And yet tackles a task that looks grim,

Who tries, ever tries,

And at last wins the prize,

Why, I take off my hat to him!

There are boys who by nature are swimmers,

To water they take like a duck,

They run up the plank, take a header,

And yet you can't say it is pluck.

They were born to it; but, for the youngster,

Who just bit by bit learns to swim,

And with no ounce of strength

Goes at last quite a length,

Why, I take my hat off to him!

There are some who are born to play cricket,

They take to the game quite with ease.

Like Caesar they come, see, and conquer!

They mount up their twos and their threes.

But the boy who is laughed at as awkward,

Who turns pale when they call out,

"Now, Jim!"

Yet goes on one by one,

Takes each chance of a run,

Why, I take off my hat to him!

There are fellows for whom life's made easy,

They have always a friend when they need,

They are never hard up for a shilling;

Life's a pathway of roses indeed!

But the boys, and they're many in story,

Who build up a real noble fame,

On the sands of Old Time

Leave their footprints sublime,

Why, I take off my hat to them!

Little Bits of Fun.

The kind-hearted woman stopped to reprove the youngster who had chased a cat up a tree.

"You bad boy, suppose you were a cat, would you like to have any one chase you in that fashion?"

"Gee! wouldn't I though, if I could climb like that," said the youngster, grinning.—Boston Transcript.

"Ma! Ma!" bawled Freddie as the usual morning wash was going on. "Do my ears belong to my face or my neck?"

Ma temporized. "Why, what is the matter?" she asked.

"I want it decided now. Every time you tell Mary to wash my face or neck she washes my ears too."—Ladies' Home Journal.

A New Competition.

Subject.—"What I am going to do this year to help in the war."

All essays must arrive at this office not later than May 10th. Prizes will be given for the best essays.

Address—"Beaver Circle Competition," Farmer's Advocate and Home Magazine, London, Ont.

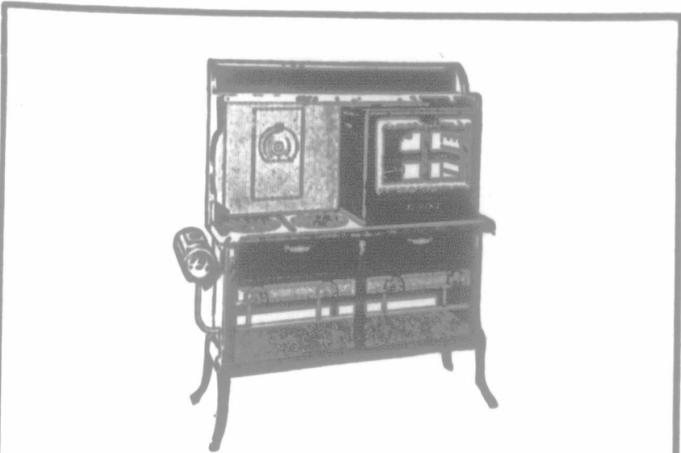
A Successful Beaver.

Miss Edith Crockett, one of the Beaver Circle members, who lives at Sandwich, B.C., recently decided to help The Farmer's Advocate, by sending in the names of new subscribers, and at the same time earn some pocket money for herself.

Her first letter, which we received on the 10th of April contained the names of two new subscribers, and now on the 16th of April we have another list from Miss Edith, containing the names of four new subscribers. She has only to send in the names of four more people who want to take the Farmer's Advocate, and then she will have made altogether \$7.50.

The Farmer's Advocate should be read by every farmer in Canada, as the paper has been working for over fifty years in the interests of the farmers, supplying useful information, and working for laws which will be fair.

You look for the paper every week, to



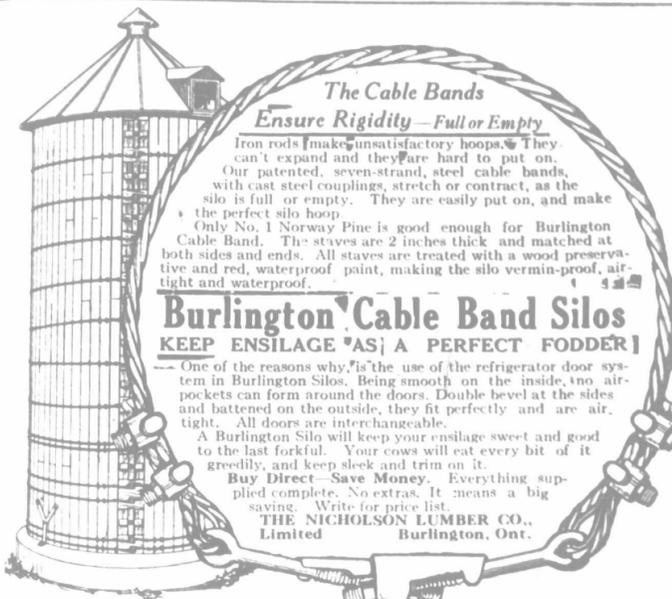
Cool, Clean, Convenient Oil Cook Stove

WHEREVER a can of coal oil can be carried to, there you can have the cool, clean comfort of the McClary Florence Oil Cook Stove which does everything a good cook stove ought to do, and does it as easily, as cleanly and as conveniently as the best gas stoves. No valves or wicks. Just an automatic feed that vaporizes common coal oil into gas that burns with a concentrated, hot blue flame—under perfect control all the time.

You can cook a big meal in perfect comfort even in a small kitchen, in hot weather.

McClary's FLORENCE OIL COOK STOVES

Wickless, Valveless, Blue Flame, Automatic
LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B., HAMILTON, CALGARY, SASKATOON, EDMONTON



The Cable Bands

Ensure Rigidity—Full or Empty

Iron rods make unsatisfactory hoops. They can't expand and they are hard to put on. Our patented, seven-strand, steel cable bands, with cast steel couplings, stretch or contract, as the silo is full or empty. They are easily put on, and make the perfect silo hoop.

Only No. 1 Norway Pine is good enough for Burlington Cable Band. The staves are 2 inches thick and matched at both sides and ends. All staves are treated with a wood preservative and red, waterproof paint, making the silo vermin-proof, air-tight and waterproof.

Burlington Cable Band Silos
KEEP ENSILAGE AS A PERFECT FODDER!

One of the reasons why the use of the refrigerator door system in Burlington Silos, being smooth on the inside, no air-pockets can form around the doors. Double bevel at the sides and battened on the outside, they fit perfectly and are air-tight. All doors are interchangeable.

A Burlington Silo will keep your ensilage sweet and good to the last forkful. Your cows will eat every bit of it greedily, and keep sleek and trim on it.

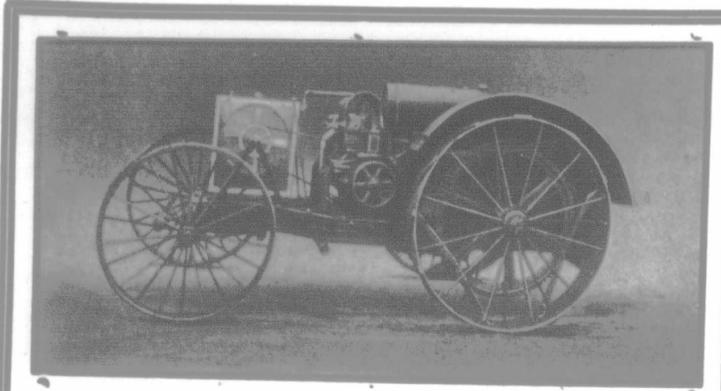
Buy Direct—Save Money. Everything supplied complete. No extras. It means a big saving. Write for price list.
THE NICHOLSON LUMBER CO., Limited
Burlington, Ont.



50 Egg-Incubator \$7.50. Incubator and Brooder Combined \$9.50
Here's Your Opportunity to Aid Production

Hatch your own chicks. It costs very little time or money, and is an interesting and profitable business. These wonderful Cycle Hatchers will pay for themselves with the one hatch. One gallon of oil will hatch 50 eggs. Get a catalogue on my system of poultry raising.

C. W. COLLINS, of the Collins Manufacturing Co.
415 Symington Ave., TORONTO, ONT.



E LEONARD & SONS, LIMITED

London, Canada

Agents for the

HUBER Light-Four Tractor

It took nearly twenty years' experience in the manufacture of Gas Tractors to reach the conclusion that the three bottom type is the Ideal Unit.

80% of the tractors sold in the United States are three plow tractors.

Less Gears, Less Bearings than any other make of Tractor. Roller Bearings are of the Hyatt make.

Buy a tractor like the Huber Light Four. Thoroughly tried and tested. Many exclusive features in design and construction. No freaks or fads.

Easily pulls three 14-inch bottoms, set 8 inches deep. Plows an acre an hour. Runs all farm machinery. 18 H. P. at the draw bar, 24 H. P. at the belt.

Burns gasoline, kerosene or distillate.

Our Folder "Doing the Impossible"

is a record achievement. It proves the excellence of the Huber. Write for it and our proposition.

Government Inspected

New Brunswick Seed Potatoes

IRISH COBBLERS. Grown by Alpheus Gray, near Fredericton, N.B.
GREEN MOUNTAINS. Grown by W. C. Graig, near Fredericton, N.B.

These potatoes were inspected in the fields and cellars by Prof. Cunningham's staff of the Dominion Department of Agriculture, and recommended by Mr. Justus Miller, Assistant Commissioner of Agriculture for Ontario.

\$3.50 per bag—F.O.B. London.

R. P. DULMAGE, R. R. No. 3, LONDON, ONTARIO



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

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

COMFORTABLE 2-STORY BRICK HOUSE to rent, vacant May 1st, 8 rooms and bath (hot and cold water), electricity and gas; good residential street, centrally located, most convenient distance for Public and High Schools. \$30.00 per month. Apply H. Box 581, London, Ontario.

WANTED—GOOD COMPETENT GENERAL for private home. Wages \$22.00 per month at start. Dr. J. J. Williams, Woodstock, Ont.

WANTED—MAN AND WIFE. MAN AS foreman of pure-bred stock farm, Shorthorn cattle. Competent farmer and good manager. Wife to keep house and do work of farmer's wife. Both able and willing to work. Apply at once. Frank Cockshutt, 42 Colborne Street, Brantford, Ontario.

GILSON CONCRETE MIXER

The ideal small Concrete, Plaster and Mortar Mixer, hand or power. Built in three sizes. Smallest size 2 1/2 cu. ft. per batch mixes in two minutes—capacity 25 cu. yds. per day. Price on skids without engine, \$75 3 1/2 ft. with engine and housing on truck, \$125. Send to-day for Concrete Mixer Bulletin No. 10. York St., GILSON MFG. CO. Ltd., Quilph, Ont.

CREAM

We are in the market for Churning Cream. Twenty-five years' experience should count. You'll find it in our service.

ASK FOR PRICES

The figures of yesterday may be too low for to-morrow. Ship to—

The Toronto Creamery

Church St., (It Pays) Toronto

There's nothing better for a light lunch than

McCormick's

JERSEY CREAM
Sodas

Sold fresh everywhere in different sized packages.

For Sale:

Reg. C. 100, Stallion, Silver Duke 16586, foaled June 1, 1911, brown; a sure foal letter. For price and particulars apply to Robt. Patterson, R. R. No. 4, Rockwood, Ont.

read the magazine section, for the news in the Beaver Circle. There are lots of other boys and girls, who would like to have the Advocate too, and their fathers would like to have the latest information about live-stock, fruit-growing, the best kind of seed to plant and hundreds of other things like that, which are in every issue, and there are a lot of things their mothers would like to read.

Would you like to help them, help us, and at the same time make some money, to put in the bank, or buy some of the things you want? If you would, just write to The Farmer's Advocate and Home Magazine, Circulation Dept., telling what your age is and who the subscriber in your house is, and we will write to you and explain how you can make money by helping us.

One of the Prize Essays.

A Faithful Dog.
(A true story.)

Dear Editor.—I have not written to your charming Circle before, but I have been a steady reader of your page. Having seen your competition on animals and birds, I thought I should like to write. I am going to tell you about a dog we used to have.

My father bought a young dog from my uncle when I was a very little girl. He was black and tan, and his name was Joe. After we had him a while he became a great favorite in the family.

He was a splendid cattle dog, and went every night with us for the cows. He was a good dog with children, and he would go every place we went when we were small. One day when my little sister was out in the yard an enraged cow ran at her, but Joe was not far away. He ran at the cow and chased her back to the barn.

Another day father was out fixing a fence in the field across from the school. He left his wire pliers sticking up in the snow by the fence and went down to grandpa's. When he came back the pliers were not there. He thought the school scholars had taken them. When he came home the pliers were lying by the door. Joe had carried them home.

Joe was very fond of father, and every time he went away he would sit out in the lane and cry until we let him into the house. After we let him in he would jump around to show us how glad he was.

Before he died he became hard of hearing and almost blind. I used to feel sorry for him, for sometimes he did not get used very well. We had him about ten or eleven years. When he died he was about fourteen years old. After he died we got a little pup whom we call Collie.

I will close now, wishing the Beaver Circle every success.

BERTHA ROBINSON,
R. R. No. 1, Victoria Harbor, Ont.

Senior Beavers' Letter Box.

Dear Puck and Beavers.—This is my second letter to your interesting Club. I did not see my other letter in print, but my name was in the notes.

There were certainly a lot of prize-winners in the last competition. I never dreamed there were so many Beavers. I think the prizes were very nice too, especially when gardens are so needful in this great scarcity of food.

I do not go to school now as I do not have to try the examinations, but I expect to try entrance next year.

I am very fond of reading. My favorite books are "Beautiful Joe" and "Black Beauty." I also like "A Sweet Girl Graduate." In fact, I like all of L. T. Mead's books that I have read.

I have one sister Thelma and a brother Fred. Our favorite pet is a Shetland pony named Julia. They generally drive her to school. I am also fond of two other pets, Dolly and Molly, twin calves. Well, I think I will close, wishing the Club every success, and Puck and the Beavers a happy Easter.

AN INTERESTED READER.

Paquette, Ont.

P.S.—I would like some of the Beavers of my own age (12) to write to me. I am in the senior fourth class.

M. H.

Dear Puck and Beavers.—This is my first letter to your Circle. We all enjoy reading the Advocate. First of all my sisters and I must thank Eva for all

kind remembrances. We would like to have Eva's picture. I am ten years old. I go to Powassan School. I am in the junior fourth class. My teacher's name is Mr. John A. Bush; we like him fine. We have two miles to go to school, Sunday School and church. I got a diploma for last year and a seal this year for attendance at Sunday School. We drive every Sunday to Sunday School with a quiet and intelligent horse. When she comes to the railroad crossing she always raises her head as far as she can and looks up and down the track.

I raked all our hay, about forty acres, last summer with this horse. We call her Min.

I raised a pet lamb last summer. She grew very well. She stayed with the sheep, but when she wanted milk she came to the house and called "baa" until she got it. I also had a small garden, I raised three bags of potatoes, some beets, cabbage and cauliflower. I am learning to knit socks, and hope to be able to knit socks for the soldiers before long. Wishing your Circle every success, I remain,

ETHEL V. MCINTYRE.

R. R. No. 1, Powassan, Ont.

(Age 10, Jr. IV.)

You deserve great credit for being such a good war-worker, Ethel.—Puck.

Dear Sir.—Could you find out for me where I could purchase a pair of Belgian hares or English greys, and the price asked for the same? I am sending a few riddles.

Black I am but much admired, men seek for me until they are tired. I tire the horse but comfort man. Tell me this riddle if you can. Ans.—Coal.

I went to the woods and got it. I sat down on a stump and looked for it, but I couldn't find it, so I carried it home in my hand. Ans.—A sliver.

MELBA SWEET.

Aylmer, Ont., Box. 257.

Will any of the Beavers who have Belgian hares to sell kindly write directly to Melba.

Senior Beavers' Honor Roll.—Jean Whitman, Estelle Brown, Lloyd Wagg, Otis Boucher, Beatrice Boucher, Alice Heney, Luella Beaman, Minnie Wettlaufer, Myrtle Clement.

Beaver Circle Notes.

Next time the Beaver Circle will be wholly for the Junior Beavers.

Alice Heney (age 13) R. 2, Georgetown, Ont., wishes Jean Gilchrist to write to her.

Beatrice Boucher, whose address is now R. 1, Leney, Sask., wishes the girl who wrote to her, signing just "Laura," to write to her again, giving full address, so she can answer the letter.

The following wish some of the Beavers to write to them:

Ethel Matthews (age 13), Thornton, Ont.

Estelle Brown (age 14), Musgrave Town, Bonavista Bay, Newfoundland.

Myrtle Clement (age 12), Paris, Ont., by March 24th had finished knitting 6 pairs of socks for the soldiers.

Riddles.

"Constantinople is a hard word. Spell it." Ans.—"I-t."—Sent by Lloyd Wagg, Tehkummah, Ont.

Ethel Matthews, Thornton, Ont., sends this riddle to be answered: "Where was Humboldt going in his thirty-ninth year?"

To An April Robin.

Hail, zealous minstrel of the balmy morn,
Whose echoes thrill through all the
nooks of space!
Surely thy voice was fashioned to adorn
And greet the advent of the season's
grace!

Thy breast is filled with thy Creator's
praise
And so thy songs of gladness do not
cease;
Telling war-haunted minds in these dark
days
The beauty and the blessedness of
peace.

Wellington Co. JOHN MORTIMER.

Current

Windsor also runs by the "ol"

Owing to the Service Act has It now embrace practically no granted except the men to be afterwards, in before the tr officers who w further than (since been di exempted. The from the ages o 30,000 at once f

On April 18 Man-power Bi imposing conc promising self- Two days before Member in th that the L.H. would resign if t to pass the nev immediately after the Nationalist John Dillon, Jo Valera, William Healy—met in situation.

Since our last vicissitudes have front. On April ing, Bailleul was and next day th village of Wyts Messines ridge remembered, w June, 1917, the co now being Gener of the recent adv drew to new lines the enemy occup dale, Poelcapelle ceeding then to a of the bulwark of mel, Mont Noir, Descats. Elsewh held their groun 16th, in replusin enemy west of M treme north, in French reinforcen joined with the repeated attacks

line between G Hangard falling French. At Ker Teuton operation to a standstill, an 19th a general lul great "Battle of lasted until the ti to press. In the meantime, quiet, but on Apr offensive southes Thennes and Ma gaining the slopes April 20 the Germ attack against the troops northwest of penetrated the An of a mile and a mediate driven the East during th ceeded in wrestin Transcaucasians, w troops joined with well in helping to from ten villages.

Doubtless we h critical stage of th among the Allies of is now unity on th with General Foch in Europe," in sup Americans are now numbers and are n reinforcements have Italy and are now the Allied battlefo great army of reser while little Belgiu army which on A Germans out of son been taken by the taking 600 prison losses have been g man-power has b ratio than among prisoners show the ment, saying that ghastly, and statin armies will never su

Current Events.

Windsor alone, in all Canada, still runs by the "old" time

Owing to the urgent need the Military Service Act has been radically changed. It now embraces young men of 19, and practically no exemptions are to be granted except for physical unfitness, the men to be called up and exempted afterwards, instead of appearing first before the tribunals. Also men and officers who went overseas but got no further than Great Britain and have since been discharged are no longer exempted. The first draft calls for men from the ages of 20 to 22 and will secure 30,000 at once for the army.

On April 18th the King signed the Man-power Bill containing a clause imposing conscription on Ireland, but promising self-government for Ireland. Two days before, George Barnes, Labor Member in the Cabinet, announced that the Lloyd-George Government would resign if the House of Lords refused to pass the new Home Rule Bill. Immediately after the passing of the Bill the Nationalist and Sinn Fein leaders—John Dillon, Joseph Devlin, Edward de Valera, William O'Brien and Timothy Healy—met in Dublin to discuss the situation.

