

PUBLISHED EVERY WEEK. \$1.50 PER YEAR.

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE AND SUCCEED FOUNDED 1880

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

ENTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

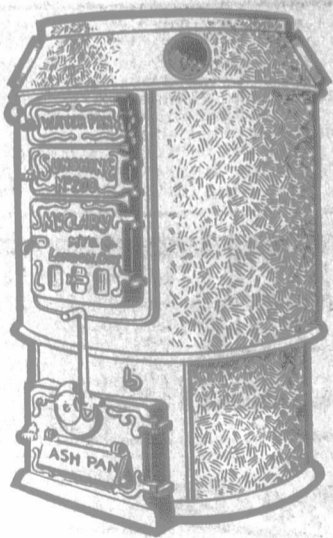
Vol. LII.

LONDON, ONTARIO, AUGUST 9, 1917.

No. 1298

Don't Be Fooled! There's a Big Difference in Furnaces

McClary's Sunshine FURNACE



Will Heat Your Home Comfortably
With One-third Less Fuel Than
Other Makes Require. Consider
What This Saving Will Amount
to in Five or Six Years!

Efficient management lies in buying a furnace that will effect a permanent saving in time, trouble and in up-keep and operating expenses. If you want to save money on fuel bills; if you want heat that is always under perfect control; if you want a heating plant that automatically renews the air in the house and safeguards your family against the dangerous ravages of worn-out, breathed-over, vitiated air, let your choice be a "Sunshine". We guarantee that when installed according to our instructions, the "Sunshine" Furnace will heat the house to your entire satisfaction.

SEND FOR THIS FREE BOOK, "Comfort in the Home." It contains valuable information for present and prospective home owners on the subject of heating, and fully describes and illustrates the many exclusive features of the "Sunshine" Furnace. Write direct to our nearest office. We mail it free.

LONDON

ST. JOHN, N.B.

TORONTO

HAMILTON

MONTREAL

McClary's

Largest Makers of Furnaces and Stoves in
the Entire British Empire

CALGARY

WINNIPEG

SASKATOON

VANCOUVER

EDMONTON

Without Cost to You

We can tell you what a complete McClary "Sunshine" Heating System will cost you, if you will fill in this form and send a separate sketch of cellar and each floor—they need not be to scale—giving the following information:

Partitions by single line _____
 Windows by space _____
 Doors by lines with part of circle _____
 Sliding Doors as _____
 Stairs by several parallel lines _____
 Chimneys by hollow square _____

Points of the compass _____

On Cellar Plan show position of posts, piers, beams, chimney, fuel bin and outer stairs.

Directions which joints run by arrow _____

Width between joists—1st floor _____ 2nd floor _____

Width between studs in partitions _____

Width of stairs _____

Width of narrowest door through which furnace is to pass _____

Mark "No Heat" in rooms not to be heated _____

Do you want Oil in Furnace to heat Water Tank? _____

What is the coldest winter temperature? _____

Name _____

Post Office _____

Nearest P. O. Station _____

Do not delay mailing us this form. Plan your heating system early and avoid the discomforts of another winter without a "SUNSHINE".

If you have a regular architect's plan of your building, we would prefer your sending that to us, and we will return it immediately with our estimate of cost of proposed installation.

GILSON
POWER plus SERVICE
 After 9 years of Service
 Mr. H. TUTTON, of Brantford, Ont., writes:
 Gentlemen—As my 6 h.p. Engine has been such a big saving to me during the 9 years I have had it, I thought I would write you. I have my acres, keep a lot of stock, and do all my own chopping, feed cutting, wood sawing, etc. My engine is as good as new now, and compares with other makes around me. I am perfectly satisfied with its superior fuel economy, power and reliability.
 Write for FREE catalogue and prices.
 ALL SIZES
 Gilson Mfg. Co. Ltd. 59 York St. Guelph, Canada.



HYLO SILO
Sweet Fresh Ensilage
 down to the last forkful
 THE HYLO SILO is perfectly air-tight. No frozen or spoiled ensilage around the walls. Convenient and perfect fitting doors, adjustable without hammer or wrench. Made of Guaranteed Long Leaf Yellow Pine. Built to last a life-time. Stands rigid when empty.
 Write for prices and catalogue.
 AGENTS WANTED
 Gilson Mfg. Co. Ltd. 49 York St. Guelph (A)



FERTILIZERS
 For Fall Wheat and Seeding Down
 High Grade—Write for Prices
THE W. A. FREEMAN CO. LIMITED
 HAMILTON CANADA

THE MARTIN DITCHER AND GRADER
 DIGS YOUR DITCHES GRADES YOUR ROADS
 EASILY QUICKLY CHEAPLY
 REVERSIBLE ADJUSTABLE
 DOES THE WORK OF 30 MEN
 SEND FOR FREE BOOKLET
 THE PRESTON CAR & COACH CO. LIMITED
 97 DOVER ST. PRESTON CANADA



BE SURE AND ASK FOR THE
Maxwell
 Line of WASHERS, CHURNS, BUTTERWORKERS, FOOD CUTTERS, GAS ENGINES, etc. Write for Catalogue.
MAXWELLS LIMITED, St. Mary's, Ont.

MORE HORSEPOWER if your teams are equipped with
Ventis
 These pads prevent Sore Shoulders and cure Gall Sores. Your dealer will supply you, or write BURLINGTON BLANKET CO., Ltd., 793 King Street West, Toronto, Canada.

Louden Barn Equipments
 SAVE TIME—Save Labor—Save Expense
 Our new catalogue describes every kind of device for money-making and labor saving on farms. Write to:
LOUDEN MACHINERY CO.
 Dept. 1, Guelph, Ont.



Give your cows summer pasturage next winter

That's the way to get a big milk flow.
 No amount of grain feeding alone will give you in winter as much milk as you get in summer. Your cows need fresh green feed such as they get when pastures are flush.
 Good corn silage is the greatest winter milk-producing feed there is. If you are not feeding it to your cows you are spending 15 or 20% more for feed than you need to and getting 25% less milk than you could.

Get an IDEAL GREEN FEED SILO and let it make money for you

The first cost of the IDEAL is small. It will pay for itself the first year and return you 100% on your investment each year thereafter for many years.
 What other equipment can you buy that will do this?

No matter whether you are feeding dairy cows, beef cattle or sheep, you need a silo, and it will pay you to buy a good one. You may save a few dollars on the first cost by buying a cheap, poorly made one, but such a silo will neither last as long as an IDEAL nor keep your silage in as good condition.

Write today for a catalogue. It shows you every detail of the IDEAL and explains just why you get in it more for your money than in any other silo.

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 Butterworkers. Catalogues of any of our lines mailed upon request.

MONTREAL PETERBORO WINNIPEG VANCOUVER
 60,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



Made in Canada

Artillery Horses Wanted
 Age 6 to 9 years, height 15.2 to 16 hands, weight 1,200 to 1,350 pounds and 1,500 pounds and stand 16.1 hands.
COLORS
 Any except light grey, white or light buckskin. All horses must be sound, of good conformation, free from blemishes, and broken to harness or saddle.
INSPECTION POINTS AS ARRANGED BY THE COMMITTEE:—
TORONTO: Burns' repository every Monday; Union Stock Yards every Tuesday; McGregors, Hayden Street, every Wednesday.
LONDON: July 28th and alternate Thursdays. Apply to James McCartney.
BRAMPTON: July 19 and alternate Thursdays. Apply to E. J. Jones.
PETERBOROUGH: July 20th and alternate Fridays. Apply to L. Green.
ST. MARY'S: July 27th and alternate Fridays. Apply to H. M. Robinson, Toronto.
COMMITTEE:—E. C. H. Tisdale, Beaverton; Wm. Smith M.P., Columbus; Robert Graham, Toronto; E. J. Jones, Brampton; C.F. Bailey, Assistant Deputy Minister of Agriculture; H. S. Arkell, Acting Live Stock Commissioner, Ottawa; Lt. Col. G. A. Carruthers, Montreal; H. M. Robinson, Sec., 883 Broadview Ave., Toronto.