Since our last issue was printed many vicissitudes have occurred on the West front. On April 16th, after terrific fighting, Bailleul was taken by the Germans, and next day they occupied the ruined village of Wytchaete on the crest of Messines ridge. This height, it will be remembered, was taken by the British in June, 1917, the commanding officer then as now being General Plumer. As a result of the recent advances the British withdrew to new lines in the Ypres salient, and the enemy occupied Meteren, Passchendaele, Poelcapelle and Langemarck, proceeding then to attack Kemmel Hill one of the bulwark of hills made up of Kemmel, Mont Noir, Mont Rouge and Mont Descats. Elsewhere, however, the British held their ground, succeeding, on April 16th, in repulsing repeated attacks of the enemy west of Merville and at the extreme north, in the Zillebeke sector. French reinforcements also arrived, and joined with the British in withstanding repeated attacks of the enemy on a long line between Givenchy and Robecq, Hangard falling into the hands of the French. At Kemmel Hill, also, the Teuton operations were forced to come to a standstill, and there ensued on April 19th a general lull in the fighting of the great "Battle of the Lys" which has lasted until the time at which this goes to press. In the Somme area, in the meantime, there was comparative quiet, but on April 18th Foch began an offensive southeast of Amiens, between Thennes and Mailly, and succeeded in gaining the slopes west of the Avre. On April 20 the Germans launched a heavy attack against the French and American troops northwest of Toul, in Lorraine, and penetrated the American lines to a depth of a mile and a quarter, but were immediately driven back again. In the East during the week the Turks succeeded in wresting Batoum from the Transcaucasians, while in Macedonia Greek troops joined with the Allies and fought well in helping to drive the Bulgarians from ten villages.

Doubtless we have reached the most critical stage of the war, but everywhere among the Allies optimism reigns. There is now unity on the Western battle lines, with General Foch, "the finest strategist in Europe," in supreme command. The Americans are now arriving in increasing numbers and are making good, while reinforcements have arrived even from Italy and are now posted on the right of the Allied battlefront in Picardy. The great army of reserves also, is still intact, while little Belgium has reorganized its army which on April 17th, drove the Germans out of some positions which had been taken by them, and succeeded in taking 600 prisoners. Although the losses have been great on our side, the man-power has been destroyed in less ratio than among the enemy; German prisoners show the greatest discouragement, saying that the losses have been ghastly, and stating their belief that their armies will never succeed in reaching the

Channel ports. It is known that least one Canadian division is now assisting in the Battle of the Lys, probably near Bethune.

Serial Story.

An Alabaster Box.

BY MARY E. WILKINS FREEMAN AND FLORENCE MORSE KINGSLEY

By arrangement with McClelland, Goodchild & Stewart, Publishers, Toronto, Ont.

Chapter XXIV.

When the afternoon mail came in that day, Mr. Henry Daggett retired behind his official barrier according to his wont, leaving the store in charge of Joe Whittle, the Deacon's son. It had been diligently pointed out to Joe by his thrifty parents that all rich men began life by sweeping out stores and other menial tasks, and for some time Joe had been working for Mr. Daggett with doubtful alacrity.

Joe liked the store. There was a large stock of candy, dried fruit, crackers and pickles; Joe was a hungry boy, and Mr. Daggett had told him he could eat what he wished. He was an easy-going man with no children of his own, and he took great delight in pampering the Deacon's son. "I told him he could eat candy and things, and he looked tickled to death," he told his wife.

"He'll get his stomach upset," objected Mrs. Daggett.

"He can't eat the whole stock," said Daggett, "and upsetting a boy's stomach is not much of an upset anyway. It don't take long to right it."

Once in a while Daggett would suggest to Joe that if he were in his place he wouldn't eat too much of that green candy. He supposed it was pure; he didn't mean to sell any but pure candy if he knew it, but it might be just as well for him to go slow. Generally he took a paternal delight in watching the growing boy eat his stock in trade.

That afternoon Joe was working on a species of hard sweet which distended his cheeks, and nearly deprived him temporarily of the power of speech, while the people seeking their mail came in. There was never much custom while mail-sorting was going on, and Joe sucked blissfully.

Then Jim Dudge entered and spoke to him. "Hullo, Joe," he said.

Joe nodded, speechless.

Jim seated himself on a stool, and lit his pipe.

Joe eyed him. Jim was a sort of hero to him on account of his hunting fame. As soon as he could control his tongue, he addressed him:

"Heard the news?" said he, trying to speak like a man.

"What news?"

"Old Andrew Bolton's got out of prison and come back. He's crazy, too."

"How did you get hold of such nonsense?"

"Heard the women talking."

Jim pondered a moment. Then he said "Damn," and Joe admired him as never before. When Jim had gone out, directly, Joe shook his fist at a sugar barrel, and said "Damn", in a whisper.

Jim in the meantime was hurrying along the road to the Bolton house. He made up his mind that he must see Lydia. He must know if she had authorized the revelation that had evidently been made, and if so, through whom. He suspected the minister, and was hot with jealousy. His own friendship with Lydia seemed to have suffered a blight after that one confidential talk of theirs, in which she had afforded him a glimpse of her sorrowful past. She had not alluded to the subject a second time; and, somehow, he had not been able to get behind the defenses of her smiling cheerfulness. Always she was with her father, it seemed; and the old man, garrulous enough when alone, was invariably silent and moody in his daughter's company. One might almost have said he hated her, from the sneering impatient looks he cast at her from time to time. As for Lydia, she was all love and brooding tenderness for the man who had suffered so long and terribly.

"He'll be better after a while," she constantly excused him. "He needs peace and quiet and home to restore him to himself."

"You want to look out for him," Jim had ventured to warn the girl, when the two were alone together for a moment.

"Do you mean father?" Lydia asked.

Farmers—the



Soldiers Of the Soil

SERVE OUR SOLDIERS

BOYS

Are Ready for You

They left the Schools, Monday, April 22, and are awaiting your calls for them.

Wages \$15 to \$30 a Month with Board

If you want some of these boys, send in your application at once. First come, best served. Don't wait till last minute and be disappointed.

Address Applications to Your Nearest

Ontario Government Employment Bureau

15 King St. East, Toronto. - Phone Main 7621

85-87 James St. North, Hamilton. - Phone 1882

108 Dundas Street, London. - Phone 5295-6

139 Queen Street, Ottawa - Phone Queen 2627

Issued by Organization of Resources Committee in co-operation with Canada Food Board

"What else should I do? It is all I live for—just to look out for father."

Had she been a martyr bound to the stake, the faggots piled about her slim body, her face might have worn just that expression of high resignation and contempt for danger and suffering.

The young man walked slowly on. He wanted time to think. Besides—he glanced down with a quick frown of annoyance at his mud-splashed clothing—he certainly cut a queer figure for a call.

Some one was standing on the doorstep talking to Fanny, as he approached his own home. Another instant and he had recognized Wesley Elliot. He stopped behind a clump of low-growing trees, and watched. Fanny, framed in the dark doorway, glowed like a rose. Jim saw her bend forward, smiling; saw the minister take both her hands in his and kiss them; saw Fanny glance quickly up and down the empty road, as if apprehensive of a chance passerby. Then the minister, his handsome head bared to the cold wind, waved her farewell and started at a brisk pace down the road.

Jim waited till the door had closed lingeringly on the girl; then he stepped forth from his concealment and waited.

Abreast of him Elliot stopped; aware, it would seem, of the menace in the other man's eyes.

"You wished to speak to me?" he began.

"Speak with you—no! I want to kick you."

The minister eyed him indignantly.

"What do you mean?"

"You sneaking hypocrite! do you think I don't know what has happened? You threw Fanny down, when Lydia Orr came to town; you thought my sister wasn't good enough—nor rich enough for a handsome, eloquent clergyman like you. But when you learned her father was a convict—"

"Stop!" cried Elliot. "You don't understand!"

"I don't? Well, I guess I come pretty near it. And not content with telling Lydia's pitiful secret to all the busybodies in town, you come to Fanny with your smug explanations. My God! I could kill you!"

The minister's face had hardened during this speech.

"See here," he said. "You are going too far."

"Do you deny that you've made love to both my sister and Miss Orr?" demanded Jim.

Physically the minister was no coward. He measured the slight, wiry figure of his wrathful opponent with a coolly appraising eye.

"My relations with Miss Orr are none of your business," he reminded Jim.

"As for your sister—"

"Damn you!" cried Jim.

The minister shrugged his shoulders.

"If you'll listen to reason," he suggested pacifically.

"I saw you kiss my sister's hand! I tell you I'll not have you hanging around the place, after what's gone. You may as well understand it."

Wesley Elliot reflected briefly.

"There's one thing you ought to know," he said, controlling his desire to knock Fanny's brother into the bushes.

A scornful gesture bade him to proceed.

"Andrew Bolton came to see me in the parsonage this morning. He is a ruined man, in every sense of the word. He will never be otherwise."

Jim Dodge thrust both hands deep in his trousers' pockets, his eyes fixed and frowning.

"Well," he murmured; "what of that?"

"That being the case, all we can do is to make the best of things—for her. She requested me to make the facts known in the village. They would have found out everything from the man himself. He

POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 50 cents.

ANCONAS, SINGLE-COMB, STRONG, vigorous yearling hens, genuine egg machines, mated to Sheppard strain cockerels. Eggs, \$1.25 per fifteen, \$8.00 per hundred. W. E. Williams, Clandeboye, Ont.

AFRICAN GEESE, INDIAN RUNNER AND Muscovy ducks, Barred Rocks, Rhode Island Reds, Black Spanish, Guinea, Campine, Hamburg, Wyandottes. Eggs only. Mating list free. For Terrier puppies. John Annesser, Tilbury, Ont.

ANNESSE'S INDIAN RUNNERS, LAY MORE eggs, eat less, and are more profitable than chickens. John Annesser, Tilbury, Ont.

BEAUTIFUL WHITE ROCKS—TRAP-NESTED—Last year's best pullets, mated to a son of 1st Ont. cock, 1916. One pen only. Eggs \$2.50 per setting. J. A. Butler, M.D., Newcastle, Ont.

BABY CHICKS, WHITE LEGHORNS FROM trap-nested females, real winter layers, money makers, investigation worth your while. Bradley Linscott, Brantford.

BUFF ORPINGTONS, EGGS FROM THE 3rd Ontario cock and Guelph winning females, \$3 setting; other pens \$2 and \$1.25 per 15. Cockerels \$5 and \$10. Geo Hawkins, Tavistock, Ontario.

BRED-TO-LAY SINGLE COMB WHITE LEG- HORN eggs for hatching, fifteen for \$1.50, forty-five, \$3.75; one hundred \$7.00; carefully packed, safe delivery guaranteed, broken eggs replaced. Addison H. Baird, R.R. 1, New Hamburg, Ont.

BARRED AND WHITE ROCKS, GOOD IN type, color, size and laying qualities. Three small, select exhibition matings. Eggs, \$3. M. A. Gee, Selkirk, Ontario.

BARRED ROCK EGGS, WE HAVE BRED for large size and egg production and we think we have succeeded. John Annesser, Tilbury, Ont.

BRED-TO-LAY BARRED ROCK EGGS, O.A.C. strain, \$1.25 per fifteen. Fowls are healthy and have free range. Russell Ballantyne, St. Paul's Sta., Ontario.

BRED TO LAY A FULL BASKET OF EGGS. Try a few settings of my Single-Comb White Leghorns, \$2-15 eggs, \$3-30 eggs, \$8-100 eggs. David G. Houston, 52 Ellsworth Ave., Toronto, Ont.

BRED-TO-LAY BARRED ROCK EGGS FOR hatching—the big, healthy kind that have free range. Should hatch well. Eggs \$2 per 13, \$5 per 50. Biggar Bros., Oakville, Ont.

Bronze Turkeys—SELECTED FOR SIZE and vigor. Eggs \$5 per 9; also eggs from White and Barred Rocks, Brown Leghorns and Rouen ducks. J. H. Rutherford, Albion, Ont.

BARRED PLYMOUTH ROCKS—200 EGG line. Champion Guelph winners; write for circular. Eggs, \$2.00 per 15. Jno. Fenn, Plattsville, Ontario.

BLACK MINORCA EGGS—BOTH COMBS, two dollars for fifteen; good layers. Write: Fred. Reekie, Camperdown, Ont.

CHANTRY FARM BLACK LEGHORNS. Winners at all principal shows, including Silver Cup, London Winter Show. Eggs, Coop No. 1, \$3.00; No. 2, \$1.50, per fifteen. Ed. de Gex, Kerwood, Ont.

CANADIAN RINGLET BARRED ROCKS; trap-nested; heavy winter laying strain. Eggs, \$2.50 setting—guaranteed. F. Coldham, Box 12, Kingston, Ont.

EGGS, \$2.00 FOR 15. S.-C. BLACK MINORCA, S.-C. Ancona, Mammoth Dark Cornish. Hugh McKay, 33 Curry Ave., Windsor P.O., Ontario.

EGGS FOR HATCHING FROM SPECIAL Barred Rock pen, trap-nested by myself. Wonderful producers. \$1.50 per setting. B. W. Linscott, Brantford.

"FAIRVIEW" S.-C. BROWN LEGHORNS Eggs \$1 per 15. Wm. Bunn, Denfield, Ont.

FAWN INDIAN RUNNER DUCK EGGS, great layers, 10c. each. Hastings Bros., Guelph, R. R. No. 7.

FOR SALE—MUSCOVY DUCKS, \$5 A PAIR. Eggs for hatching \$2 a setting. J. A. Tancock, 96 King St., London.

GOLDEN AND SILVER WYANDOTTES Good Silver cock for sale. Eggs from both varieties—three dollars setting of fifteen, two settings for five dollars. From winning stock. Peter Daley, Box 12, Seaford, Ont.

HATCHING EGGS—BABY CHICKS—UTIL- ITY laying strains. Eggs, \$1.50 per setting. Barred Rocks, Rhode Island Reds, White Leghorns, White Wyandottes, Golden Wyandottes, White Rocks, Non-Bearded Golden Polish. Write for price list. Satisfaction guaranteed. Tay Poultry Farm, Perth, Ont.

HEDGE ROW FARM S.-C. BROWN LEG- HORN eggs for hatching, \$1.50 for 15; out of a beautiful flock of extra heavy layers. Order now. H. W. Thur, Elora, Ont.

LARGE, VIGOROUS, THOROUGH-BRED Rhode Island Reds (single-comb). Heavy winter layers. Fifteen hatching eggs \$2.00. Dr. Hendry, Delhi, Ont.

O. A. C. BARRED ROCK EGGS \$1.25 PER doz. post paid. R. L. Easton, Princeton, Ont.

PLYMOUTH ROCK EGGS—O. A. C. LAYING strain; \$1.50 per setting. Mrs. Berry, 52 Queen's St., Guelph, Ont.

"REGAL" WHITE WYANDOTTE EGGS FOR hatching, from Guelph, Ottawa and Newmarket winners \$1 to \$5 setting. J. McCaffrey, Box 600A, Newmarket, Ont.

TURKEY EGGS—WE HAVE 50 HEALTHY Bronze Turkey Hens, mated to strong, husky, young and old toms; eggs ready in season at \$4.50 per 10 eggs; few toms left. Send in your order, we have the eggs ready for you. Everything in pure-bred poultry—write us first. We want your surplus of eggs and baby chicks. Stamps highly appreciated. Yamaska Poultry Farms, St. Hyacinthe, Quebec.

TWENTY-FIVE YEARS A BREEDER OF Barred Rocks that are barred and bred right, and from first-class laying hens. Eggs \$2 for 15, \$3.50 for 30, \$5 for 50, \$8 per 100. Order direct from this advt. Satisfaction guaranteed. Walter Bennett, R.R. 1, Cottam, Ont.

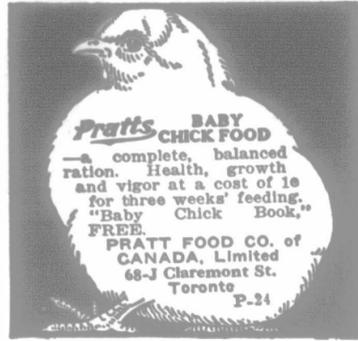
WINNERS—SILVER CUPS, GOLD MEDAL— Eggs, Single-comb White Leghorns, \$1.50 and \$3 setting; Barred Rocks, \$1.50. Nine chicks guaranteed. H. Berscht, Caledonia, Ont.

WHITE WYANDOTTES; IMPORTED, bred-to-lay. Cocks dams' records over two hundred eggs per year. Barred Rocks, bred-to-lay, excellent layers. Prices—eggs, chicks on application. A. W. Hamilton, Parkhill, Ontario.

WHITE WYANDOTTES FROM WELL-BRED stock, Martin strain. \$1.50 per fifteen. Ezra Stock, Woodstock, Ontario.

WHITE INDIAN RUNNER DUCK EGGS for sale. From a choice pen—\$2 per 12. Winfred McPherson, St. Ann's, Ont.

50,000 HATCHING EGGS FROM HIGH- CLASS strains of bred-to-lay stock. Single-comb White Leghorns, White Wyandottes, Barred and White Plymouth Rocks. Eggs \$1.50 per 15, \$7 and \$8 per 100. Limited number of baby chicks. Send for circular. C. E. Smith, Scotland, Ontario.



"UTILITY POULTRY FARM"

E. F. MONTGOMERY, Mgr., Stratford, Ont. After 15 years of careful breeding we feel that we can supply you with the best day-old chicks procurable in Canada, at very moderate prices. Get your orders in early, and avoid disappointment.

Lochabar Poultry Yards Barred Rock Rhode Island Reds, \$1.50 per 15 eggs; Rouen duck eggs, \$1.00 per 10; M. Bronze Turkey eggs, 40c. each. D. A. Graham, R. R. No. 4, Parkhill, Ontario

Choice Eggs for hatching from free range flocks—S.-C. White Leghorns (Barron's 282-egg strain), Bred-to-lay S.-C. Brown Leghorns (O. A. C. and Guild strains), Barred Rocks—\$2 per 15, \$10 per 100. Fawn I. R. Duck eggs, \$3 per 10; Mammoth Bronze Turkey eggs, \$5 per 9 (show stock). Also choice Yorkshire Hogs, all ages. T. A. KING, Milton, Ont.

Rose-Comb Rhode Island Reds and Barred Rock eggs for hatching, \$1.50 per 15. Rose-Comb Rhode Island Red cockerels \$3 each. Alex. McKinney, R.R. No. 1, Erin, Ontario

You'll be proud to own and exhibit to your friend the handsome, beautifully-toned, well-made

Sherlock-Manning 20th Century Piano known as

"Canada's Biggest Piano Value" Write Dept 18 for Catalogue "T." THE SHERLOCK-MANNING PIANO CO. London, (No street address necessary) Canada.

is—perhaps you are aware that Bolton bitterly resents his daughter's interference. She would have been glad to spare him the pain of publicity.

The minister's tone was calm, even judicial; and Jim Dodge suddenly experienced a certain flat humiliation of spirit.

He eyed the minister steadily. "I'll be hanged if I can make you out, Elliot," he said at last. "You can't blame me for thinking—Why did you come here this afternoon, anyway?"

A sudden belated glimmer of comprehension dawned upon the minister. "Are you in love with Miss Orr?" he parried.

"None of your business!" "I was hoping you were," the minister said quietly. "She needs a friend—one who will stand close, just now."

"Do you mean—?" "I am going to marry Fanny," "The devil you are!"

The minister smiled and held out his hand. "We may as well be friends, Jim," he said coolly, "seeing we're to be brothers."

The young man turned on his heel. "I'll have to think that proposition

over," he growled. "It's a bit too sudden—for me."

Without another glance in the direction of the minister he marched toward the house. Fanny was laying the table, a radiant color in her face. A single glance told he brother that she was happy. He threw himself into a chair by the window.

"Where's mother?" he asked presently, pretending to ignore the excited flutter of the girl's hands as she set a plate of bread on the table.

"She hasn't come back from the village yet," warbled Fanny. She couldn't keep the joy in her soul from singing.

"Guess I'll eat my supper and get out. I don't want to hear a word of gossip."

Fanny glanced up, faltered, then ran around the table and threw her arm's about Jim's neck.

"Oh, Jim!" she breathed, "you've seen him!"

"Worse luck!" grumbled Jim.

He held his sister off at arm's length and gazed at her fixedly.

"What you see in that chap," he murmured. "Well—"

"Oh, Jim, he's wonderful!" cried Fanny, half laughing, half crying, and altogether lovely.

"I suppose you think so. But after the way he's treated you—By George, Fan! I can't see—"

Fanny drew herself up proudly. "Of course I haven't talked much about it, Jim," she said, with dignity; "but Wesley and I had a—little misunderstanding. It's all explained away now."