THE GILSON
 Gilson Ensilage Cutters
 Cut silage perfectly, and at a very low cost of operation. Gilson knives cut smoothly and swiftly. They make a fine, uniform silage that is very palatable and nutritious. The rigid direct drive, slow speed, six fan construction, lifts and throws the silage, requiring much less power than any other blower doing the same work.
 Mechanical perfection and high quality of material mean long life, no loss of power and low cost of operation.
 Our new illustrated catalog gives facts showing how "The Wonderful Gilson" will save time and money at cutting time. Send for copy to-day.
GILSON MFG. CO., Ltd.
 289 York Street Guelph, Ontario

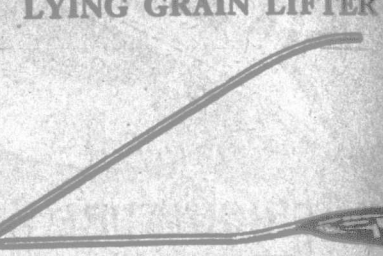


USE
WINDSOR BRAND
CHLORIDE OF LIME
 for cleansing milking machinery.
THE CANADIAN SALT CO., LIMITED,
 Windsor, Ontario.

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

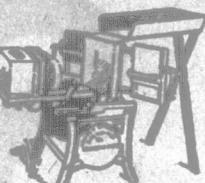
When writing advertisers will you kindly mention The Farmer's Advocate

Good Luck Feeds
 Cotton Seed Meal, Oil Cake Meal, Gluten Meal, Digestive Tankage, Bran, Shorts, Oats, Crushed Oats, Corn, Cracked Corn, Corn Meal, Feed Wheat, Good Luck Baby Chick Feed, Scratch Feed, Poultry Mash, etc. Write for prices.
CRAMPSEY & KELLY
 Dovernourt Road Toronto

LYING GRAIN LIFTER

 Patent No. 167260
 Write for full particulars, Mr. Farmer. You cannot afford to harvest your crop without this attachment, as it is no experiment, it has proven satisfactory in every way.
 Write to-day for full particulars.
DICK AGRICULTURE WORKS
 T. A. DICK, Manager, Bolton, Ontario

BEEKEEPER'S SUPPLIES
 HIVES · FRAMES · FOUNDATIONS · ETC.
THE TILLSON COMPANY, LTD.
 TILLSONBURG, ONT.

BUILD CONCRETE SILOS
 Dwellings, or any class of buildings, from Concrete Blocks.
THE LONDON ADJUSTABLE BLOCK MACHINE makes all sizes and designs of Concrete Blocks. Price \$65.00. Send for catalogue No. 3.
LONDON CONCRETE MACHINERY CO.
 Dept. B, London, Ontario
 World's Largest Manuf'rs of Concrete Machinery.



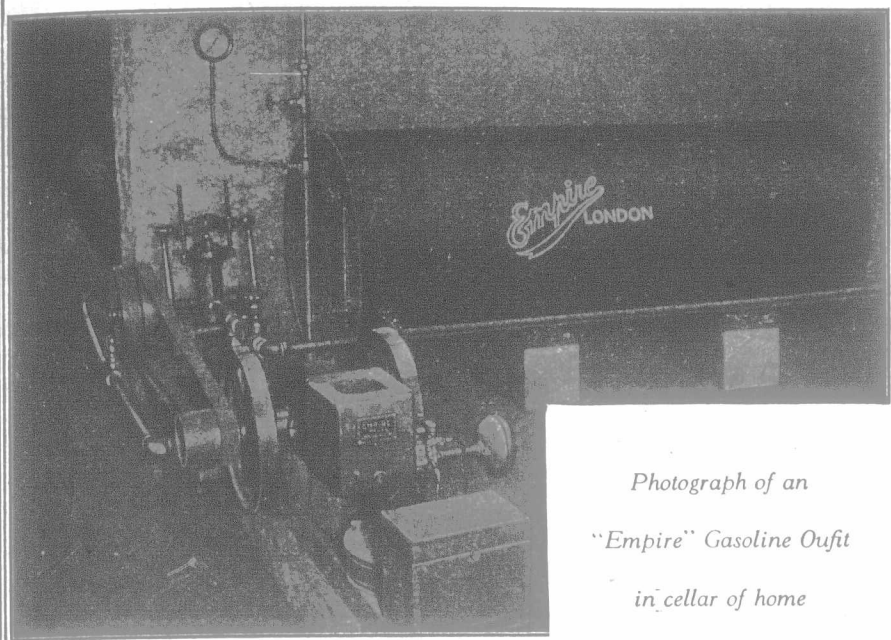
5% INSTEAD OF 3%
 Your money can earn 5% just as easily as 3% if you invest it in the debentures of the Standard Reliance Mfg. Corp.
 Our booklet, entitled "Profits from Savings," tells you all about it. It's free.
 Write now for a copy.
STANDARD RELIANCE MFG. CORPN.
 52-58 King St. E., Toronto, Ont.