And to this meager explanation she stubbornly adhered, through subsequent soul-searching conversations with her mother, and during the years of married life that followed. In time she came to believe it, herself; and the "little misunderstanding with Wesley" and its romantic dénouement became a well-remembered milestone, wreathed with sentiment.

But poised triumphant on this pinnacle of joy, she yet had time to think of another than herself.

"Jim," she said, a touch of matronly authority already apparent in her manner. "I've wanted for a long time to talk to you seriously about Ellen."

Jim started. "About Ellen?" he repeated.

"Jim, she's awfully fond of you. I think you've treated her cruelly."

"Look here, Fan," said Jim, "don't you worry yourself about Ellen Dix. She's not in love with me, and never was."

Having thus spoken, Jim would not say another word. He gulped down his supper and was off. He kissed Fanny when he went.

"Hope you'll be happy, and all that," he told her rather awkwardly. Fanny looked after him swinging down the road. "I guess it's all right between him and Ellen," she thought.

To be continued.

Why Wheat Substitutes Cannot be Sent Overseas.

Some foods, such as potatoes, occupy too much space in proportion to their nourishment. But people often ask: Why not send corn instead of wheat? The chief reason at present is because for two months after the first of April corn will not keep during shipment abroad, for that is the germinating season. Wheat, on the contrary, is a durable grain.

And, though some do not realize it, the Allies have been using much corn in their bread, as high as 30 per cent., a far larger admixture than we have universally adopted.

And every one should realize that to ask the French nowadays to eat more wheat substitutes, such as corn, rice, or oats, is nothing less than loading upon them extra burdens which we might easily shoulder. While the French are under the cruel strain of war—for over three years giving their very heart's blood in fighting for the ideals which mean as much to America as to France—it is brutally selfish to force them to change, by a hair's breadth more than is necessary, the diet they have been accustomed to. The American people, 3,000 miles from the thunder of war, can easily enough use substitutes for wheat, such as oats, rice, or corn. They are just as nutritious. Of course, wheat bread is the most white and moist. But cannot ease-loving American men at home give up a little whiteness and moisture in their meals

when Frenchmen and Englishmen are giving up their lives? Cannot American women change some of their cooking and eating habits while their French sisters are taking the place of horses to drag a plow in order to raise more food? Is it true that American patriotism goes no deeper than cheering the flag?

More than half the families in this country bake their own bread. It is easy enough for them to change their diet. In France the people of each village are supplied with bread from the village bakery. Would you ask any woman of those villages to add to the length of her working day, experimenting with substitutes, baking corn bread or cooking rice and oatmeal, with coal at \$135 a ton—Literary Digest.

Markets

(Continued from Page 732)

Chicago.

Cattle.—Beeves, \$11 to \$17.25; stockers and feeders, \$8.40 to \$12.75; cows and heifers, \$7.60 to \$13.85; calves, \$9 to \$14.75.

Hogs.—Light, \$17.20 to \$17.85; mixed, \$17 to \$17.75; heavy, \$16.25 to \$17.40; rough, \$16.25 to \$16.65; pigs, \$13.25 to \$17.25.

Sheep.—Native, \$13 to \$17.85; lambs, native, \$16.50 to \$21.70.

Cheese Markets.

Montreal, finest westerns, 21½c.; finest easterns, 21¼c.; Watertown, 20c.; St. Hyacinthe, Que., 20¾c.

Those attending the Merner Shorthorn sale on May 1 should bear in mind that trains will be met at Hensall. The post office address is Seaford. See the advertisement.

Geo. Amos & Sons of Moffat, Ont., in ordering a change in their advertisement state that they have had a good season's business and have sent many cattle west of the great lakes and south of the border to United States. They have had a very great deal of inquiry for real good, young bulls which means, no doubt, the raising of better cattle. Among the many sent out special mention might be made of Walnut Victor, shipped to Messrs. E. H. Graham & Son of Carp, Ont. This was one of our very best young bulls and should be a valuable addition to Messrs. Graham and Eastern Ontario. A grand bunch of young things are coming along and they are offering some grandly-bred young Scotch cows with calves at foot and rebred to Imp. Newton Grand Champion. Also quite a number of well-bred heifers bred to him and one 12-months bull sired by Imp. Loyal Scott and out of a dam that was first in dairy class at London, the calf himself being second in the junior calf class. Messrs. Amos would be pleased to have intending purchasers come and inspect the herds as they feel they can make it worth their while.

York County Holstein Sale.

With this issue appears the first announcement of the York County "Quality Sale" of pure-bred Holsteins, to be held in the Fair Buildings, Richmond Hill, Ont., on Wednesday, May 15. This year's offering is made up of fifty-two females, including about twenty cows that are freshening around sale time, and six young bulls, nearly all of which are in the twelve-months class. A list of the consigners follows: C. R. James, Richmond Hill; W. F. Elliott, Unionville; A. J. Camplin, Unionville; Frank Boyle, Hagerman; Jas. Jonson, Scarborough; Geo. Garri, Aurora; W. A. Snider, and W. E. Watson & Sons, Pine Grove, and Sunny Brook Farm, Eglington. All requests for catalogues, etc., should be made to R. W. E. Burnaby, Jefferson.

Questions and Answers. Miscellaneous.

Grafting.

What is the proper time to graft apple trees?

Ans.—It is advisable to cut the scions very early and keep them in moist sand. However, it is not well to commence grafting until the sap is flowing in the tree.

The Nature in Ke Lamb

During the a fuel shortage those who were located in the gas. However, to a certain extent an unlimited showed signs of localities. such an extension to keep certain private dwellings for heat the temperature sufficiently high.

"The Nature Counties of E is the title of a G. R. Mickle, by order of the Ontario. This difficulties in gas, gives an amount of gas coal and artificial purposes. are taken from

Essential of the Product

"There are natural gas production and first place the is instantly an to escape into waste of gas less than would be products. B

hibiting waste gas field in 190 way for a gas million cubic feet in heating value to about 400 barrels of ting the ab

amounts daily garded as a m in the case of operators of f fancied they l pelled to close sympathizers. is not physical

ence off, as it ent operators own property omical develop of all the trou right to drill f can draw off leases of any disposed to co indispensable

It accordingly draw off the price rather th causes unnee superfluous w called, the o scores of miles are enormous the consumer There is no which this is t ing factor in o

therefore, dra which is final tion, is of no essentially dif designed to economical pro gas which do fact must nec

Estimate of in Reserve

"Up to the million cu. ft. from the Ken the pressure to 320 lbs. a d ing the press lbs. before th remains a dro on, and this amount of g should produc million cubic go down to 5 drop of 270, way about 8 however, al that more ga indicated by t

This is only the shape of a that of a ham, t ing northward

The Natural Gas Situation in Kent, Essex and Lambton Counties.

During the past winter when there was a fuel shortage many people envied those who were fortunate enough to be located in the districts served by natural gas. However, even those people suffered to a certain extent, as what was considered an unlimited supply of this fuel product showed signs of exhaustion in many localities. The pressure dropped to such an extent that it was impossible to keep certain industries running, and private dwelling houses depending on gas for heat found difficulty in keeping the temperature of their residences sufficiently high to make it comfortable. "The Natural Gas Situation in the Counties of Essex, Kent and Lambton" is the title of a small pamphlet, written by G. R. Mickle, Mine Assessor, and printed by order of the Legislative Assembly of Ontario. This pamphlet deals with the difficulties in the distribution of natural gas, gives an estimate of the probable amount of gas in reserve, and compares coal and artificial gas as fuel for heating purposes. The following paragraphs are taken from this pamphlet:

Essential Difficulties in Dealing with the Production and Distribution of Natural Gas.

"There are certain peculiarities about natural gas which make the economical production and use of it difficult. In the first place the fact that it is invisible and is instantly annihilated once it is allowed to escape into the open air renders the waste of gas less impressive and revolting than would be the case with other valuable products. Before the regulations prohibiting waste were enforced in the Kent gas field in 1907, it was nothing out of the way for a gas well to blow off two to three million cubic feet per day. This is equivalent in heating power and, consequently, value to about 100 tons of coal, or over 400 barrels of petroleum; anyone permitting the absolute destruction of such amounts daily of coal or oil would be regarded as a menace to the community, but in the case of gas it was tolerated and the operators of the wells wasting gas even fancied they had a grievance when compelled to close the wells, and found many sympathizers. Moreover, the fact that it is not physically possible to separate, or fence off, as it were, the holdings of different operators—allowing each one on his own property to plan a careful and economical development—is really the source of all the trouble. A competitor with the right to drill for gas on adjoining territory can draw off the gas underlying the leases of any operator who might be disposed to conserve the gas for the future indispensable needs of the community. It accordingly becomes a scramble to draw off the gas first and sell it for any price rather than let a rival have it. This causes unnecessary expense in drilling superfluous wells to "offset", as it is called, the competitor's wells, inlaying scores of miles of double pipe lines which are enormously expensive, all of which the consumer must ultimately pay for. There is no other product of nature of which this is the case, and it is the governing factor in operations. The experience, therefore, drawn from older industries, which is finally crystallized into legislation, is of no value because the thing is essentially different, and any regulations designed to ensure an intelligent and economical production and use of natural gas which do not take cognizance of this fact must necessarily fail in their purpose.

Estimate of Probable Amount of Gas in Reserve in the Known Gas Field.

"Up to the end of 1917 about 80,000 million cu. ft. of gas had been produced from the Kent field. During this time the pressure dropped from about 590 to 320 lbs. a decrease of 270 lbs. Assuming the pressure may go down to 100 lbs. before the field is abandoned, there remains a drop of 220 lbs. to be drawn on, and this represents a proportional amount of gas which is available and should produce 80,000 X $\frac{220}{270}$ or 65,000 million cubic feet. If the pressure may go down to 50 pounds there remains a drop of 270, representing in a similar way about 80,000 cubic feet. It is, however, almost an absolute certainty that more gas will be obtained than is indicated by the calculations just made. This is only reasonable to expect from the shape of the field, which is roughly that of a ham, the knuckle of the ham pointing northwards and the broad base ex-

KEITH'S
THE FARMER'S SEEDSMAN SEEDS FIFTY-TWO YEARS SERVICE
1866 1918

RUSH YOUR ORDER!

Owing to the shortage of seeds of all kinds, especially corn, we advise you to rush your order before you are too late. All orders received will be filled with the utmost care and attention from best selected stock. When buying from us you save all middlemen's profits. Send your order to-day—SURE.

We pay railway freight to all parts of Ontario and Quebec on orders of \$25 or more.

CORN	CLOVER AND TIMOTHY
Seed corn now on hand. It is excellent quality, fine and dry as flint.	Government Standard Bushel
Red Cob	No. 1 Red Clover.....\$23.00
Early Prince Charles	No. 1 Alsike..... 16.50
(Would do as a substitute for Wisconsin No. 7.)	No. 2 Alsike, No. 1 for purity.... 15.50
Early Improved Leaming	Alfalfa, Ontario Variegated No. 2, almost No. 1 for purity..... 25.00
Per bus.	Sweet Clover, White Blossom..... 16.00
Guaranteed 90% Germination. \$5.00	No. 1 Timothy, extra No. 1 for purity..... 6.25
Guaranteed 75% Germination. 4.60	No. 2 Timothy, extra No. 1 for purity..... 5.75
O.A.C. 21 Barley..... 2.40	No. 2 Timothy, No. 1 for purity 5.25
O.A.C. Barley (Registered)..... 2.85	Kentucky Blue Grass, 21c. per lb.
O.A.C. 72 Oats..... 1.45	Marquis Spring Wheat (Ontario grown)..... 3.00
American Banner..... 1.45	
Emmer..... 2.10	
Amber Sugar Cane..... 11c. lb.	

We are in the market for Rye, Buckwheat, O. A. C. No. 3 Oats, Silver Hulled Buckwheat. Send samples. Bags for Clover & Timothy, 45c. extra. Bags for Grain free.

GEO. KEITH & SONS SEEDS 124 KING ST. E. TORONTO

Cream Wanted

For good service and better prices, ship your cream to us. We guarantee the test, and pay 52 cents a pound butterfat. We remit daily and pay express charges.

The Mutual Dairy & Creamery Co.
743-745 King St. W. TORONTO

BEEKEEPER'S SUPPLIES

HIVES · FRAMES
FOUNDATIONS · ETC.

THE TILLSON COMPANY, LTD.
TILLSONBURG, ONT.

McLAUGHLIN

—Symbol of Life
Power, Grace
Efficiency, Harmony and
Easy Effort

The McLAUGHLIN MOTOR CAR Co Limited, OSHAWA, ONT.
CANADA
12 BRANCHES IN LEADING CITIES DEALERS EVERYWHERE

McLAUGHLIN

MODEL E-6-49 SEVEN PASSENGER TOURING CAR

See the McLaughlin Line at the Local Show Rooms

NO WAR PRICES ON THIS CLOTHES WASHER

\$1.75

SPECIAL OFFER

Washes anything from finest laces to heaviest blankets or overalls equally well and without wear or tear—saves rubbing and washboard drudgery—can be used for rinsing, bluing or dry cleaning.

To prove to every woman that this is the best Vacuum Washer and to introduce it in every home we will send it complete with long handle and exhaust projectors, which prevent splashing, for only \$1.75 postpaid. Lasts a life time. Send order to-day. Satisfaction guaranteed or money refunded.

Grant & McMillan Co.
Dept. AL 7 Box 353 Toronto

15 VOLPEEK
MENDS POTS & PANS

Mends Granite ware, Tin, Iron, Aluminum, etc. in two minutes. Without tools. 50 mends for 15c. From your dealer or us, postpaid Vol-Peek Co., P.O. Box 2024, Montreal



FOR mops, brooms and brushes "as good as new", try dissolving a heaping table-spoonful of Gold Dust in a pail of hot water. Thorough "swishing" makes them clean and sanitary, because Gold Dust so quickly dissolves the grease.

GOLD DUST
The Busy Cleaner

THE FAIRBANK COMPANY LIMITED, MONTREAL

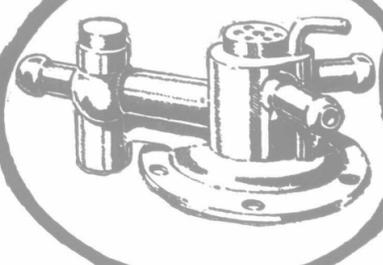
MADE IN CANADA




EMPIRE MILKING MACHINES

The Heart of the Milker

The Super-Simple Pulsator gets it



The Bested Effect



THIS IS THE WAY IT IS ACHIEVED

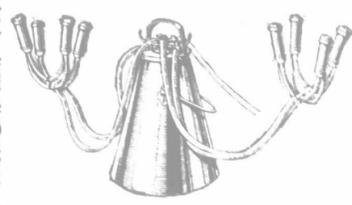
Another Battle Won for Dairymen

FOR months we have been experimenting—investigating—testing—fighting, to find a way to make the Empire Milking Machine, already the unquestioned leader, still more efficient for the dairy farmer.

THE BATTLE IS WON.

We have given the milking machine a new heart—the pulsator is the heart of the milking machine—and the result of our experiment, the new Empire Super-Simple Pulsator, is the most wonderful development since the invention of the Empire—the competent milking machine.

To be successful a milking machine *must* have a perfectly acting pulsator to cause the alternating action of suction and massage on the teasts (to imitate the calf's "suck and squeeze") to occur with absolute regularity; and to make the change from suction to massage and back again instantaneous.



It places the Empire Milking Machine immeasurably in advance of all competition. Your cows should be milked by an Empire Milking Machine with the new Super-Simple Pulsator. It will milk them more rapidly than ever—it will solve your labor problem—it will increase milk production at a decreased

The Empire Super-Simple Pulsator, the pulsator without a piston, does that and more. It really is *Super-Simple*—so simple that it can be taken apart and put together again in less than two minutes. *It has but five moving parts; nothing to wear out or "get out of gear."* It cannot lose vacuum, so its action is perfect.

cost; it will transform milking from drudgery into a pleasant chore. Our factory is overtaxed by the increased demand for Empire Milking Machines, so go to your dealer at once, see the new Super-Simple Pulsator and tell him to order your Empire outfit without delay; or write for Catalog J

THE EMPIRE CREAM SEPARATOR CO. OF CANADA, LIMITED
MONTREAL TORONTO

tending into Lake Erie. In making the calculations given in Report of the Bureau of Mines, Vol. XIX, p. 150, a probable mean porosity of the rock of 10 per cent. was assumed and a yield of 38,000 million cu. ft. arrived at on that basis, whereas it can be seen the production will ultimately be about four times this amount, thus requiring a porosity of 40 per cent., which I believe is quite unknown in any field. The only way the excess production over the calculated amount can be accounted for is by the movement of gas from under the lake. This of course would have the same original pressure as that under the land area, viz., 590 lbs., and as the pressure drops, due to the flow of gas from the wells, the gas now in strata under the lake will gradually find its way to the wells drilled on land. The extent to which this would increase the calculated production cannot be determined in any way, but an increase of 20 per cent. might reasonably be looked for from this source, making thus a reserve of 78,000 to 96,000 million feet. As 24,000 cu. ft. of this gas are equal to one ton of coal, this is equivalent to 3,200,000 or 4,000,000 tons, something well worth making an intelligent effort to conserve. The amount that has been produced to the end of 1917 is equal in heating value to 3,300,000 tons of coal.

Amount of Fuel Necessary for Domestic Use and Comparison with Coal and Artificial Gas in Cost.

"What is a reasonable amount of fuel for the inhabitants of the districts in Kent, Essex and Lambton served by natural gas to use? It is easily capable of calculation. Assume the population thus served to be 80,000. The figures given in Municipal Bulletin No. 10 for 1916 for Windsor, Walkerville, Sandwich, Wallaceburg, Chatham, Blenheim, Ridgetown, Tilbury, Dresden, Leamington, Kingsville, Sarnia and Petrolia total 76,300, allowing the balance to be made up by small places not mentioned and farm houses along the lines. From the figures given in Vol. XIX of the Bureau of Mines Reports, 10,000 people use 700,000 daily average throughout the year for domestic purposes. Eighty thousand would use 5,600,000 daily, or 2,044,000,000 per year. Now the total importation of anthracite coal into Ontario for the fiscal year 1915-16 was 1,827,000 tons, and this anthracite coal is a measure of the amount of fuel used for domestic purposes in the Province, outside of the consumption of wood, natural gas and artificial gas. This means that the average consumption is probably not much over a ton per individual, or say 100,000 tons for the 80,000 people concerned. This is equivalent to 2,400,000,000 cu. ft. of gas, a figure which agrees fairly closely with the one obtained by direct observation given above.

"One circumstance which has hindered any effort to prevent waste of gas, not only by direct escape into the air and consequent destruction, but also by the employment of wasteful appliances or using an unnecessary amount, is the fact that the price paid for the gas is totally out of keeping with the cost of the standard fuel—coal—at the present time.

"From the figures given above, 24,000 ft. of gas being equal to one ton of coal, the following relation between prices can be seen, viz—

Natural Gas	Coal (per ton)
At 10c. per 1,000 ft. equals coal at \$ 2.40	
" 15c. " " " " " 3.60	
" 20c. " " " " " 4.80	
" 25c. " " " " " 6.00	
" 30c. " " " " " 7.20	
" 35c. " " " " " 8.40	
" 40c. " " " " " 9.60	
" 50c. " " " " " 12.00	

Even the domestic consumer who pays the highest rate, 25c. per thousand, is getting the equivalent of coal at \$6.00 per ton, with the additional advantage of the elimination of all work in connection with its use. The industrial concern and the large user were only paying 11 to 15 cents per thousand, or the equivalent of coal at \$2.64 to \$3.60 per ton, surely an absurd price in these times, and one that will never compel rigid economy. There does not seem to be any reason, compatible with the idea of enforcing the utmost economy, why large users should have any advantage over small consumers beyond possibly a small discount. In this respect the interests of both the gas companies, who are anxious to sell their product before a rival can get it, and the large users are identical, but it is inimical

to intelligent... at all is allowed... the same rate... seems to be no... less than 40c. p... lent of coal at... expense for lab... can purchase a... are fortunate i... prices paid for... is striking. On... anywhere in O... the price is 80c... having a heat... compared with... the Kent gas, o... as the Toronto... in Kent should... and vice versa t... to be on as fa... dweller in Ken... thousand shoul... at 23 cents inst...