RAW FURS-HIDES
WOOL &c. SEND US YOUR SHIPMENTS—TO RECEIVE HIGHEST PRICE LIST FREE MARKET PRICES.
JOHN HALLAM, Limited
 9 Hallam Building TORONTO

Pratts POULTRY REMEDIES
 A Guaranteed Remedy for every Common Ailment
 Send 10c. for 160-page "Poultryman's Handbook," or write for FREE Book, "Poultry Wrinkles" Pratt Feed Co. Canada, Ltd. 68 J. Claremont St., TORONTO.

Cockshutt Catalogue
 will give you valuable farming hints and shows the full line of Cockshutt and Frost & Wood Implements. Write for a copy to-day.
 Cockshutt Plow Co., Ltd., Brantford, Ont.

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



Photograph of an
"Empire" Gasoline Outfit
in cellar of home

HAVE RUNNING WATER IN YOUR HOUSE AND BARN

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

Empire WATER SUPPLY System

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

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

Yours truly,
N. SANGSTER

OUTFIT CONSISTS OF:

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

We have supplied many homes throughout Canada with similar systems. Send for our Information Blank and Catalogue to-day. Fill in the "Blank" and we will suggest a system suited to your needs, and estimate its cost without charge or obligation.

EMPIRE MANUFACTURING CO., LIMITED
Head Office and Factory: East London, Canada
Branch Office: 119 Adelaide St. West, Toronto



BE INDEPENDENT

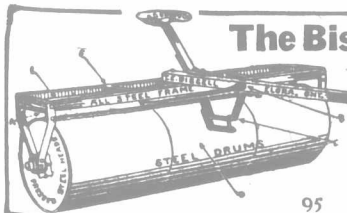
IT IS YOUR SAVINGS, NOT PAY CHECKS THAT COUNT

The average town worker with a family cannot save more than \$120 a year. Rent, food, clothing and expensive amusements take the rest. Once his machinery, seed and live stock are paid for the average Western Farmer has a yearly turnover of \$500 and up, his own.

OWN A WESTERN FARM

by Homesteading along the lines of the Canadian Northern Railway, where the newest and most fertile sections are still open for settlement. Booklets and information on application to General Passenger Departments: Montreal, Que.; Toronto, Ont.; Winnipeg, Man.

CANADIAN NORTHERN RAILWAY



The Bissell Steel Roller has a rigid steel frame—no wood whatever. Large roller bearings and strong 2" axles insure durability and great strength. The Bissell is a 3-drum Roller of good weight, built to stand hard usage and give great service. Write Dept. W for free catalogue.
T. E. BISSELL CO., LTD., Elora, Ont.

"The New Fairbanks-Morse Type Z Engine"

YOU simply cannot get more engine value per dollar than you get when you buy either of these engines. They are oil engines built to use kerosene and other cheaper fuel as well as gasoline.

Here's where you get your economy-- these engines use kerosene so successfully that you get the same power from a gallon of kerosene as from a gallon of gasoline- and you save the difference in cost!

POWER? All you want and more. These Type 'Z' engines are built to serve.

Every distinctive feature of these wonderful engines does its part to develop maximum power from least fuel. Results are the test we ask. They are the most practical, money-saving and all-round satisfactory engines that your money can buy. Adopted for General farm work such as Grinding, Ensilage Cutting, Wood Sawing, pumping electric lighting etc.

1-2 H. P.	\$ 65.00
3 H. P.	\$115.00
6 H. P.	\$205.00

with magneto attached

The Canadian Fairbanks-Morse Co. Limited

Toronto, Hamilton, Windsor, Montreal,
Ottawa, Quebec, Factory Toronto 34



More than Rated
Power and a Wonder
at the Price

High Cost of Living

vs.

Low Cost of Insurance

Midst all the increasing cost of living there's one thing that hasn't advanced,—that's the cost of Imperial Life policies. In fact, an Imperial policy today requires no greater annual investment than a similar policy taken at a corresponding age a dozen years ago.

And the fact that the dividends to policyholders in The Imperial Life have shown a gradual increase every year since the Company's inception makes this investment more attractive now than ever before.

Would you care to know the profit returns being made this year to holders of Imperial profit-sharing policies? Our booklet "The Voice of Experience" gives the information.

A copy will be sent to you post free if you ask for it.

THE IMPERIAL LIFE Assurance Company of Canada

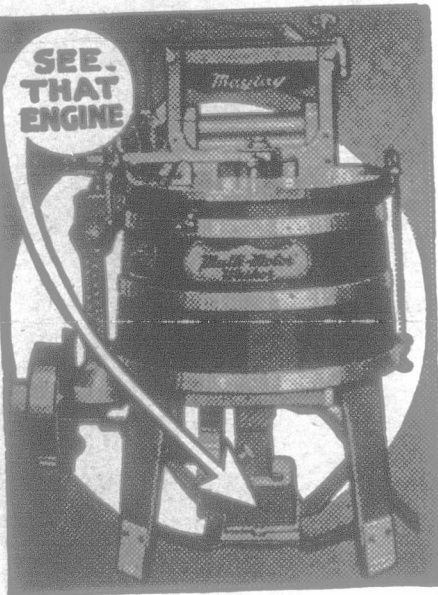
HEAD OFFICE - TORONTO

Branches and Agents in all important centres

Copyright



"MAYTAG"
MULTI-MOTOR WASHER



It is positively the only washer of its kind on the market. The half-horsepower engine operates on gas, gasoline, kerosene or alcohol—about five cents worth does the wash.

This washer will not injure the daintiest linens, or the most delicate laces—and it will handle heavier blankets—doing the work twice as well and in less than half the time required by the old-fashioned washer or back-breaking, knuckle-skinning wash-board and tub.

We also have in stock
"Maytag" Electric
"Maytag" Power and
"Maytag" Hand Washers
ALSO THE
"Maytag" One H.-P. Engine

Each machine warranted
FOR THREE YEARS.

Ask your dealer, or write for
information to :

WHITES LIMITED
COLLINGWOOD, ONTARIO

Sole distributors for the Provinces of
Ontario, Quebec, Nova Scotia,
New Brunswick and Prince
Edward Island.

BOB LONG
UNION MADE
GLOVES and OVERALLS



Known from Coast to Coast
R.G. LONG & CO. LIMITED
TORONTO ONTARIO

When writing please mention this paper.

An Absolute Guarantee

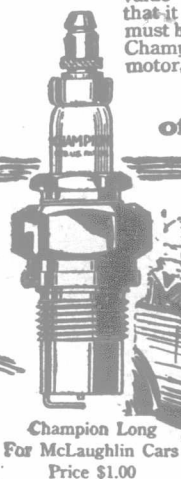
Nowadays so many products are guaranteed that the full import is often overlooked by the user. The manufacture, testing and inspection of our product is so thorough and sincere that we want everyone who owns or drives any kind of a gasoline motor or engine to know how unreservedly we stand behind

Champion Toledo

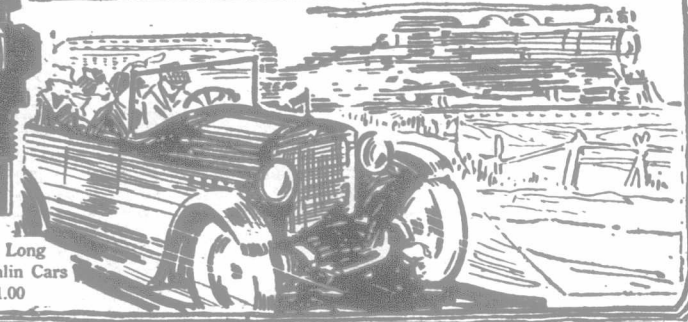
Dependable Spark Plugs

The Champion guarantee means exactly what each word implies—Complete satisfaction to the user—Free Repair—Replacement or your Money Back—It can't be more binding. If in your opinion any Champion spark plug has not given you full value—take it to the dealer from whom you purchased it and demand that it be repaired or replaced free or get your money back—You must be "Completely satisfied". Champions are made to give dependable service in every type of motor, gas engine or tractor. Look for "Champion" on the porcelain.