Long Life of the Rates Advancing Domestic Consumption

"The benefit... increase in rates... utmost econom... 20,000 or so r... presenting as n... unless backed... could enforce e... both undesirable... benefit that wo... an increase of t... of the life of t... care that woul... This benefit wo... panies, as can... calculation. A... the smallest an... gas in reserve... is correct. For... industrial consu... cent. of the tot... cent., and the r... 15,000 million... supply. Apart... evitable breakd... would increas... of cold weather... great deal of g... careful nursing... under domesti... can compare th... as far as the ga... In the first pl... system continu... is probably imp... can be markete... then we have a... 30% of 65,00... equals \$3,997,50... Mill at 13c. e... \$9,912,500.

As this 65,000,000 cu. ft. of gas would be sold at \$3.67 per ton, it would be worth \$241,050,000.

"If this amount of gas were sold at 5 per cent. would be worth \$12,478,100, the 40c. rate suggests a little over 5 per cent. for the year, and a minimum of 40c. for the years for the fuel obtained from the collection of three years. This is \$12,606,800.

gain of about \$12,478,100, the 5 per cent. would be worth \$12,478,100, the 40c. rate suggests a little over 5 per cent. for the year, and a minimum of 40c. for the years for the fuel obtained from the collection of three years. This is \$12,606,800.

Interest of the Greatest

"It is evident... sumers resident... county now su... the greatest aggr... parties concern... that a big life f... greatest importa...

to intelligent conservation. If any use at all is allowed for industrial purposes, the same rate should be paid, and there seems to be no reason why this should be less than 40c. per thousand, or the equivalent of coal at \$9.60 per ton, with no expense for labor attached. Those who can purchase anthracite coal at this price are fortunate indeed. Compared with prices paid for artificial gas the difference is striking. The cheapest artificial gas sold anywhere in Ontario is in Toronto, where the price is 80c. per thousand for a gas having a heating efficiency of 570 as compared with over 1,000 efficiency for the Kent gas, or to buy on the same basis as the Toronto householder the consumer in Kent should pay \$1.40 per thousand, and *vice versa* the Toronto user in order to be on as favorable a footing as the dweller in Kent county paying 40c. per thousand should be able to get his gas at 23 cents instead of 80.

Long Life of the Gas Field with Higher Rates Advantageous to the Domestic Consumers—not the Gas Companies.

"The benefit to be derived from the increase in rates is the enforcement of the utmost economy in the use of gas. With 20,000 or so meters in commission, representing as many users, no regulations unless backed by an army of inspectors could enforce economy. This of course is both undesirable and impracticable. The benefit that would accrue to the public by an increase of the rates is a prolongation of the life of the field due to the extra care that would result in the use of gas. This benefit would not go to the gas companies, as can easily be seen by a simple calculation. Assume for a moment that the smallest amount calculated above as gas in reserve, viz., 65,000 million cu. ft., is correct. For the last few years the industrial consumption has been 70 per cent. of the total and the domestic 30 per cent., and the rate of consumption is now 15,000 million per year, or four years' supply. Apart altogether from the inevitable breakdown of the system, which would increase in seriousness every spell of cold weather and result in the loss of a great deal of gas against the system of careful nursing of the wells possible under domestic consumption only, we can compare the results of the two systems as far as the gas companies are concerned. In the first place, imagine the present system continued and even admit, what is probably impossible, that all of the gas can be marketed under those conditions; then we have as follows:—

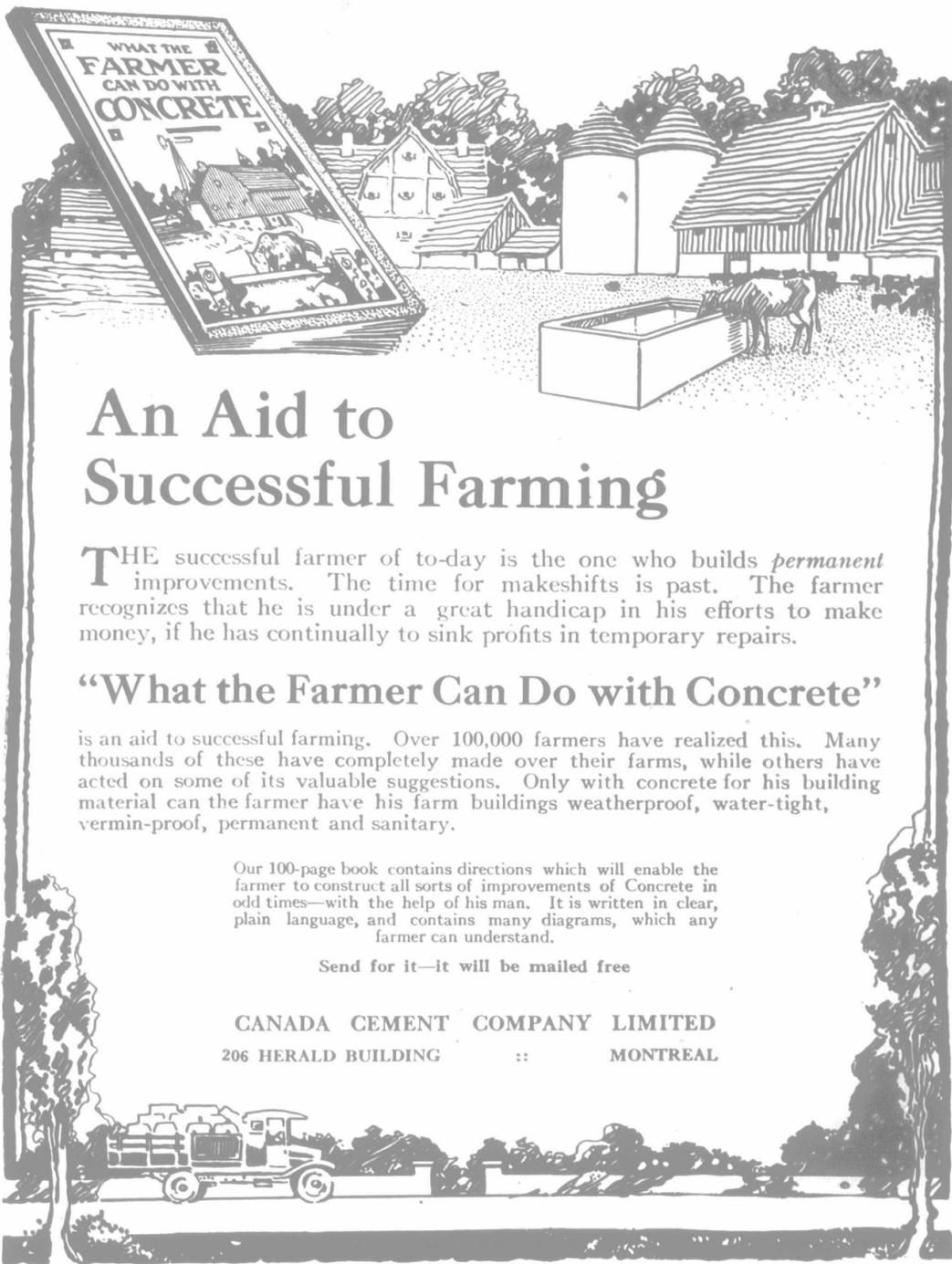
30% of 65,000 or 19,500 Mill at 25c. equals \$3,975,000; 70% of 65,000 or 45,500 Mill at 13c. equals \$5,915,000. Total, \$9,912,500.

As this 65,000 million feet is equal to 2,700,000 tons of coal, this means that it would be sold at the average rate of \$3.67 per ton. No economy can be enforced under these conditions.

"If this amount were collected in four years it would mean a yearly amount of \$2,478,100, the present value of which at 5 per cent. would be \$8,787,200. On the 40c. rate suggested with a consumption of a little over 2,000 million cu. ft. per year, and a minimum life of thirty-three years for the field, the total final revenue obtained from the 65,000 million feet would be \$26,000,000, which would give a yearly collection of \$787,800 for the thirty-three years. The present value of this is \$12,606,800. There is thus an apparent gain of about \$3,800,000, but all the expenses of leaseholds, upkeep, repairs, office staff, etc., for thirty-three years, as against four years, must be taken into consideration. This would amount to more than enough to make up the difference. The price would probably have to be increased as the supply declined greatly. In addition to these expenses the present pipe lines could be removed at the end of four years and sold for a substantial amount, but would have to be renewed wholly or in part before the end of the thirty-three years, thus increasing the disadvantage against the gas companies. If the interest be put at 6 per cent. as in the latest provincial loan, the present values under the two systems would differ by about \$2,600,000.

Interest of Domestic Consumers Greatest in Importance.

"It is evident that the domestic consumers resident in cities, towns and in the country now supplied by this gas have the greatest aggregate interest of any of the parties concerned in the question, and that a long life for the gas field is of the greatest importance to them. Moreover,



An Aid to Successful Farming

THE successful farmer of to-day is the one who builds *permanent* improvements. The time for makeshifts is past. The farmer recognizes that he is under a great handicap in his efforts to make money, if he has continually to sink profits in temporary repairs.

"What the Farmer Can Do with Concrete"

is an aid to successful farming. Over 100,000 farmers have realized this. Many thousands of these have completely made over their farms, while others have acted on some of its valuable suggestions. Only with concrete for his building material can the farmer have his farm buildings weatherproof, water-tight, vermin-proof, permanent and sanitary.

Our 100-page book contains directions which will enable the farmer to construct all sorts of improvements of Concrete in odd times—with the help of his man. It is written in clear, plain language, and contains many diagrams, which any farmer can understand.

Send for it—it will be mailed free

CANADA CEMENT COMPANY LIMITED
206 HERALD BUILDING :: MONTREAL

A KITCHEN ENCYCLOPÆDIA THE PURITY FLOUR COOK BOOK

containing 180 pages of tried and tested information on food preparation reviewed and approved by the DOMESTIC SCIENCE DEPARTMENT of the McDONALD INSTITUTE

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

Crop Feeding and Canadian Harvests

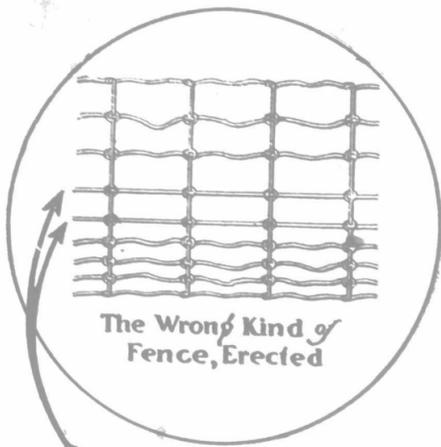
YOU are starting off the young crops. Their growth and yield depend upon how well you have prepared the soil and how much suitable plant-food the crops have at their disposal.

¶ Fertilizing paid in tests made on Dominion Experimental Farms in 1915, as follows:

Treatment of Potatoes per acre	Yield bus. per Acre
No added plantfood	75.66
Manure 15 tons plus 583½ lbs. high grade complete fertilizer	200.33
838 lbs. of fertilizer containing Nitrogen and Phosphoric Acid	140.75
Manure 15 tons only	131.61
Manure 7½ tons only	94.36

Write for our publications on greater crop production

Soil and Crop Improvement Bureau of the Canadian Fertilizer Association
1111 Temple Bldg. Toronto



SNAP!



SAFE-

PAGE—the Always Uniform Fence

The 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, 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 Fence and Gates.

There is a Page Wire Fence for every purpose. Page Gates, built as carefully as Page Wire Fences, are obtainable in every regular size. Write our nearest branch for price list of all Page Products—Page Fences, Gates, Engines or Woodsaws. Information will be cheerfully given. Drop us a line to-day.

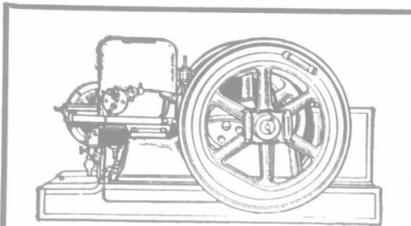
SHIPPING TERMS—Freight allowed, on all shipments of 200 pounds or more, to any place in Old Ontario or Quebec, when payment is made within thirty days.

THE PAGE WIRE FENCE COMPANY LIMITED.

Walkerville

517 Notre Dame St., Montreal

Winnipeg



The Best Workman You Can Get

is the one that never tires. The sturdy little Page is always on the job. It is always ready for work when you are.

It will do more work than a hired man, and it costs about as much to buy as one of his monthly cheques. Its running expenses only amount to about 2c. per hour for fuel.

A Page will hoist hay to the mow, turn the churn, run the cream separator, the mechanical milker, and pump water for the stock, and as many other odd jobs around the farm as you can dig up.

There are two types of Page Engines—one burning gasoline, the other kerosene (or gasoline); and 5 sizes, ranging from 1 1/2 h.p. to 7 h.p.

Price list on request.

the matter was easily capable of calculation years ago; for instance, Vol. XIX of the Bureau of Mines Reports, published in 1910, contained a calculation of the amount of gas that would be obtained from this field, which was close enough to shape an intelligent line of development. The production then was already high enough, viz., over 4,500 million cu. ft. per year. In the Report (Vol. XXII), published in 1913, on p. 45 and 46, information is given from which it could be calculated that the total production would be over 138,000 million, and yet the production went on increasing till by 1916 it trebled the amount yielded in 1910 and more than trebled it in 1917.

Questions and Answers.

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

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

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

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

Miscellaneous.

Books on Bees.

Can you give me the names and prices of some books on bees? Could a hive of bees be moved in the day-time or should it be done at night? J. Z.

Ans.—"The Honey Bee," by Langstroth, can be secured through this office for \$1.60, or "A B C Bee Culture," by Root, for \$2.75. It would be necessary to be sure the bees were all in the hive before it was moved. If they were fastened in there would be little difference whether they were moved in daylight or dark.

Cribber.

Is there any cure for a horse that is a cribber? She is a young mare in good condition. What is the cause of the trouble? G. I. C.

Ans.—Cribbing is a vice or habit, and the horse bites the manger or other objects, often sucking in the air at the same time. The habit usually begins in colt days and it has been contended that it may arise from a sore tooth; the colt to relieve the pain bites the manger, and so acquires the habit. There is no cure when the habit is once formed, but different measures may be employed to lessen the fault. A broad strap firmly placed around the neck brings the desired effect with some individuals.

Administration of Estate.

A dies leaving a widow and three small children; having made a will, and has B and C for executor. B and C look after them so that they have enough to live on and everything.

1. A's father dies leaving no will. D is administrator for A's father's estate, and now holds a certain sum of money which is to be divided amongst the three children after they reach the age of 21 years. Will they receive interest and compound interest on same?

2. And who should hold the money till that time comes, D, the administrator or B and C, the executors of A's estate? Ontario. READER.

Ans.—1. It would seem that they will be entitled to receive along with the principal money the net profits that have arisen from the investment thereof.

2. D.

Quit Claim Deed Required.

A owns two houses, right of way dividing them. He sells to B one house, giving B a deed calling for 32 feet frontage. Now, said deed covers part of right of way. A to make right of way good to B makes over to him (B) the quantity of land required to make full width of right of way. We now find that the new right of way takes in 3 feet off the corner of A's house. Can B compel A to remove said house from said right of way—he (B) having a good full width right of way now, and A being willing to pay full value for land occupied by A's house, and said house not interfering with B's traffic over said right of way? Ontario. A. K.

Ans.—Strictly speaking, yes, but the matter ought to be arranged by a quit claim deed from B to A of sufficient of the land to include in A's parcel the full space occupied by his house to the limit of the eave trough.

DOUGLAS EGYPTIAN

LINIMENT

"I have tried the Liniment on 4 cows during the winter for bump in bag, and a sample bottle cured each case in 36 hours. A. H. Schiedel, New Hamburg, Ontario."

DOUGLAS & COMPANY MFRS.
MONTREAL ONTARIO

Patent Solicitors—Fetherstonhaugh & Co. The old established firm. Patents everywhere. Head Office, Royal Bank Building, Toronto. Ottawa Office, 5 Elgin St. Offices throughout Canada. Booklet free

The Easy Way on Wash Day

Why My "1900" is the Easiest, Quickest and Best Washer for You



NEITHER you nor any other woman needs to be reminded that washing is a mighty disagreeable household task by the "wash-tub and wash-board" method. I have discovered that most women are keenly interested in finding some mechanical aid that will remove this most objectionable of drudgeries. That is why so many Canadian housewives have come to me as the result of my claim that I have the machine that answers the "wash" problem completely. My "1900" Gravity Washer will save you all the work of washing. It does away with all the drudgery of the back-breaking rubbing. It washes clean, because the hot soap-suds are thrown right through the clothes until they are thoroughly clean. And it does not wear or tear the clothes; they are firmly held while the tub and water are in motion. The finest linens and laces or blouses, come out of the "1900" Gravity Washer without having been strained or stretched—without frayed edges or broken buttons.

The "1900" Gravity is operated with an ease

you will marvel at. Gravity is the basic reason for its ease of operation. A child can run it.

"Does it wash with speed?" you will ask. The "1900" Gravity Washer takes just six minutes to wash a tub full of very dirty clothes.

Of great importance, too, is the lasting quality of this "1900" Gravity. The tub (detachable, by the way) is made of Virginia White Cedar, bound together with heavy galvanized steel hoops that will not rust, break or fall off. The "1900" Gravity is built for use; it will last a lifetime.

If you are interested, let me tell you more about it. Thousands of Canadian women have written to let me know what a genuine help the "1900" Gravity is to them. A New Brunswick woman says about hers:

"I enclose payment in full for washing machine and wringer. I am very much pleased with the washer. It is the best I have seen. It makes wash-day a pleasure."

Try the "1900" at my expense. I will send it to you for a free trial, without a cent deposit. Do as many washings with it as you like within the trial period of four weeks, and if you then find that you can afford to do without it, send it back at my expense. If you want to keep it, as I know you will, pay for it out of what it saves you, week by week, 50c. a week if you like, until it is paid for. If you want to know specially about this trial offer, better address me personally.

N. W. MORRIS, Manager "1900" Washer Company
357 Yonge Street TORONTO

YOURS,
Our bit
For 40 years
of highest
customer
ous size
varieties
for



Sc and Stock

—Are prevalent irregular work a
doses both. A sy
blood purifier, a
FLEMING'S
HEAVE R
will prevent the
when developed.
Veterinary Hea
quickly cures the
Fuller Infor
Fleming's V
Veterinary
Write us for a F
FLEMING
75 Ch

Reduc
Thicke
Curbs,
ness fr
stops S
Does no
lay up t

at druggists or d
ABSORBIN
antiseptic linime
strains, painful, r
heals and soothe
gists or postpaid.
write. Made in
W. F. YOUNG, P. D.

DR. PAGE

Cures the lameness
Ringbones, Curbs,
bunches, does not
Hocks, Bog-sparin
lameness in tend
ke
re
M
\$1



J.
17

Clydesdal

STALLION, r
conformation and
A

HOLSTEINS. Fen
two brood-sows (gra
May 5.

Warren String

MESSRS. A. J.
Hickman & Scr
Kent, England.

PEDIGREE

of all descriptions, s
beef and dairy bre
sheep. Illustrated c
application. All en
Now is the time to i
better, and insuran
covered by paymen

CLYDESDALE
for sale. Shawanoo
Knight No. = 14176.
months and under 2
heifers, bred to Kin
with calves at foot.
Sacket Brothers,

PATENTS T
Special atten
Pamphlet ser

RIDOUT & M

YOURS, FOR THE ASKING!
 Our big new Catalogue Free!
 For 40 years we have furnished seeds of highest quality. Thousands of customers attest this fact. Generous sized packages. Big-yielding varieties. Send post card now for this reliable Seed Catalogue.

KENNETH McDONALD & SONS, Limited
 63 MARKET ST. OTTAWA, CAN.

McDonald's
 TESTED SEEDS

Scratches and Stocking

—Are prevalent in cold weather irregular work and overfed induces both. A system tonic and blood purifier, such as **FLEMING'S TONIC HEAVE REMEDY** will prevent these troubles and when developed, with Fleming's Veterinary Healing Oil will quickly cure them. Per box, \$1.

Fuller information in Fleming's Vest Pocket Veterinary Adviser Write us for a Free Copy

FLEMING BROS., Chemists
 75 Church St., Toronto

ABSORBINE
 TRADE MARK REG. U.S. PAT. OFF.