Champion Spark Plug Co.
of Canada, Limited, Windsor, Ontario. 23



Champion Long
For McLaughlin Cars
Price \$1.00



**More Power
Cheaper Operation
Constant Service**

Power depends on piston rings—so do fuel and oil consumption—so does regular service. Therefore—when you find power falling off, compression weak, gasoline waste, carbon trouble—you should put in a complete set of the Genuine

**McQUAY-NORRIS
LEAK-PROOF
PISTON RINGS**

Always gas and oil-tight; give more power with less fuel and oil; reduce carbon; cause minimum friction and cylinder wear. Strong, long-wearing, ever-efficient. There are imitations and substitutes. Be sure you get only the Genuine McQuay-Norris Leak-Proof Piston Rings.

All garage and repair men can give you immediate service on them. If you have any difficulty getting them, write us. We'll see you are supplied.

Send for Free Booklet

"To Have and to Hold Power"—the standard handbook on gas engine compression. Every farmer who runs an automobile, engine, tractor, etc., ought to have it. Manufactured by
McQuay-Norris Mfg. Co., St. Louis, U. S. A.
Canadian Factory:
W. H. Banfield & Sons, Ltd.
374 Pape Ave., Toronto

— the Genuine is packed this way

The Immediate Needs

of any financial emergency require immediate cash. At death most of all. Life Insurance is the one possession that death automatically turns into cash.

Life Insurance at lowest cost and with highest returns is to be secured on the most liberal conditions in

THE GREAT-WEST LIFE ASSURANCE COMPANY
Department "Z" Head Office, Winnipeg.

**Peter Hamilton
Ensilage Cutter
and Blower**

Take no chance of having your ensilage spoil this fall! Buy your own silo filler, and put your corn in your silo at the right time, and in the right way.

MACHINES FOR EVERY NEED

We have a machine suited to your needs, and to your power—blower or carrier silo-fillers and feed-cutters of different sizes. All these machines are designed to cut the maximum amount of feed in the shortest time, and with the least power. Our blower machines have cast-steel knife-wheel, which will not blow up under any condition. Learn more about these machines by sending to-day for our free booklet.

PETER HAMILTON CO., Limited
Peterborough, Ont.



**Prize Butter
Makers Use**

Windsor Dairy Salt
Made in Canada
THE CANADIAN SALT CO. LIMITED

Prices from \$26.70 up



**More Profit from
Your Cream**

ONE man (name on request) writes in to say his 300 lb. Viking gives him 1 1/4 lbs. of butter more a week and that it skims closer by a good deal than the \$75 separator he used to have.

Ask your dealer for our free descriptive booklet, or write us
Dept. 4 Swedish Separator Co.
515 South Fifth Ave. Chicago

IMPROVE YOUR HEALTH

Drink a beverage having the tonic properties and general flavor of the finest beer. Easily made in your own home with

HOP MALT EXTRACT

Made only from pure hops and malt. An aid to digestion. Excellent for convalescents. Anyone can make it.

Small tins, \$1.00; large, \$1.50
Agents Wanted DEPT. A
Hop Malt Co. - Beamsville, Ont.

**METALLIC
METALLIC ROOFING CO.
TORONTO, CANADA
CEILING**

The Farmer's Advocate and Home Magazine

PERSEVERE
AND
SUCCEED

ESTABLISHED
1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

LII.

LONDON, ONTARIO, AUGUST 9, 1917.

1298

EDITORIAL.

Let there be no waste.

Give good measure; it pays.

Let the boys fit something for the fall fair.

You don't lose your self-respect by acting on the square.

Full garbage pails now may mean empty dinner pails later on.

Don't stop to worry about the past. Improve the time you have left.

Keep the cultivator going in the corn field; it will be the salvation of the crop.

Can surplus vegetables and fruits that cannot otherwise be stored for winter use.