Reduces Bursal Enlargements, Thickened, Swollen Tissues, Curbs, Filled Tendons, Soreness from Bruises or Strains; stops Spavin Lameness, allays pain. Does not blister, remove the hair or lay up the horse. \$2.50 a bottle at druggists or delivered. Book 1 R free.

ABSORBINE, JR., for mankind—an antiseptic liniment for bruises, cuts, wounds, strains, painful, swollen veins or glands. It heals and soothes. \$1.25 a bottle at druggists or postpaid. Will tell you more if you write. Made in the U. S. A. by

W. F. YOUNG, P. D. F., 258 Lyman's Bldg., Montreal.

DR. PAGE'S SPAVIN CURE

Cures the lameness from Bone-Spavins, Side-Bones, Ringbones, Curbs, Splints, etc., and absorbs the bunched, does not kill the hair, absorbs Capped Hocks, Bog-spavins, thick pastern joints; cures lameness in tendons; most powerful absorbent known; guaranteed or money refunded.

Mailed to any address. Price \$1.00.

Canadian Agents:
J. A. JOHNSTON & CO.
 Druggists
 171 King St. E., Toronto, Ont.

Clydesdales and Holsteins

STALLION, rising 3 years, large size, good conformation and action; from imp. sire and dam. Also two fillies.

HOLSTEINS. Females—a number fresh. Also two brood sows (grade Yorkshires) due to farrow May 5.

Warren Stringer, R.R.1, Dunnville, Ont.

MESSRS. A. J. HICKMAN & CO. (Late Hickman & Scruby.) Court Lodge, Egerton, Kent, England. Exporters of **PEDIGREED LIVE STOCK** of all descriptions. Speciality made of draft horses, beef and dairy breeds of cattle, show and field sheep. Illustrated catalogues and testimonials on application. All enquiries answered with pleasure. Now is the time to import. Prospects were never better, and insurance against all war risks can be covered by payment of an extra 1% only.

CLYDESDALES AND SHORTHORNS for sale. Shawanoo King Imp. No. = 15708; Baron Knight No. = 14176. 4 Shorthorn bulls, over 15 months and under 2 years. Some young cows and heifers, bred to King Dora Imp., No. 107291, and with calves at foot.

Sockett Brothers, R.R. No. 5, Rockwood, Ont.

PATENTS Trade Marks and Designs Procured in all Countries. Special attention given to patent litigation. Pamphlet sent free on application.

RIDOUT & MAYBEE Crown Life Bldg. Toronto, Ont.

The Manufacture of Cream Cheese.

At some time or other during their career, most dairy farmers have experienced difficulty in marketing their produce satisfactorily. The trouble may have been because of a poor demand for the product, or the quality may have been below standard.

The dairy produce from the Experimental Farm, Agassiz, B. C., has been sold in a number of different ways, one of the most satisfactory of which is on the form of cream cheese. The cream cheese appears to be the most popular soft cheese. It is easily made on the farm and requires very little special apparatus. The labor and cost of making and packing are small, so that the manufacture is well suited for any producer within a reasonable distance from a market. It is a suitable and remunerative method of marketing cream. During cool weather we have been able to keep this cheese for a week or ten days without any appreciable deterioration in flavor, but, as evaporation is going on continually, the cheese, unless originally made overweight, will not be up to the standard weight at the end of this time. It is therefore advisable to place it on the market as soon as possible after completion.

The market as yet is limited but the demand appears to be increasing. We have sold during the past twelve months 5,420 of these cheeses in the city of Vancouver. The wholesale price obtained is 15c. each, which amounts to \$813.00 for the product during the past year. Each cheese weighs six ounces and approximately ten dozen are now being manufactured weekly from 170 pounds of twelve per cent. cream. This brings a return of ninety cents per pound butterfat for the cream, with the whey retained for feeding purposes.

The shape of the cheese is cylindrical from one to one and a half inches deep and three inches in diameter. When moulding, the cheese is pressed into a cheesecloth cover and when ready for shipment is incased in a neat cardboard carton. It is a cheap cheese and a convenient size for table use. Picnicers have found it a suitable substitute for meat as a filling for sandwiches. It is also found to be very delicious and palatable when served with lettuce, celery, or any of the various kinds of vegetable salad.

The method of manufacture is concisely described in Exhibition Circular No. 23, which may be obtained for the asking from any of the Experimental Farms.—Experimental Farms Note.

Gossip.

Flintstone Farm Reports Sales.
 The manager of Flintstone Farm, Dalton, Mass., whose advertisement will be found in another column writes:

"We have recently sold an exceptionally nice red-with-little-white bull calf, sired by Flintstone Bell Boy and out of Jewell of Meadowbrook, which has produced, up to April 1st, of this year, in 189 days, 5,938.3 lbs. milk and 263.096 lbs. fat. Jewell of Meadowbrook is of the same family as the top-priced milking Shorthorn heifer in the recent Congress Sale, and also as of Lady of Meadowbrook, which has produced 9,155.8 lbs. milk and 348 lbs. fat in 10 months, and which still is milking over 30 lbs. daily. This calf was born September 20th, and weighed 588 lbs. on April 9th. We also sold to the same purchaser an exceptionally nice heifer, Flintstone Bell Boy, a son of Glenside Lady Doris, and a grandson of Doris Clay. We have sold, at a price comparing very favorably with that obtained for bulls at our large public sales, Flintstone Bell Boy's dam, Glenside Lady Doris, has produced in 9 months, 9,558.2 milk and 374.761 lbs. fat. This bull goes to head what will probably be one of the large herds of the country.

"The demand for Shorthorns has been very brisk, and at very good prices. The demand for females far exceeds the available supply."

The Only Thing I Possess that is always worth a hundred cents on the dollar---

is my Imperial Life Assurance policy. These are the words of a prominent man of affairs—a man who owns large real estate and stock market investments, besides a substantial interest in a business.

Two years ago he was rated at \$50,000. If death came to him today the only thing his widow could turn into ready cash is his \$15,000 life assurance policy. And the interest on this would not be sufficient to provide anything like the comforts to which his family have been accustomed.

Life insurance is the one safe investment—more desirable in a sense than Government Bonds, because Government Bonds can at times be bought at a discount, but an Imperial Life policy is worth one hundred cents on the dollar at any time.

If you haven't as much life insurance as you can afford, take immediate steps to remedy the condition. We can show you how. Write for our booklet "The Creation of an Estate."

THE IMPERIAL LIFE Assurance Company of Canada
 HEAD OFFICE - TORONTO

Branches and Agents in all important centres

Copyright 1916

RAISE YOUR CALVES

Sell Your Cream At a Big Profit

It is sheer waste to raise calves on whole milk when they will grow and develop as rapidly on International Grofast Calf Meal. The calves like GROFAST fine, and it costs but a fraction of the price of milk. Ask your dealer for GROFAST.

Write for booklet, "How You Can Raise and Grow Calves at a Low Cost Without Milk."

INTERNATIONAL STOCK FOOD CO., LIMITED
 Ask Your Dealer TORONTO

INTERNATIONAL GROFAST CALF MEAL

IMPORTED AND CANADIAN BRED CLYDESDALES
 Columbus Stables. We have on hand at present one of the strongest selections of imported and Canadian bred stallions we have had in the stables in years. A strong combination of size, quality and breeding. We also have 15 in-foal mares, all to the service of horses we are offering.

SMITH & RICHARDSON, Myrtle, C.P.R., Oshawa, C.N.R., Oshawa, G.T.R. Columbus, Ont.

Aberdeen-Angus

We have a splendid selection of last spring's bull calves to offer, sired by our noted herd bulls and from our choice home-bred and imported cows. Inspection invited. Berkshire Boars and Sows.

LARKIN FARMS (MENTION FARMER'S ADVOCATE) QUEENSTON, ONTARIO

KNIGHTON LODGE STOCK FARM
 Offers for sale one Aberdeen-Angus bull, 15 months old, in the pink of condition, and a show animal. Cheap, quality considered.
C. C. KETTLE, Wilsonville, Ont.

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.**

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.**

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

**DREADNAUGHT
TWO-PIECE
STEEL HAMES**



**FOR HARD ROUGH WORK
THEY STAND PRE-EMINENT**

There is no load too heavy or strain too great for these all-steel hames. Two-piece, doubly reinforced at points of greatest strain.

15% Stronger Than Any Other Hame Draft studs, forged steel. Rings electrically welded—will not break; will not buckle or bend, anti-rust treated.

Write for Our Descriptive Folder. We can furnish low tops and high tops; light hames and heavy hames in all kinds of finishes and designs for every hame requirement. DEALERS: Write for our dealer proposition and selling helps. **McKINNON DASH COMPANY**, Dept. B., St. Catharines, Ontario, Canada

Flintstone Farm

Breeders of—

Milking Shorthorn Cattle
Berkshire Swine
Belgian Draft Horses

All Shorthorns eligible for registry in the American Shorthorn Herd Books are now also eligible for registry in the Dominion Herd Books. We will register and transfer in both herd books all animals sold by us.

Dalton
Massachusetts

**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.

**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.

ABERDEEN-ANGUS

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

Kenelworth Farm ABERDEEN-ANGUS

Young bulls of serviceable age, got by Victor of Glencairn Imp.
PETER A. THOMSON, HILLSBURG, ONT.

Balmedie Aberdeen-Angus

Get high-class Angus bull and breed the champion steers. I have show-ring quality bulls from 10 to 24 months of age; also choice 1 and 3-year-old heifers. **T. B. BROADFOOT, FERGUS, ONT.**

Tweedhill Aberdeen-Angus

If you want a choice young bull, ready for service, write **JAMES SHARP, R.R. 1, Terra Cotta, Ont.**
L. P. Phone 1, Terra

HEREFORD BULLS

Bred from stock of quality. Special charges prices. Write at once.
A. S. HUNTER & SON, DURHAM, ONT.

Factors Influencing Crop Yields.

Crops require moisture, heat and food in suitable amounts and proportions to make rapid, strong growth. Nature supplies the essentials for crop life and growth, the farmer's task and problem is to utilize these resources in such a way as to ensure satisfactory yields. Investigations conducted at the Central Experimental Farm, Ottawa, have led to the conclusion that the following factors exert a telling influence towards increasing crop production.

Underdrainage.—Probably the most important and indispensable where the rainfall is great: (a) To carry off surplus water; (b) To allow air to enter the soil; (c) To aid in raising the soil temperature.

It is equally a necessity in soils where moisture conservation has to be considered. Drainage lowers the natural water table in the soil leaving the soil in shape to absorb rain as it falls that is preserved for use of crops.

On the whole drainage improves the mechanical condition of the soil and assists in influencing the liberation of plant food elements in proper proportions for the different classes of crop to be grown. This involves the adoption of a good crop rotation. This rotation should be a short one, say of 3 to 4 years' duration, and the order of crops is most important. Crops such as corn, roots, potatoes and hay, require large supplies of food from the soil for stem, leaf and root growth. This may be most easily supplied by clover or other sod turned down, or by heavy manuring. The cereals, such as wheat, oats and barley require less of this food and generally do best if sown the year following an application of manure. The area sown to these cereals, if seeded down to clover and grasses, will supply a hay crop the third, or the third and fourth years, and the sod turned down, manured if necessary, fits the land for corn or roots once more.

Such general plan of rotation may be modified by each farmer as will best suit soil and needs, but some such scheme is necessary in order that humus, probably the most valuable of all soil constituents, be added and maintained in the soil, to keep it in good producing shape. Humus decomposed and decomposing vegetable matter is provided in applications of barnyard manure, in legume crops such as clovers and in green manuring crops like buckwheat. Humus absorbs and holds soil moisture and is a means of raising soil temperature since dark soils absorb heat readily and rapidly.

Barnyard manure is a most effective fertilizer and furnishes humus forming material. Fresh manure gives crop yields almost equal to those from rotted manure and when applied directly it can be handled more economically with regard to labor. Manure should be spread evenly and incorporated thoroughly with the soil. Applications should be made in moderate quantities frequently rather than in larger quantities at longer intervals. Apply the manure for hoed and clover or other hay crops in a suitable crop rotation which provides that each field in the farm will receive regularly its fair share of manure. To make a good seed-bed requires thoroughness in carrying out each step in its preparation.—Experimental Farms Note.

Seventy Shorthorns for Sale.

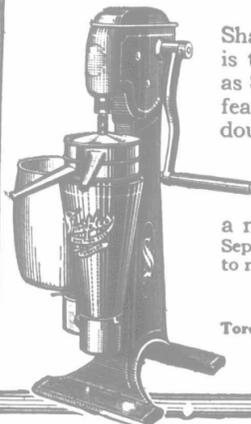
The season for spring sales is now drawing to a close, but Shorthorn breeders still have an opportunity to choose from sixty females and ten bulls which are offered for sale by J. J. Merner, M. P., on Wednesday, May 1. The herd is made up of such popular families as Rosemary, Correll, Princess Alice, Carry C., Miss Ramsden, Butterfly, Duchess of Gloster, Crimson Flower, and others. A number of the cows have calves at foot, while others of breeding age are in calf to the service of such bulls as Meadow Signet and Village Marquis, a son of Gainford Marquis (imp.). A three-year-old Clydesdale stallion, King's Glory, will be offered. He comes of King Thomas and Cumberland's Glory breeding. The great Standard Bred stallion, Emperor McKinney will also be sold. He was sired by McKinney, that great race horse and sire of racers. See the advertisement for further particulars and write Mr. Merner at Seaforth, Ont., regarding this offering and get catalogue and full information.

**You Don't Permit Your
Hired Man to Throw
Away
Cream**



THEN, why let him waste your cream by using a fixed-feed separator? The moment a fixed-feed separator is turned under speed it begins to lose cream. This loss averages 10 lbs. per cow yearly. And tests have proved that only one person out of 20 keeps up a fixed speed. Eliminate this cream waste by installing a

**SHARPLES
SUCTION-FEED
CREAM SEPARATOR**



Sharples skims clean at any speed! It is the only separator that will do this, as Suction-feed is an exclusive Sharples feature. Sharples Tubular Bowl has double the skimming force of any other; yet is easy to turn. Containing only one piece and no discs, it is by far the easiest to clean. Over a million dairymen are using Sharples Separators. Why not you? Write for catalog to nearest office, addressing Dept. 78

The Sharples Separator Co.

Toronto, Ont. Regina, Sask.

DC-25

ENGLISH DUAL-PURPOSE SHORTHORNS

My present offering—Several young bulls, all from imported stock, bred for milk through many generations. Dams of big frame and fine conformation.
F. WALLACE-COCKSHUTT, LYNNORE STOCK FARM, BRANTFORD, ONTARIO

NICHOLSON'S SHORTHORNS

We have about a dozen young bulls (ages 8 months and upwards), sired by our herd headers, Best Boy = 85552 = and Browndale Winner = 106217 = . Write or come and see.
R. and S. Nicholson, Parkhill, Ontario

WILLOW BANK STOCK FARM

SHORTHORN CATTLE AND LEICESTER SHEEP. HERD ESTABLISHED 1855—FLOCK, 1848. The great show and breeding bull, Browndale = 80112 =, by Avondale, heads the herd. Extra choice bulls and heifers to offer. Also a particularly good lot of Leicester rams, mostly from Imp. ewes
JAMES DOUGLAS, CALEDONIA, ONTARIO

IMPORTED SHORTHORN BULLS

We have several newly-imported bulls of serviceable age—Cruickshank, Marr and Duthie breeding, as well as a number of choice, home-bred young steers, got by our noted herd sire, Proud Monarch, by Royal Blood. Get our prices before buying elsewhere.
RICHARDSON BROS., Columbus, Ont.

SHORTHORNS CLYDESDALES

Will price 4 richly-bred Lavinia heifers, 5 to 27 months, oldest one due to calf to Lochiel (Imp). Still have stallion rising 2 years old, rich in Baron's Pride blood; size and quality combined; gelding price.
Wm. D. Dyer, R.R. No. 3, Oshawa, Ont. 4 1/2 miles to Brooklin, C.N.R., or Myrtle, C.P.R. 2 1/2 miles to Brooklin, G.T.R.

30 Shorthorns for Sale—Eight bulls and a lot of good breeding, registered females, in all conditions. Buyers from this herd in past years want more of the same kind. As breeders, feeders and milkers they satisfy the people. Only selected bulls have headed this herd from the first. Price of bulls from \$125 to \$250; females, \$150 to \$400. One choice milk strain bull near two years old, \$185.
JOHN ELDER & SONS, Hensall, Ont.

For Sale—Dual-Purpose Shorthorn Bull

Two years old; a sure stock getter, with size and quality combined. Dam, officially tested, gave 11,636 lbs. milk in 327 days. Also Berkshires, all ages, from Imp. stock.
Frank Teasdale, Concord, Ont.

FIFTY IMPORTED SHORTHORNS

I have fifty head of newly imported Shorthorns (42 females, 8 bulls) which are acknowledged to be one of the strongest lots that have left Britain this season. You should see these if you are wanting something choice.
George Isaac, (All Railroads: Bell Phone) Cobourg, Ontario.

CREEKSIDE SCOTCH SHORTHORNS

Herd headed by Gay Monarch 79611; dam, Sally 8th imp., and sire, the great Gold Sultan 75411. My present offering of young bulls includes several 7 to 14 months' youngsters, all thick, mellow, well-grown fellows—reds and roans—and priced right. Can also supply females in most any numbers.
Geo. Ferguson, —Elora Station, C. P. R., G. T. R.—Salem, 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



Fire, Lightning and Weather
PELLETT
THERE'S no house that's known galvan most violent yet them. The fire damage them on fire. They Why put on a "Oshawa" shir Write for R THE PEDLA (EST. Executive Office Branches at London,

Dual-Purpose

Herd headed by whose granddam an R. O. P. record testing 3,99, and P. record of 10, 3.88. We have about ready for s out of dams with 8,000 to 11,000 lb

WELDY
Farmer's Advocate

BULLS

No. 1.—An extra extra good calf; red; No. 2.—A Cruick cow at 1917 Toronto Silver, one of the best U. S. Dark roan; 1 No. 3.—An Imp. calf. 12 months. No. 4.—An Imp. Anderson. 12 months. I am badly in need worth the money.
A. G. FARROW

Shorthorn

Right Sort son \$500. A choice bulls. Special Sound Shire m old. Radial ev

C. N. Blanshard,

Mardella

Dual-purpose bull heifers—bred, son type, quality; son great massive D lbs. milk, 474 lbs.

Thomas Graham

Newcastle Herd of

For Sale:—2 boars 8 boars and sows 2 to bred and 2 show cows All descendants of Toronto Industrial 3 Cholderton Golden A.A. Colwill, Prop.,

Evergreen Hill

Offering a 13-months Clare. Dam has rec S. W. JACKSON, W

Shorthorns

record cows. A few extra good breeding at PETER CI Manchester P. O.

MAPLE

In Shorthorns, the h for, a real bull, dark f = 115239 =, 13 months on a few of our best c John Baker, R.

GLENFOYLE SHOR

College Dula 4th in of Roth's 1924 and offering young cows a bull. Have a new bull STEWART M. GRA

Brownlee Shorthorn

nine months, and sire Royal Saxon. See the Could also spare a few Bright, Ont., R. R.



Fire, Lightning and Weather Proof
PEDLAR'S SHINGLES
 THERE'S positive protection for the house that is roofed with these well-known galvanized steel shingles. The most violent wind storm cannot loosen them. The fiercest lightning will not damage them. Nothing can set them on fire. They cannot rust or decay. Why put on a risky roof when Pedlar's "Oshawa" shingles are available?
 Write for Roofing Booklet "LF"
THE PEDLAR PEOPLE LIMITED
 (ESTABLISHED 1861)
 Executive Office and Factories: OSHAWA, ONT.
 Branches at Montreal, Ottawa, Toronto, London, Winnipeg, Vancouver.

Dual-Purpose Shorthorns
 Herd headed by Dominator No. 10624, whose grandam on his sire's side has an R. O. P. record of 13,535 lbs. of milk, testing 3.99, and whose dam has an R. O. P. record of 10,689 lbs. of milk, testing 3.88. We have several choice bulls, about ready for service, from this sire, and out of dams with records running from 8,000 to 11,000 lbs. in one lactation period.
WELDWOOD FARM,
 Farmer's Advocate London, Ontario.

BULLS — SHORTHORNS
 No. 1.—An extra well-bred Roan Lady, and an extra good calf; red; 10 months.
 No. 2.—A Cruickshank Victoria, out of 1st prize cow at 1917 Toronto Exhibition, and by Royal Silver, one of the best show and breeding bulls in U. S. Dark roan; 14 months.
 No. 3.—An Imp. Flora. Roan — and a great calf. 12 months.
 No. 4.—An Imp. Roan Lady; red; bred by Wm. Anderson. 12 months.
 I am badly in need of stable space and will sell worth the money.
A. G. FARROW OAKVILLE, ONTARIO

Shorthorns for Sale
 Right Sort son = 96282 = (guaranteed) \$500. A choice lot of young heifers and bulls. Special price for next 30 days. Sound Shire mare, registered, 4 years old. Radial every hour from Hamilton.
C. N. Blanshard, R. 2, Freeman, 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, Ont.

Newcastle Herd of Shorthorns and Tamworths
 For Sale:—2 boars 8 and 12 months old, several sows and sows 2 to 6 months old. Young sows bred and 2 show sows 2 years old, safe in farrow. All descendants of Colwill's choice, champions at Toronto Industrial Secret. Long-distance Phone. Cholderton Golden Secret. Long-distance Phone. A. A. Colwill, Prop., R.R. No. 2, Newcastle, Ont.

Evergreen Hill R. O. P. Shorthorns
 Offering a 13-months son of the R. O. P. bull, St. Clare. Dam has record of 7,000 lbs., test 4.5%.
S. W. JACKSON, WOODSTOCK, R.R. 4, ONT.

Shorthorns—Pail-fillers for sale. Young bull and heifers out of high record cows. A few young cows and bulls with extra good breeding and quality.
PETER CHRISTIE & SON
 Manchester P. O. Port Perry, Ont. Co.

MAPLE LEAF FARM
 In Shorthorns, the herd header you are looking for, a real bull, dark red and Stamford bred, No. = 115239 =, 13 months, and sure, having used him on a few of our best cows.
John Baker, R. No. 1, Hampton, Ontario

GLENFOYLE SHORTHORNS.
 College Bull 4th in service — a high-record son of Roth's Bull 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, ONT.

Brownlee Shorthorns. Offers a choice lot of young bulls, ranging in ages up to nine months, and sired by the Nonpareil bull, Royal Saxon. See these before buying elsewhere. Could also spare a few females. **Douglas Brown, Bright, Ont., R. R. 3. Ayr Station, C. P. R.**

Questions and Answers.

Miscellaneous.

Bitter Milk.
 1. What is the cause of a cow giving bitter milk? The cow is fed on a mixture of clover and timothy hay, and 6 quarts of oat chop. She gets plenty of salt.

L. H.
 Ans.—1. Bitterness is sometimes caused by certain weeds in the feed. However, it may also develop after the milk is drawn, due to the growth in such milk of some bacteria or yeast, or it may be due to some trouble in the udder. Thoroughly cleansing the dairy utensils and sterilizing by boiling would remove any danger from bitterness developing after the milk was drawn. If it is due to udder trouble, little can be done. The cow will possibly be all right in the next lactation. Bitter or thick milk sometimes occurs when a cow is nearing the end of the lactation period.

Ticks on Sheep.
 1. I have a fair-sized flock of sheep which are badly infested with ticks. How would you proceed to get them cleaned off? How could a dipping tank be built?

J. M. M.
 Ans.—1. Dipping the sheep is one of the best methods of destroying ticks. If the weather is too cold for dipping, a small quantity of the dip may be poured along the backs and sides of the sheep. By opening the wool up with the hand and pouring in the dip, very good results are obtained. Where only a small flock of sheep is kept, a small vat which would permit of practically immersing the sheep would be satisfactory. Each sheep could be picked up and put in the tank. Where large flocks are maintained larger tanks are built, with gang-ways leading to and from them which permits of the work being done more rapidly and more easily.

Veterinary.

Infectious Diarrhoea.

Some time ago I purchased seven cows. My stables are new, well lighted and ventilated. Each of the 7 cows produced a healthy calf, but each calf suffered from acute diarrhoea shortly after birth. We succeeded in saving some of them, but others died. I never had trouble of this nature before. One of my old cows produced a calf in the same stall that one of the 7 did, and the calf is doing well.

1. Did newly purchased cows bring the disease, or did calves inherit it from the sire?
 2. How can I disinfect to effectively stop the disease?
 3. What disease is it? **H. B.**

Ans.—1. It is not possible for us to tell how the infection was introduced into the stable. The disease is due to a specific virus that gains the circulation of the calf, usually through the navel opening. It may have existed on the cows, or in the stable, but the sire was not responsible. The disease is not congenital.

2. Thoroughly sweep and dust all parts of the stable. Then give a thorough scrubbing with a hot 5 per cent solution of crude carbolic acid, or one of the coal-tar antiseptics. It is good practice to repeat this in a few days, or give a coat of hot lime wash, with 5 per cent. of one of the antiseptics. Closing all openings to make the stable as air-tight as possible, and then burning sulphur until all parts become permeated with the fumes is a good plan of disinfection. In addition to this as a preventive measure, make a solution of corrosive sublimate 30 grains to a pint of water, and dress navel with it as soon as possible after birth, and 4 or 5 times daily afterwards until it is thoroughly healed.

3. The disease is called, "Infectious or Contagious Diarrhoea". **V.**

Gossip.

Volume 93 of the American Shorthorn Herd Book is now in circulation and a copy has been received at this office through the courtesy of the Secretary, E. W. Harding, Union Stock Yards, Chicago. In this Volume the numbers run from 517001 to 517000 and the record is complete up to March 14, 1917. The book is well compiled and nicely bound.

DISPERSION SALE OF 70 HEAD
Shorthorns
 The property of J. J. MERNER, M.P., 2 miles from Zurich, Ont., on
Wednesday, May 1st, 1918
 Commencing at 1 o'clock sharp.



Comprising 60 females and 10 bulls, including such popular families as Rosemary, Corelli, Princess Alice, Carrie C, Miss Ramsden, Butterfly, Duchess of Gloster, Crimson Flower and others. A number of the cows have calves at foot, others of breeding age in calf to service of such bulls as Meadow Signet and Village Marquis, son of Gainford Marquis (Imp.).
 One three-year-old Clydesdale Stallion, King's Glory [19554], by Cumberland's Glory (Imp.) [15788] (17846), and out of Lady King [30896], by King Thomas (Imp.) [9254] (12625), will go to the highest bidder.
 There will also be sold the Standard-bred Trotting Stallion, Emperor McKinney (54151) 1653, a nine-year-old son of the great speed sire, McKinney 8818, 2:11 1/4. This is one of the best bred horses of the breed.
 Train will be met at Hensall station, on the London, Huron & Bruce, on day of sale.
 CATALOGUES ON APPLICATION TO:
J. J. Merner, M.P., Seaforth, Ont.
 AUCTIONEERS:
 C. W. Robinson Frank Taylor E. Bossenberry Robert Luker

For Sale:
 1 reg. Dairy Shorthorn bull, sired by Robin; 15 months old.
 1 reg. " " calf, sired by Ashley H.; 7 months old.
 1 reg. Ayrshire bull, sired by Auchinbrain Pride; 2 years old.
 1 pure-bred Ayrshire bull calf, three months old.
 1 " Dairy Shorthorn bull calf, three months old.
 1 heavy Draft Gelding, 7 years old, weight 1,600 lbs.
 APPLY TO:—
F. M. PASSOW, Eustis, P. Que.

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.

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

FAIRVIEW SHORTHORNS AND CLYDESDALES
 In Shorthorns we can offer you a choice from 60 head, including both bulls and females, of Lavender, Missie, Augusta, Duchess of Gloster, Village Girl, Miss Ramsden and Clara breeding—the best of cattle and the best of pedigrees. In Clydesdales, write for our list of winners at Toronto, London and Guelph 1917 shows, Canadian-bred classes. We also have a nice offering in Shropshires.
ROBERT DUFF & SONS Myrtle Station, C.P.R. and G.T.R. MYRTLE, 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, Ont.

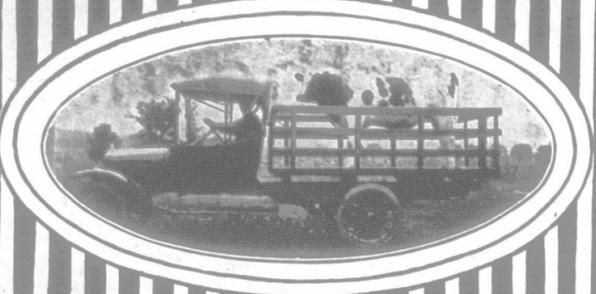
still has a few Shorthorn bulls, fit for service, and some females that are as good as can be found for the man that wants to start right in Scotch Shorthorns. They will be sold for a low price, considering the quality, and the freight will be paid.
 Write for anything in Shorthorns One hour from Toronto

SPRING VALLEY SHORTHORNS
 Herd of seventy head, straight Scotch, good individuals. Headed by the great show and breeding bull, Sea Gem's Pride 96385, 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.)**

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

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

SHORTHORNS—T. L. Mercer, Markdale, Ont.
ROSEWOOD CHAMPION, by Nonpareil Archer, Imp., at the head of the herd. I have almost 100 Shorthorns in my stables at present. Marr Missies, Campbell-bred Clarets, Nonpareils, Minas, Rosemarys, etc.—the best of breeding and the best of cattle; bulls or females; also have a few Herefords.



A 29-pound sire going to head the herd of W. T. Davidson & Son, Meadowvale, Ont.; 10 months old. Note the splendid development. Perhaps I have the one you want.

Gordon S. Gooderham
Manor Farm Clarkson, Ont.

75 HOLSTEIN FEMALES

We have now 75 Holstein females more than we can handle. Will sell a dozen young cows in calf to Sir Gelsche Walker. Every one sound and right; also have a few young bulls by the above sire.
T. L. LESLIE, ALLUVIALDALE FARM, NORVAL STATION, ONT.

Pioneer Farm Holstein Herd With big, yearly records and high average butter-fat test, and headed by **Canary Hartog**, grandson of Royalton Violet, at 10 years, 30.39 lbs. butter, 735 lbs. milk in 7 days; 29,963 lbs. milk, 1,300 lbs. butter in 1 year. Sire's dam, Royalton De Kol Fern, 34.60 lbs. butter in 7 days, 116 lbs. milk in 1 day. Bull calves for sale, born after Jan. 25th, 1917; dam over 11,000 lbs. milk up to nearly 16,000 lbs. milk in 1 year at 2-year-old. **Walburn Rivers, R. R. No. 5, Ingersoll, Ontario, Phone 343L, Ingersoll Independent Line.**

LOW BANKS HIGH-RECORDS: SONS OF "FAIRVIEW KORNDYKE BOY" who now has seven daughters out of a total of eleven, with records of from 20 to 23 lbs.—two have milked over 600 lbs. of milk in 7 days. Also some young bulls from these heifers sired by Sir Echo. Only one ready for service from 30.14 dam, with a 20-lb. two-year-old daughter.
K. M. DALGLEISH, KENMORE, ONTARIO

EVERGREEN STOCK FARM HOLSTEIN-FRIESIANS
Our unparalleled success at the Toronto and London Exhibitions during the past five years places Evergreen Holsteins in a class by themselves. The strong combination of size and type found in our individuals makes record producers. Your next herd bull should be carefully selected. See our offering before buying elsewhere.
A. E. HULET, (Oxford County) NORWICH, ONT.

Questions and Answers.

Miscellaneous.

Fees for Transfer.

Will you please publish in your next issue the fees of transferring pedigrees of Shorthorn cattle and where to address?
A. W. W.

Ans.—Certificates of registration of transfers may be had at 25 cents each. Address communications to the Accountant, National Live Stock Records Ottawa, Canada.

Horse Cribbing.

I would like to have some advice regarding a cure for a cribber. I have a two-inch strap around his neck in the stable and still he persists in the habit.
C. H. J.

Ans.—1. Cribbing or wind-sucking is a habit which is difficult to suppress. Having the strap around the neck buckled fairly tightly cures some horses of the habit. We do not know of any other effective cure. We have seen nails driven in the manger stop the practice for a time.

Stock Books.

1. Where could I purchase a book giving information relative to the care of stock and symptoms and treatment of different diseases?
R. N.

Ans.—1. "The Farmer's Veterinary Adviser," by Law, can be secured through this office for \$3.15; "The Farmer's Veterinarian," by Burkett, is \$1.50; "Veterinary Medicine and Surgery," by Reed, can be secured for 50 cents; "Feeds and Feeding," by Henry and Morrison, a book costing \$2.50, gives excellent information relative to the feeding and care of the different classes of live stock.

York County Holsteins

At Auction

IN THEIR ANNUAL "QUALITY" SALE
AT RICHMOND HILL FAIR BUILDINGS

Wednesday, May 15th, 1918

SIXTY HEAD

Nearly all females fresh or due to freshen soon. A number of choice young heifers; a few bulls of excellent quality.

York County is well known as a Holstein centre. Our herd sires include a 33-lb. son of the great King Segis, a son, a full brother, and grandsons of the world's record cow, May Echo Sylvia and sons of King P.A. Canada.

York County has probably more thirty-pound cows than any other county in Canada, as well as several world's record cows.

We feel sure the satisfied buyers at previous sales and the determination of York County breeders to give satisfaction will, as before, insure the success of this sale.

SEND FOR CATALOGUE TO

R. W. E. BURNABY, JEFFERSON, ONTARIO

SALE COMMITTEE:

R. W. E. BURNABY, R. F. HICKS, W. F. ELLIOTT

"GOING TO SELL 'EM"

We have 5 thirteen-months bulls and are going to let them go. Three are by Pontac Korndyke of Het Loo and brothers to Het Loo Pietertje (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

CLOVERLEA FARM HOLSTEINS

Special offering for this month is a nice, straight heifer due to freshen in May.

For price and particulars, apply to

GRIESBACH BROS. COLLINGWOOD, ONT.

Here's a Top-notch!

Sire, King Segis Walker; dam, 30-lb daughter of Pontac Korndyke, who herself has a 30-lb. daughter. He is a youngster, but he'll grow.
A. A. FAREWELL, Oshawa, Ont.

DUMFRIES FARM HOLSTEINS

Present Offering—A few bull calves.

S. G. & ERLE KITCHEN ST. GEORGE, ONT.

Business is Brisk

We are rushed with orders of all sizes, for stock and poultry feeds and especially **Hog Feeds**.

The people of Canada are evidently trying to supply the needed bacon and other pork products, and from past results they know that the quickest and cheapest way to produce pork is by feeding

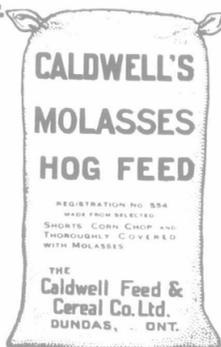
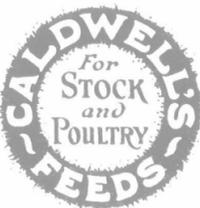
CALDWELL'S Molasses or Dry Hog Feed

Little wonder our capacity is taxed to the limit. We are going to fill all orders promptly however, and help you produce. Our **Molasses Hog Feed** has the following analysis: Protein 11%, Fat 3%, Fibre 8%. **Dry Hog Feed** which contains 10% tankage is 19% Protein, 2 1/2% Fat and 9% Fibre.

Order a quantity of each feed from your feedman at once or we will supply you direct.

The Caldwell Feed & Cereal Co.
DUNDAS (LIMITED) ONTARIO

MAKERS ALSO OF:—
Molasses Horse Feed, Dairy Meal, Calf Meal and Poultry Feeds of all kinds.



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

Veterinary.

Inversion of Vagina and Afterwards of Uterus.

1. Some of my ewes have taken sick about a week before lambing. The vagina becomes inverted and in a few days the lambs are born and the uterus becomes inverted and will not remain in place when returned and the ewe dies in a few days.

Ans.—1. The cause of several ewes in one flock suffering this way is hard to explain. The condition is due to relaxation of certain ligaments. Inversion of the vagina is not serious, but inversion of the womb is always fatal, unless successfully treated. At the first symptoms of inversion of the vagina arrange a narrow stall, with a false bottom, 8 inches higher behind than in front and keep the ewe in this, where, of course, whether standing or lying she will be 8 inches higher behind than in front. Wash the protruding viscus well with a hot solution of alum, 1 oz. to a pint of hot water, and then return it. Watch closely and take her out of the stall into a level floor when parturition is about to take place, after which stand her in the stall again until straining ceases. If inversion of either vagina or womb is about to take place, wash as before, return, and put a couple of strong sutures through the lips of the vulva, and, if necessary, arrange a truss to press upon the vulva. Keep her in the stall until pressing ceases, remove the truss but do not remove the stitches for five or six days. If a case be properly treated recovery should take place. It would probably be wise to call your veterinarian if you have another case and he will show you just how the treatment is given.
V.

Six Week

BY J. A. SCOTT

The sun was wind waved the and fro, and as made German realize that I w hands of the er June and I, alor been brought fr been interned, Westphalia. I this district now ing acquainted of farming. TI I labored were and adopted a national dress. were trimmed v round the botto or green, trim colors, and for high conical ha on each side en foot and a half l and to complet an apron of a working in the were not in evic handkerchief wa and ears, leavin the face exposc men with their l at once struck v the color of the face was browne their ears and whiteness. I w by their looks. T part soberly att must have been i

The farmer I for was fairly w about 100 acres under cultivati about 30 acres of he cut his crops the other in the The farmhouse house the stock and the whole r similar in appe Western Canada where the hous entered by eith was very cosy at the other e through a huge teams and wago entering the g in a large court

On the right twelve to fourte munching away cut fresh every chained up all da went outside wa would clean out by hitching a ho rake. The pro bedding and m removed, and th outside, two or t a time. It wa out on the ma specially for th cows were milke others only twice shed was the e entirely of conc drained and ven young ones were in a compartm their progress c the other side of loose boxes wher A mare with fo the others were o ing two horses th that summer. W at the idea of tw farm of 100 acre it with ease.

The farm was 10 acres here, 30 the owner grew r could. You coul in the morning, an have to walk a patch. The co situated went in in a 30-acre field rye, clover, turni Very seldom was used for growing was, no doubt, c being for the mo and bound by ha put in that sprin and that and a r was the only up-

Six Weeks on a German Farm.

BY J. A. SCOTT, AN ESCAPED PRISONER.

The sun was shining brightly and a cool wind waved the growing crops gently to and fro, and as I trudged along that well-made German road, it was hard for me to realize that I was a prisoner of war in the hands of the enemy. It was the end of June and I, along with eleven more, had been brought from Minden where we had been interned, to labor on the farms in Westphalia. I had been three weeks in this district now, and was rapidly becoming acquainted with the German methods of farming. The people amongst whom I labored were of a peculiar religious sect and adopted a semi-uniform as their national dress. The dresses of the women were trimmed with rows of black beads round the bottom. The bodice was black or green, trimmed with lace of various colors, and for head-gear they wore a high conical hat from which stood out on each side enormous black bows, fully a foot and a half long, and eight inches wide, and to complete the uniform they wore an apron of a light green color. When working in the fields, the hat and apron were not in evidence, but a white or pink handkerchief was bound around the head and ears, leaving only the front part of the face exposed. When you saw the women with their heads uncovered you were at once struck with the contrast between the color of their skin. The front of the face was browned by sun and wind, whilst their ears and neck were of a dazzling whiteness. I was not much impressed by their looks. The men were for the most part soberly attired in black. This dress must have been in vogue for ages.

The farmer I was compelled to work for was fairly well to do, and he owned about 100 acres of land, which were all under cultivation. In addition, he rented about 30 acres of meadow land from which he cut his crops of hay, one in July and the other in the beginning of October. The farmhouse and buildings used to house the stock were all under one roof, and the whole made one huge structure similar in appearance to our barns in Western Canada. The end of the building where the house was situated could be entered by either one of two doors, and was very cosy and comfortable, whilst at the other end entrance was gained through a huge gate, which permitted teams and wagons to pass through. On entering the gate you found yourself in a large courtyard.