Run the mower over the weedy pastures before the weeds go to seed. It will save work next year.

Don't run any risk with the potato crop. Apply poison and Bordeaux to ward off bugs and blight.

When driving or motoring remember that the other fellow has certain rights on the King's Highway.

The silo means larger profits from the corn field. There is still time to erect a silo before corn harvest commences.

Don't expect the team to do a full day's work in the harvest field on grass alone. Feed a little grain three times a day.

After-harvest cultivation starts weeds germinating so that a later stroke with the cultivator will destroy many of them.

Team work is needed with the different departments of the Government, on the farm, in the city; in fact, in every line of life.

Fall wheat seeding is only a few weeks distant. Is the field being put in proper tilth and a supply of good seed provided?

The weather cleared in time for a lot of hay to be harvested in good condition. This along with silage will help out the feed problem next winter.

Give the team a pail of water in the middle of the forenoon and afternoon when hauling in the crop. Water refreshes the horses as well as the man.

Market the broody hen or else break up her broodiness. It doesn't pay to feed high-priced grain to hens that merely sit on the nest week in and week out.

So long as flies are bred about the place we will be tormented by them. Avoid this by not allowing decomposing material to accumulate around the buildings.

What do you purpose doing with those weeds in the fence corners, around the barn, and on the roadside fronting your farm? They are unsightly to say the least.

Neglect the summer-fallow for a few weeks and the result of many days' work is brought to naught. Even in the rush of harvest it may pay to give it a little attention.

The Fly Nuisance.

Although the house-fly is a comparatively small insect, it is capable of causing considerable annoyance and of spreading disease which results in great loss of life. The house-fly is said to be among the most dangerous of insects, but yet it is tolerated to a certain extent in many homes. Refuse and decomposing material constitute the chief breeding places of these pests, but yet they are allowed to alight on food and drink to be consumed by humans. Coming from places laden with disease germs, it is a wonder that more sickness is not caused than there is. For the sake of humanity a rigorous warfare should be waged on this insect. Screen doors and windows should be put on the house and every effort made to prevent flies from coming in contact with food, especially that intended for infants. The milk-house or dairy should be carefully guarded and flies kept out of the sick room. Even when these precautions are taken the fly will continue to be a menace unless the breeding places are removed from near the buildings, or else treated to render them immune to the insect. The barnyard is a prolific breeding place of the house-fly, as is also decaying material such as vegetable garbage, cess pools, mouths of house drains, damp refuse of any kind, etc. Pouring kerosene over the waste material is an effective way of abating the fly nuisance, but there are places where the use of this is not advisable. Swatting the flies early in the season will also prevent increase in numbers, as it is said that a single fly may lay about one thousand eggs, which will turn into full-grown flies in about ten days after they are laid. As far as possible the breeding places should be cleaned up or disinfected so as to make it easier to protect the house from these disease carriers.

Reduce Waste.

A good deal is heard these days about conservation of food so that the vast armies, as well as the civilian population of the many countries engaged in war, will not suffer owing to lack of nourishment. Eliminate waste has become the slogan among certain classes of people who urge upon others the necessity of saving food products in every way possible. It has been said that fifty million dollars' worth of food goes into the garbage pails in Canada yearly, and that the waste in the city of Toronto alone would feed an European city of like size. While the waste is believed to be paramount in large hotels, restaurants, and in the homes of the rich, there is a certain amount in the most humble homes, due sometimes to lack of knowledge in making "left-overs" into appetizing dishes. The farmer and his family are not immune. Food may not go into the garbage cans, as there are always chickens and hogs to consume what is not used by the family, but there are other forms of waste which are prevalent; for instance, machinery is left to rust in the field instead of being stored, shelled grain is left on the fields which might be picked up by chickens and hogs were they given a chance, weeds are allowed to grow and use, up needed fertility, plant food is permitted to leach away from the barnyard, vegetables rot in the garden instead of being canned for winter use, apples spoil under the trees for want of a suitable market or time to market them, crops could be turned to better advantage if fed to higher-quality stock, time is wasted by inefficient farm management, and lives are wasted by worry. It is expedient that wastage of human food in cities, in fact everywhere, be reduced to the minimum. On the farm, the great manufacturing plant of human food, the problem is a large one; it touches bigger things than the scraps from the table, which are not really wasted in the country. The farmer has had to do a lot of reorganizing on his farm to adapt the cropping system and general work to present conditions of labor shortage, but he has done it very creditably. If it were possible to study and plan

more and to improve the quality of some of the crops and stock, returns from the farm would be increased, and the country in general would be benefited. However, with shortage of help the tiller of the soil cannot always do as he would like.