On the right was the cow-shed where twelve to fourteen fine milch cows were munching away at the clover, which was cut fresh every day. The cows were chained up all day, and the only time they went outside was once a week, when we would clean out the shed. This was done by hitching a horse on to a huge-pronged rake. The prongs were stuck into the bedding and manure which was to be removed, and the horse would drag it outside, two or three hundred pounds at a time. It was then spread carefully out on the manure pit, which was built specially for that purpose. Some of the cows were milked three times a day, the others only twice. On the end of the cow shed was the hog-pen. It was built entirely of concrete; was well lighted, drained and ventilated. As soon as the young ones were weaned they were placed in a compartment of their own, and their progress carefully watched. On the other side of the courtyard there were loose boxes where the horses were kept. A mare with foal was in one, whilst the others were occupied by the remaining two horses that were doing the work that summer. Western farmers will smile at the idea of two horses working even a farm of 100 acres, but they accomplished it with ease.

The farm was spread out a good deal, 10 acres here, 30 there, and so on. As the owner grew richer he bought what he could. You could work on a piece of land in the morning, and in the afternoon would have to walk a mile to work another patch. The community where I was situated went in for mixed farming, and in a 30-acre field you would find growing rye, clover, turnips, mangel-wurzels, etc. Very seldom was a large portion of land used for growing the same thing. This was, no doubt, on account of the crop being for the most part cut by a scythe and bound by hand. The crop had been put in that spring with a small seeder, and that and a mower that I saw there was the only up-to-date machinery that

**SHERWIN-WILLIAMS
PAINTS & VARNISHES**



Get the Varnish that is made to do what you want it to do.



MAR-NOT
For Floors

Made for floors—to be walked on and danced on, to have water spilled on it, and furniture dragged over it. **MAR-NOT** is tough, durable, absolutely waterproof. Dries in 8 hours; will rub and take a high wax finish; pale in color; particularly desirable for fine hardwood floors.

SCAR-NOT
For Furniture and Woodwork

has been the means of converting thousands of women to the idea of protection in the home. They use **SCAR-NOT** to make their furniture, etc., fresh and pleasing,—even boiling water will not affect it.

REXPAR
For Outside Work

Made to protect outside doors, boat decks, spars, store fronts, etc., against every kind of Canadian weather. It is absolutely waterproof and will not turn white, no matter how long exposed.

The Sherwin-Williams agent in your neighborhood has the right varnish for your purpose. Ask him.

Color schemes and suggestions for any part of your building furnished by expert decorator, free upon application and without any obligation.

Send for book—"The A. B. C. of Home Painting"—written by a practical painter, and telling how to paint, varnish stain or enamel every surface in and around the house. Mailed free anywhere.

THE SHERWIN-WILLIAMS CO., OF CANADA, LIMITED,
897, Centre St., Montreal, Que. 110 Sutherland Ave., Winnipeg, Man.
PAINT, VARNISH AND COLOR MAKERS. LINSEED OIL CRUSHERS.



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 Street Radial) Jefferson, Ont.

Hospital for Insane, Hamilton, Ont.

ONLY THREE BULLS LEFT

(1) A splendid fellow, more white than black, born May 1917. He is a grandson of Dutchland Sir Mona, and his dam is a half sister of the famous Toitilla of Riverside.
(2) Born September and December, 1917, of A. I. R.O.P. dams.

APPLY TO SUPERINTENDENT.

SUMMER HILL HOLSTEINS

A number of choicely-bred bulls. One a real show bull, beautifully marked, dam a 30.76 junior four-year-old; sire's dam 31.60. The three nearest dams average over 100 lbs. milk a day. Can spare a few good heifers.

D. C. FLATT & SON, R. R. 2, HAMILTON, ONT.

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.

Riverside Holsteins

We still have some good bulls on hand, including two half-brothers of Toitilla of Riverside, former Canadian R.O.P. Champion. Write or phone your wants to—J. W. Richardson, Caledonia, Ont

Cream Wanted

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

Ontario Creameries, Limited
London, Ontario

HOLSTEINS

1 bull 2 years old; 1 bull 18 mos. old, from a 23 1/4 lb. 3-year-old dam. One bull 13 mos.; others younger.

R. M. Holtby, Port Perry, Ont.

For Milk, Butter, Cheese, Veal Holstein Cows Stand Supreme

If you try just one animal you will very soon want more.

WRITE THE

HOLSTEIN-FRIESIAN ASSOCIATION
W. A. Clemons, - Secretary - St. George, Ont.

RENNIE'S SEEDS

For HIGH Production

LOOK FOR THE STARS Every page in the Rennie 1918 catalogue is a guide to War-time production. But there are a number of outstanding values and these are called to your attention by a star border such as encloses this.

SEEDS of high productive power are a vital War-time necessity. Not only must every square yard of available ground be made to produce, but Rennie's Seeds must be sown to ensure the finest possible crop. It is a War-time duty. When buying from dealers insist on Rennie's. The following seeds can be obtained from dealers or by mail.

PLANT THESE NOW!!

	Pkt.	oz.	¼ lb.	lb.	5 lbs.
BEET —Crosby's Egyptian	.06	.25	.85	2.50	
CABBAGE —Danish Summer Roundhead	.10	.90	2.75		
CARROT —Rennie's Market Garden	.10	.40	1.20	3.50	
CORN —Rennie's Golden Bantam	.10		.25	.65	
LETTUCE —Burpee's Earliest Wayhead	.10	.35	1.00	3.00	
ONION —Early Yellow Danvers	.10	.40	1.35	4.40	
Rennie's Extra Early Red	.05	.35	1.00	3.75	
PEAS —Little Marvel	.10	.15	.45	2.00	
Senator—Best Second Early	.10	.15	.45	2.00	
TOMATO —Bonny Best	.10	.60	1.75		
Blue Stem Early (King Edward)	.10	.60	1.75		
TURNIP —Breadstone (Swede)	.05	.25	.75	2.50	
		Prepaid	Not Prepaid		
		lb.	5 lbs.	lb.	5 lbs.
ONION SETS —Yellow Multiplier Sets	.30	1.40	.20	.90	
White Multiplier Sets	.50	2.25	.40	1.85	
FLOWER SEEDS					
New Giant Asterum—Mixed					Pkt .15
Rennie's XXX Defiance Balsam—Mixed					.15
Rennie's XXX Hybrids Climbing Nasturtium—Mixture					.10
Rennie's XXX Chameleon Dwarf Nasturtium—Mixture					.10
Grandiflora Phlox Drummondii—Mixed					.10
Rennie's XXX Giant Spencer Sweet Peas—Mixture					.15
Rennie's XXX Mammoth Mixture Verbena					.10

When buying from dealers, insist on Rennie's. If your dealer hasn't them, we will ship direct.

THE WILLIAM RENNIE COMPANY LIMITED.
 KING & MARKET STS TORONTO
 ALSO AT MONTREAL WINNIPEG VANCOUVER

For Quick Growth and Early Maturity, Feed

GARDINER'S CALF MEAL



It replaces perfectly the cream in skim milk, and provides the nourishment necessary for quick, vigorous growth. It is rich in protein, and several points higher in fat than any other meal on the market.

Feed Gardiner's Calf Meal first with skim milk, then with milk-and-water, and finally with water only, and your breeding calves will mature earlier and your young steers will be ready for market sooner. It is equally good for colts, lambs and little pigs.

Put up in 25, 50 and 100-lb. bags. If your dealer doesn't handle it, write us for prices, and for information about Gardiner's other products—Ovatum, Pig Meal, See-a-fat and Cotton Seed Meal.

GARDINER BROS., Feed Specialists, SARNIA, Ont. 15

RECORD OF PERFORMANCE JERSEYS
 CHOICE BULLS AND FEMALES. We have six young bulls of serviceable age, all from R.O.P. dams. Three are by our senior sire, Brampton Dairy Farmer, and three are by our junior sire, Brampton Bright Togo. Write for records. We also have females.

R. & A. H. BAIRD (G.T.R. Stations—New Hamburg, Bright) NEW HAMBURG, ONTARIO

THE WOODVIEW FARM JERSEYS
 LONDON, ONTARIO
 Jno. Pringle, Proprietor

CANADA'S MOST BEAUTIFUL JERSEY HERD
 Imported Champion Rowler at its head.

This bull, with his get, won first prize on the island of Jersey, 1914, second in 1916, and again first in 1917. Present offering—A few yearling heifers in calf to our great young bull, Woodview Bright Prince (7788), and bred from imported sire and dams. We show our work cases and work our show cows.

THE EDGELEY CHAMPION HERD OF JERSEYS
 Write us about your next herd sire. We now have sons of our present herd sire, Edgeley's Bright Prince, who is a son of Canada's champion butter cow, Sunbeam of Edgeley. Pay us a visit. Sunbeam of Edgeley is not the only high-record cow we have. We are pleased to show our herd at all times.

JAMES BAGG & SONS (Woodridge, C.P.R., Concord, G.T.R.) EDGELEY, ONTARIO

BRAMPTON JERSEYS
 SPECIAL OFFERING of fresh cows, in-calf heifers and Island-bred bulls. Nearly all of the Champion R.O.P. cows are directly descended from the Brampton Herd. Buy at the fountain head.

B. H. BULL & SON BRAMPTON, ONTARIO

When writing advertisers will you kindly mention The Farmer's Advocate

the farmer had. Windheim, the farmer, used to point with pride to about 20 acres of wheat, which was fast coming to a head, and inquire whether we had the same in Canada, and when I told him about the huge farms and the up-to-date machinery used in our country, he would shake his head and walk away. No doubt he thought that I was a liar. Little did he know that he was a hundred years behind the times. Life to me on that farm was very monotonous. In the forenoon we would hitch a horse to a wagon and go to the clover field for a load of feed. Fritz, the farmer's son, would cut the clover and I would fork it on the wagon. They had a splendid crop of clover, and the cows looked extremely well on it.

I often wondered what they would have done if they were turned out to feed off a straw stack. When we had our load we would drive back to the cow shed, where I would throw off the load. The afternoon was generally occupied by thinning out the root crop, the two girls and myself generally working together. I was not very expert with the hoe, and later on when the crops got growing, large bald patches showed up where I had been working. Turnip sprouts and weeds were alike to me in Germany.

On several occasions Fritz and I went out to cut down the thistles which were very plentiful in that region. Armed with a long stick on the end of which was a sharp, flat knife about two inches wide, we would move carefully through the grain and stab at the roots of the thistle (which was of the Scotch variety) cutting it off and leaving it lying. It was a very tedious job, and I was glad when we started haying the first week in July. The mower was not in working order, so Windheim and his son got busy with the scythes. Only enough hay was cut in a day that could be cocked that evening before knocking off work. Myself and the two hired girls used to turn over the hay, when cured with small hand rakes, and they were very particular over the job. Every particle had to be turned over to get the benefit of the sun. When we had the job done, we would rest in the shade till it was time to start cocking. A rake pulled by one horse gathered the hay into heaps, and then we got busy, great care being taken in the building of the cocks. After all was cocked a handrake was pulled over the field, and every straw carefully gathered up, and we proceeded to the house for supper. Next morning, to my surprise, we spread all the cocks out again, and during the course of the day turned the hay once more, in the evening cocking it again. It seemed to me to be a great waste of labor; as there had been no signs of rain the evening before, but Windheim evidently took no chances. It was not till we had repeated this performance three times that the hay was considered fit to load. It was then spread out again, and after two hours of sunshine was drawn into huge heaps with the horse-rake. A large rack was then brought in and we commenced to load up. The two girls were inside the rack tramping down hay and building the load, and Windheim and myself pitched it on. I have hayed in different parts of the States and Canada, but I never worked so hard as I did on that German farm. I thought the load would never get finished, and I was wringing with sweat and aching all over when the old man said we had enough. There was about two tons on at that time, and we led the horses out on the road and headed for the hay loft. Right through the gates of the barn-like structure we drove, and when we had the wagon in the correct position, the two horses were looking into the living room of the house. I was the unfortunate victim selected to pitch off the load, and I climbed on that wagon, chuck full of confidence in my ability to show the "squareheads" how it should be done. Being inside the building no air could circulate, and soon I was blinded with sweat. These girls had loaded and tramped that hay a certain way, making it extremely difficult to pitch it off, and it was a great relief to me when that load was safely stowed in the loft. Frau Windheim then brought out a bottle of schnapps, it being the custom in harvest time, and I swallowed a glassful, and out we went for another load.

When we came in again the old man ordered his son to pitch off the load, whilst I passed it back to the girls who tramped it down. Pretty soon Fritz was played out, and he abused and cursed these girls till he was black in the face.

SIMMERS

ESTABLISHED 1856.

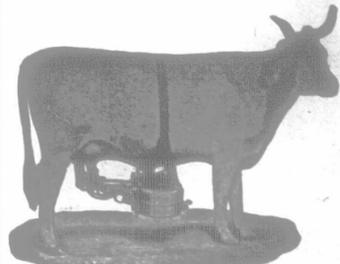
Confidence is the greatest factor that enters into the buying of seeds, since you are buying not a finished product, but only the means by which your garden may be either a success or a partial or complete failure. You will make no mistake in placing confidence in SIMMERS' SEEDS.

CATALOGUE FREE on application.

J. A. SIMMERS, Limited,
 Bulbs, SEEDS, Plants,
 Toronto - - - - - Ont.

SEEDS

The OMEGA Milking Machine



has been installed in the private dairy of H.M. King George V. at Windsor Castle, and also at His Majesty's private estate at Sandringham. The OMEGA, in a 17-day test on ten cows, (against 17 previous days), at the O. A. C. Guelph, increased the milk flow 206 lbs., or 3 per cent.

CLEANLY AND EFFICIENT

The OMEGA is the only machine that draws the milk from the teats through stiff, transparent, celluloid tubes to the pail, which is suspended from the cow. (See cut.) The pail cannot be kicked over and the teat-cups cannot fall to the floor and suck up straw or manure. There are no rubber tubes in the OMEGA to crack and harbor germs. The OMEGA is simple in design and easily cleaned.

WRITE TO-DAY

for free booklet describing the many exclusive and desirable features of the OMEGA.

C. RICHARDSON & CO.
 St. Mary's, Ontario

Keep Your Live Stock Healthy
 and in prime condition by supplementing the feed with

LINSEED OIL CAKE "Maple Leaf" Brand
 With a trial ton order we will send you, free, "The Veterinarian," a valuable book about the diseases of cattle.

THE CANADA LINSEED OIL MILLS, Ltd.
 Toronto and Montreal

Twenty-Five Years Breeding REGISTERED JERSEYS and BERKSHIRES

We have bred over one half the world's Jersey champions for large yearly production at the pail. We bred, and have in service, the two grand champion Berkshire boars. If you need a sire for improvement, write us for literature, description and prices.

HOOD FARM, LOWELL, MASS.

AYRSHIRE COWS
 are heavy milk producers, rich in butter-fat and very prolific.

WRITE W.F. STEPHEN, Secretary
CANADIAN AYRSHIRE BREEDERS ASSN.
 Box 513 Huntingdon, Quebec

CITY VIEW AYRSHIRES

One bull, ten months old; dam's R.O.P., 6,500 lbs. milk, 4.64% fat as a two-year-old. Several bull calves—might spare a few females. R.-C. and S.-C. Reds, White Wyandottes—eggs for setting now ready. James Bagg & Son, St. Thomas, Ont.

They thought it and had p the loads after and it was co but I was now on a German sent back to opportunity. a wet spell, w the haying was should get fine

I was now one of which bands to be u when the grain all made bef in the loft. An of the chop. were passed th box, which wa My job was t in a large bask down again to of labor, but i had to store a of July one of was born deac came from tow skinned and h the carcass w away, but the liver, etc., for were kept bu suddenly disco the taste of sau right away. I splendid shape feet high, whilst I have ever see storm and a g flat next morn shine soon bro

The prisoner were being pai pfenning's a d compelled to w all, so I refused more. After ha I was taken ba there, I had an work in harve acutally employ to take note of grain was cut w which was a cr ground ready children followe with the bands during the sum the prisoners sheaves in long grain cut that before knocking sheaves had i they were loade barn where th carefully stacke of the threshi machines in open outfit, and the o used being woo abundant suppl one of the old-fa and generally di

The straw ca being pounded them on the str and carried by th to the loft whe on to the floor. up by the wome passed from han its resting place where it belong bedding and cho was required. took note of th the farmer three compelled to ke for every bushel

A good many de ever, to cheat th a bushel of rye unknown to the of the population eat and to spare people are suff of hunger. Spic over the country be always on th self from getting whilst we were a was astonished t dish of meat off t it in a trunk that Before I could gendarme walked brought a paper He had to show F cows, etc., he h acres he had un what they consist had gone the F

They thought I would have to unload it and had packed it accordingly. All the loads after that were built properly, and it was comparatively easy to load, but I was now sick and disgusted with life on a German farm, and resolved to get sent back to Minden at the earliest opportunity. About this time we had a wet spell, which lasted a few days, so the haying was postponed till the weather should get finer.

I was now occupied on various jobs, one of which was the making of straw bands to be used in binding the sheaves when the grain would be cut. These were all made before cutting time and kept in the loft. Another chore was the cutting of the chop. Bundles of straw and hay were passed through an ordinary chopping box, which was worked by horse power. My job was to carry the chop upstairs in a large basket. As it had to be carried down again to be used, it seemed a waste of labor, but it was the only place they had to store anything. Toward the end of July one of the cows had a calf which was born dead. Next day the butcher came from town and killed her. She was skinned and hoisted up to set, after that the carcass was divided up and taken away, but the farmer retained the heart, liver, etc., for his own use, and girls were kept busy making sausages. I suddenly discovered that I did not like the taste of sausage and turned vegetarian right away. By now the crop was in splendid shape, the rye being over six feet high, whilst the wheat equalled any I have ever seen. One night we had a bad storm and a good deal of the grain was flat next morning, but a few days of sunshine soon brought it upright again.

The prisoners working on the farms were being paid the large sum of thirty pfennings a day (six cents), and were compelled to work hard. I was sick of it all, so I refused point blank to work any more. After two weeks of confinement I was taken back to Minden, and whilst there, I had an opportunity to study the work in harvest time. Although not acutely employed on the job, I was able to take note of what was going on. The grain was cut with a scythe attached to which was a cradle which left it on the ground ready for tying. Women and children followed on and tied the bundles with the bands which had been made during the summer. After them came the prisoners who would stook the sheaves in long windrows, and all the grain cut that day was stooked on end before knocking off time. After the sheaves had matured and were dry, they were loaded up and taken to the barn where they were unloaded and carefully stacked to await the coming of the threshing machine. I saw two machines in operation, one was a gasoline outfit, and the other a steam rig, the fuel used being wood, of which there was an abundant supply. The separator was one of the old-fashioned hand feed variety, and generally did a clean job.

The straw came out intact, the grain being pounded out of the ears, leaving them on the straw. The grain was sacked and carried by the prisoners up some steps to the loft where it was emptied out on to the floor. The straw was bound up by the women into large bundles and passed from hand to hand till it reached its resting place in the part of the loft where it belonged. This was used for bedding and chopped up for feed when it was required. Government officials took note of the amount of grain that the farmer threshed, and he would be compelled to keep track of and account for every bushel during the following year. A good many dodges were devised, however, to cheat the government and many a bushel of rye has been hidden away unknown to the inspector. The farmers in Germany are better off than all the rest of the population, and they have food to eat and to spare whilst the rest of the people are suffering from the pangs of hunger. Spies, however, abound all over the country, and the farmer has to be always on the alert to prevent himself from getting into trouble. One day whilst we were at dinner on the farm I was astonished to see the Frau grab the dish of meat off the table and hastily hide it in a trunk that did duty for a cupboard. Before I could inquire the reason a gendarme walked into the house. He had brought a paper for Windheim to fill in. He had to show how many pigs, chickens, cows, etc., he had, and the amount of acres he had under cultivation, also of what they consisted. When the gendarme had gone the Frau produced the dish



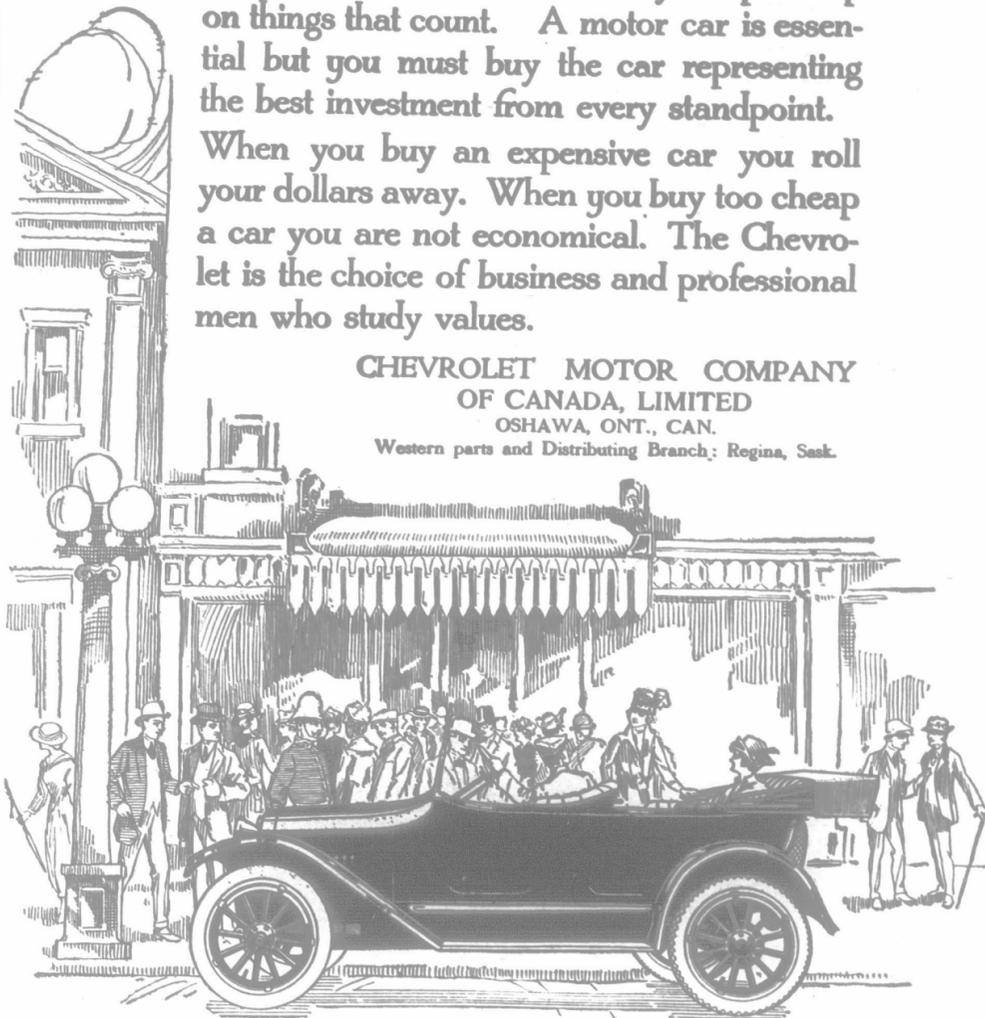
Economise

IN
TIME MONEY ENERGY

Buy a Chevrolet Four Ninety

WARTIME demands that you accomplish more in less time—that you speed up on things that count. A motor car is essential but you must buy the car representing the best investment from every standpoint. When you buy an expensive car you roll your dollars away. When you buy too cheap a car you are not economical. The Chevrolet is the choice of business and professional men who study values.

CHEVROLET MOTOR COMPANY
OF CANADA, LIMITED
OSHAWA, ONT., CAN.
Western parts and Distributing Branch: Regina, Sask.



MODEL 490-A \$825. f. o. b. Oshawa

There is a Chevrolet Show Room in your vicinity. Call and see the latest Chevrolet models

GLENHURST AYRSHIRES — ESTABLISHED 50 YEARS

For a half-century Glenhurst Ayrshires have been noted for their depth and size, good teats and smoothness of conformation. Our famous Flos family has produced dozens of 60 and 65-lb.-a-day cows, many on twice-a-day milkings. We have young bulls up to twelve months, and females all ages. If you are looking for a combination of size, type and production—plus high butter-fat—write me or visit the farm. JAS. BENNING, Summerstown, G.T.R.; Williamstown, G.T.R., Williamstown, Ont.

RAVENSDALE AYRSHIRES

A few splendid 12-months-old bulls, out of R. O. P. and imp. high-testing dams. January test averaged 4.6%; also younger bulls and heifers. I have three registered Clydesdales for sale, eight months old. Write for prices or come and see stock. W. F. KAY, PHILIPSBURG, QUEBEC. 50 miles south of Montreal. St. Armand Station, G. T. R.

Glencairn Ayrshires Herd established 40 years. Producing ability from 8,600 to 11,022 lbs. If that sort of production appeals to you, we have heifers all ages and young bulls for sale. Thos. J. McCormick, Rockton, Ont. Copetown Station, G. T. R.

Choice Offering in Ayrshires AT SPECIAL PRICES. Several young bulls of serviceable ages. All from R.O.P. sires and dams. Come and see them. JOHN A. MORRISON, Mount Elgin, Ontario

Fernbrook Ayrshires

Young bulls for sale (out of R. O. P. dams) from one to fifteen months old; tracing closely to the world's champions, Garlaugh May Mischief and Jean Armour.

COLLIER BROS., Beachville, Ontario (OXFORD COUNTY)

Kelso Farm R. O. P. Ayrshires. Herd headed by Palmston Speculation Imp. We never had a stronger line-up of R. O. P. producers than we have at present. Our 1917-1918 young bulls are sure to please. D. A. MacFarlane, Cars Cross-Ing, G. T. R., Athelstan N. Y. C.; Kelso, Que.

LIFT YOUR CORNS OFF WITH FINGERS

Tells How to Loosen a Tender Corn or Callus so it Lifts Out Without Pain.

A noted Cincinnati chemist discovered a new ether compound and called it Freezone, and it now can be had in tiny bottles, as here shown, for a few cents from any drug store. You simply apply a few drops of Freezone upon a tender corn or painful callus, and instantly the soreness disappears, then shortly you will find the corn or callus so loose that you can just lift it off with the fingers.



No pain, not a bit of soreness, either when applying Freezone or afterward, and it doesn't even irritate the skin. Hard corns, soft corns, or corns between the toes, also toughened calluses, just shrivel up and lift off so easy. It is wonderful! Seems magical! It works like a charm! Your druggist has Freezone. Ask him!

IRON AGE

Farm, Garden and Orchard Tools
Answer the farmer's big questions.
How can I grow crops with less expense? How can I save in planting potatoes? How make high priced seed go farthest? The IRON AGE Potato Planter solves the labor problem and makes the best use of high priced seed. Means \$5 to \$10 extra profit per acre. Every seed piece in its place and only one. Saves 1 to 2 bushels seed per acre. Uniform depth; even spacing. We make a full line of potato machinery. Send for booklets today.

No Misses
No Doubles

THE BATEMAN-WILKINSON CO., Ltd.
41 Symington Avenue Toronto, Canada.

LABELS
Live-stock Labels for cattle, sheep and hogs, manufactured by the Ketchum Manufacturing Co., Limited,
Box 501, Ottawa, Ont. Write for samples and prices

Cloverdale Shropshires and Berkshires—40 shearing rams, 70 shearing ewes; an exceptionally choice lot, true to type and well grown, nearly all sired by the show ram, Nock 16 Imp. In Berkshires, the usual strong offering, including sows just bred. C. J. LANG, Burketon, Ont.

Shropshires and Clydesdales
Besides my regular offering of ram and ewe shearlings, I have the three-year Clydesdale stallion, Cairnbrogie Heir 18299. Write quick, don't wait. W. H. PUGH, Myrtle Station, R. R., Ontario

Morrison Tamworths and Shorthorns—Bred from the prizewinning herds of England. Tamworths, both sexes; boars from 2 to 12 months. Shorthorn bulls from 5 to 10 months old, reds and roans—dandies. CHAS. CURRIE, Morrison, Ont.

TAMWORTHS
Young sows bred for spring farrow and a nice lot of young boars for sale. Write: John W. Todd, R. R. No. 1, Corinth, Ontario

Meadow Brook Yorkshires
Have a splendid offering of young stock to offer at reasonable prices. Write your wants to: G. W. MINERS, R. R. No. 3, EXETER, ONT.

Featherston's Yorkshires—The Pine-Grove Herd
I have the choicest lot of young sows of breeding age that were ever on the farm. A few are already bred. Also have 10 young litters. Prices reasonable. J. K. FEATHERSTON, STREETSVILLE, ONT.

Lakeview Yorkshires If you want a brood sow or a stock boar of the greatest strain of the breed, (Cinderella), bred from prizewinners for generations back, write me. John Duck, Port Credit, Ont.

SPRINGBANK CHESTER WHITES
Several young sows, ready to breed, and boars fit for service; young pigs, both sexes, ready to wean, by Sunny Mike—15917—first at Toronto in 1917. Satis action guaranteed, inspection invited. Wm. Stevenson & Son, Science Hill, Ontario

PROSPECT HILL BERKSHIRES
Young stock, either sex, for sale, from our imported sows and boars; also some from our show herd, headed by our stock boar, Ringleader. Terms and prices right. John Weir & Son, Paris, Ont., R. R. 1

DUROC JERSEYS
Our herd won all champion prizes at Toronto and London, 1916 and 1917. Pairs not akin. Young stock, all ages for sale. Visitors welcome. For further particulars write: CULBERT MALOTT, No. 3, Wheatley, Ont.

of meat, and we resumed our dinner. They told me that they were not supposed to have any meat at all, and would have been heavily fined had the officer caught them with it on the table.

Shortly before I left Germany an order was issued that where a farmer kept poultry he had to bring in for sale to the government a certain number of eggs per month in proportion to the number of chickens he owned.

The roads in Westphalia are lined with apple-trees, which are owned by the government, and the farmer is responsible for the fruit which is growing on that section of the road adjacent to his farm. Much as I detest the Germans on account of the brutal treatment which was subsequently given me, I am compelled to admire them for their wonderful powers of organization, and their hard-working thrifty nature. Not a thing is wasted, all offal, manure, etc., is utilized for something. There is more wasted through carelessness on some of our large Western farms than is produced on a little holding in Germany, that is giving a good living to a large family.

Obedience is bred and born in the people. They would no more think of openly disobeying an order than they would of flying to the moon. That is why they are hanging together so long. Without their spirit of loyalty to the "Fatherland" they would long ago have been a beaten nation.

"For Want of a Drink."

"If a tired and broken Canadian soldier, fresh back from battle, stopped at your back door and pleaded for a hot drink to refresh his waning strength, would you refuse him?" This was the burning interrogation with which Capt. J. M. MacKendrick climaxed a telling speech delivered in Fort William, Ont., a few days ago. Capt. MacKendrick, who is home on furlough after a strenuous period as a Y. M. C. A. worker in France, was referring to the following incident. After the battle of Vimy Ridge, two hours after the boys had gone over the top, the Captain and his assistants followed them up and established themselves in a German dug-out in No-mans' Land to serve hot coffee and other refreshments. Among other things they dealt out 2,500 cups of hot coffee and 2,500 packages of cigarettes. Then their supply ran out. They sent for more, but received word there were no supplies to be had. The amount of supplies the Y. M. C. A. had been able to buy had run out for lack of funds.

"It was pitiful," said Captain MacKendrick, "to have to tell those thirsty, war-worn men that there was no more coffee to be had." But one incident, in particular stood out so that he could never forget it. A burly Canadian, battle-weary, exhausted, frantic for nourishment, straggled up and pounded upon the door of the Y dug-out and pleaded for a hot drink. Capt. MacKendrick had to face him with the news that there was no hot drink for him.

At this the man broke into great oaths in his despair. He wanted to know of what use the Y. M. C. A. was at the front if in moments such as this one it failed. Captain MacKendrick explained to him that they had no more because they had not had the funds to purchase more.

The man's next question was one that the Captain decided he would carry back to the people of Canada if he were spared: "Do the people at home know this?"

"One of my men," continued Capt. MacKendrick, "afterwards found that poor boy lying on his face only a short distance on—dead. He died of sheer exhaustion. A cup of hot coffee might have saved him—the cup of coffee that the people at home might have bought for him if they had only known the dire need."

Questions and Answers. Miscellaneous.

Making Hard Soap.

Some of our readers have found difficulty in the making of hard soap. Mrs. E. C. Nelson sends the following recipe, which she claims has proven satisfactory: 15 quarts of rain water; 9 lbs. of grease or cracklings, 2 cans of lye, 1/2 lb. borax, and 1/2 lb. resin. It takes about an hour to make the soap after the water has been brought to a boil.

TORONTO WINDMILLS

ONTARIO WIND ENGINE & PUMP CO. LIMITED

USE THE AIR—FREE

THE use of wind developed power for pumping purposes was given up by many farmers on account of undue cost in repairs, the necessity of frequent oiling and the loud rattling and grinding of the old style wind mills. Toronto Windmills overcame all these difficulties—ensuring noiseless pumping even in the slightest breeze and long life with little oiling, repairs or attention. Space prohibits our telling you all particulars about Toronto windmills, our book gives it all. Send us your name and address and learn how to save labor by using free air.

Ontario Wind Engine & Pump Co., Limited

Atlantic Ave., Toronto.
12 St. Antoine St., Montreal. 142R
Winnipeg Calgary Regina

Also Makers of TORONTO Engines



WELDWOOD FARM YORKSHIRES

Four choice litters almost ready to wean. Orders filled in rotation as received.

WELDWOOD FARM

FARMER'S ADVOCATE, LONDON, ONTARIO

BERKSHIRES

My Berkshires for many years have won the leading prizes at Toronto, London and Guelph. Highcleres and Sallys, the best strain of the breed, both sexes, any age. ADAM THOMPSON, R. R. No. 1, STRATFORD, ONT. Shakespeare Station, G.T.R.

ELMHURST LARGE ENGLISH BERKSHIRES
From our recent importation of sows, together with the stock boar, Suddon Torredor, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed. H. M. VANDERLIP, Breeder and Importer, R. R. 1, BRANTFORD, ONTARIO. Langford Station on Brantford and Hamilton Radial

When writing advertisers will you be kind enough to mention The Farmer's Advocate

Don't
PO
E

Vast quantities of potato
troyed
potato
time this
was stop
has do
but don

A

is cheaper
The
ant that

Acco
Any size
your dis

Made by
ACCO

Toronto,

F

Over three f
that the sun
When t
have a flag
We hav
we will send
new subscri
Cut out
\$1.50, which
Advocate an

THE FARM
Gentle
money order
advertised.

Name of sen

Address

Name of new

Address

When writin

Don't Feed POTATO BUGS

Vast quantities of good potato crops are destroyed every year by potato bugs. It is high time this foolish wastage was stopped. Paris Green has doubled its price—but don't worry,



ACCO SPRAY

is cheaper than Paris Green and just as effective.

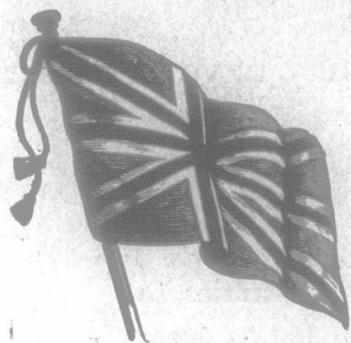
The present world shortage of food makes it vitally important that you stop any wastage of food—especially potatoes.

Acco Spray is put up in 1/2- 1- 5- 10- and 25-pound bags. Any size for special order. If unable to purchase Acco Spray in your district, send us a card.

Made by
ACCO CHEMICAL CO., LIMITED
Toronto, Ontario

Harold F. Ritchie & Co. LIMITED
10-14 McCaul St., Toronto, Ontario
Sole Agents

FREE!



A UNION JACK

Over three feet long and two feet wide, which you will soon be needing now that the summer is near.

When the 24th of May and other holidays come you will be glad to have a flag like this to hang up in front of your house.

We have secured a supply of these Union Jacks, and as long as they last we will send one of them, FREE, to any reader sending us the name of one new subscriber.

Cut out the coupon and send it to us with express or money order for \$1.50, which the new subscriber will give you to pay for the Farmer's Advocate and Home Magazine for one year.

COUPON

THE FARMER'S ADVOCATE & HOME MAGAZINE; London, Ontario

Gentlemen,—I am sending you the name of one new subscriber, with money order for \$1.50 to pay for same. Please send me the Union Jack you advertised.

Name of sender.....

Address.....

Name of new subscriber.....

Address.....

When writing advertisers will you kindly mention The Farmer's Advocate.

NEPONSET ROOFS

NEPONSET PAROID ROOFING NEPONSET TWIN SHINGLES

THRIFFT and production are the farmer's watchwords this year. Paroid is a tremendous help to the thrifty farmer, because the price is right, it is easy to lay, will require no repairs, and will last for many, many years. To date, Paroid has a record of over 19 years' service.



NEPONSET Paroid ROOFING

If you are roofing, or repairing roofs this year give your building the protection of Paroid. For instance, burning cinders falling on a Paroid roof die out harmlessly.

Paroid makes an attractive roof, too, either in the gray finish, or with the red or green crushed slate surface.

Insist on the genuine Paroid. Look for the label as shown here.

*Neponset Twin Shingles for all Residences
Sold by Hardware and Lumber Dealers*

BIRD & SON .. Head Office, Hamilton, Ont.

—Warehouses:—

Montreal, Toronto, Winnipeg, Calgary, Edmonton, St. John

The Largest Manufacturers of Roofings, Wall Board and Roofing Felts in Canada



100,000 FREE FARMS OF 160 ACRES EACH



IMMENSE WEALTH IN WESTERN CANADA

Send for **FREE Book**

"Home-Seekers' and Settlers' Guide"

Contains valuable and interesting information based on Government Reports

ENTERPRISE and ENERGY—One Alberta town reports at least 100,000 acres of new land in that vicinity plowed last fall for crop this year; has six elevators now and three new ones and a flour mill under way. The reason—1917 values for wheat, oats, barley and flax seed alone for the prairie provinces is \$613,885,700.00. Start now, share it this year.

THOUSANDS OF FREE FARMS—Whether you have capital or not, there is a farm for you along the Canadian Northern Ry.—160 acres of Government homestead lands, surveyed and ready for entry. First comers have the choice.

Improved Lands from \$15 UP PER ACRE
Thousands of acres of selected lands, close to the railway, can be purchased on easy terms, cash, or part cash and crop payments. This means schools, good roads, transportation and market facilities. Prices continually advancing; the values are there.

Low Fares **Comfortable Trains**
Interesting Features

By Canadian Northern, the logical route from Eastern to Western Canada. Through tickets everywhere. Get copy of the "Guide" to-day; any agent, or write General Passenger Dept., Montreal, Que.; Toronto, Ont., or Winnipeg, Man.

Seed Beans

Germination test from 85% to 95%. Foundation stock imported from Michigan in 1916 is of White Field Variety, maturing about ten days earlier than the native White Field Bean. Price, \$0.00 per bushel, F.O.B. **WM. A. KELLY, RODNEY, ONTARIO**

Make your own Will at home. No lawyer needed. Bax Legal Will Form is binding. Has full directions and specimen will. Specify Bax at your stationers, then you are sure. Don't take any substitute, 35c.



ONTARIO

**"The food wanted by mankind does not exist.
The word 'shortage' is not strong enough.
The whole world is up against a nasty thing, familiar
to the people of India, called 'famine'."**

**LORD RHONDDA,
Britain's Food Controller.**

One year ago, only the enemy was on rations.

To-day, Great Britain, France and Italy are on rations.

**To-day, Germany controls the wheat lands of Roumania,
Russia, Poland and Ukania.**

**To-day, the shadows of hunger, famine, disease and death
hang over the Allies.**

**Upon the 1918 crop from Canada and the United States
depends the fate of the democratic peoples of the world.**

If that crop is sufficient the Allies can be fed.

**If that crop is not sufficient the Allies may have to accept
a German peace.**

We know that farmers have obstacles and difficulties to overcome—but the labour shortage this year is not as great as it was last year. If you need help to produce more food communicate with your District Representative of the Department of Agriculture, or the Public Employment Bureau in Toronto, Hamilton, London or Ottawa.

Lack of Food—threatens the Battle Line

Issued by the Ontario Department of Agriculture, in Co-operation with The Canada Food Board