A Deceiving Feature of Co-operation.

The very benefits of co-operation in Agricultural affairs lead many who have subscribed to the movement to consider they have made a mistake, and those who remain apart to think themselves the wise ones. There is something deceiving about it all. True it is that on many occasions the slacker profits by the enlistment of his neighbor farmer in the co-operative ranks, and this leads the member of the society to regret his association with the movement to which he has rendered assistance and become a part. However, the member usually profits and the non-member receives some benefit in an indirect way for which he pays nothing, not even moral support. Sometimes the non-co-operator even ridicules the one whose actions have meant profits to others as well as to himself, thereby causing disappointment, distrust and often rupture in the organization. What has really been a good thing for the community has been construed in men's minds as something which failed in its purpose for the reason that the co-operators were not the only ones to profit thereby. What helps one farmer frequently helps another, and on account of this very virtue of co-operation, dissatisfied and disgruntled minds result. A few concrete examples will make this point clear.

The co-operative movement among the Annapolis Valley fruit growers in Nova Scotia has tended to stabilize the whole industry. With strength, the outcome of union, they have struggled for improved shipping facilities. They have chartered vessels of their own. By loading whole trains with fruit and diverting them while en route to certain destinations or shipping points they have relieved and prevented congestion. They have controlled a large quantity of the output, thus preventing it from being consigned hither and thither by growers who are ignorant of market conditions and whose haphazard marketing methods would lead to congestion and glut. Indirectly, in all these ways, they have assisted the non-member, so those who do not identify themselves with the union are enabled to do business independently under more favorable circumstances. Above all, however, a big organization has been built up so dealers and speculators are obliged to meet the prices received by the members of the association (perhaps advance on them slightly) or they could not do business, for all the growers would flock into the organization. No doubt it is better as it is, but far too few appreciate the good the co-operative movement is doing. Some non-subscribers may be doing very well indeed, but not alone on account of their superiority; the organization itself makes it possible.

By united effort last spring 1,500 Ontario farmers graded and marketed in a co-operative way 260,000 pounds of wool. Up to the time the prices received for this wool were announced from 50 to 55 cents per pound was the highest prevailing price being paid. The farmers who sold co-operatively got 57 cents per pound for "coarse" and "lustre"; 63 1-8 cents per pound for low medium combing, and 66 cents per pound for medium combing. These two latter prices were paid for grades that constituted a large percentage of the product. Better grades brought 67 cents. As soon as these values were made public, prices all over the Province advanced, and those who still held quantities of the two million pounds of wool, with which Ontario is credited, benefited. Since that time all kinds of prices have been reported, and have caused some dissatisfaction among those who consigned their wool to Guelph.

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

Published weekly by
THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.

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

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

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

No doubt a number of these recent transactions represent the sale of washed wool, which would, of course, sell higher than unwashed; and then again, in isolated cases, the high price might be quoted in the hope that it would sow the seeds of discord and induce farmers to revert to former or the old-time methods of handling wool. The fact remains that prices were advanced by the sale of only about one-eighth of Ontario's clip in a co-operative manner to the direct advantage of those who still held a part of the remaining seven-eighths.

The Grain Growers' organization of the West is too well known to require comment. It has meant the salvation of thousands of growers, and yet there are many who have not subscribed to it but still have prospered on account of its existence.

In these three districts mentioned where co-operation on a large scale has been tried, one can still find producers who claim they can do better by not being connected with the organization. That may be true, we cannot say, but this we know is true, they are doing better with the organization than they would without it. Conditions are usually improved, prices are frequently advanced when a live co-operative scheme is put into operation. All far-seeing and broad-minded people will be aware of these advantages and will be able to discern the pitfalls laid for the destruction of the association or movement. Members and non-members alike should support and assist the organization which benefits them both.

Rounding out the Business of Production.

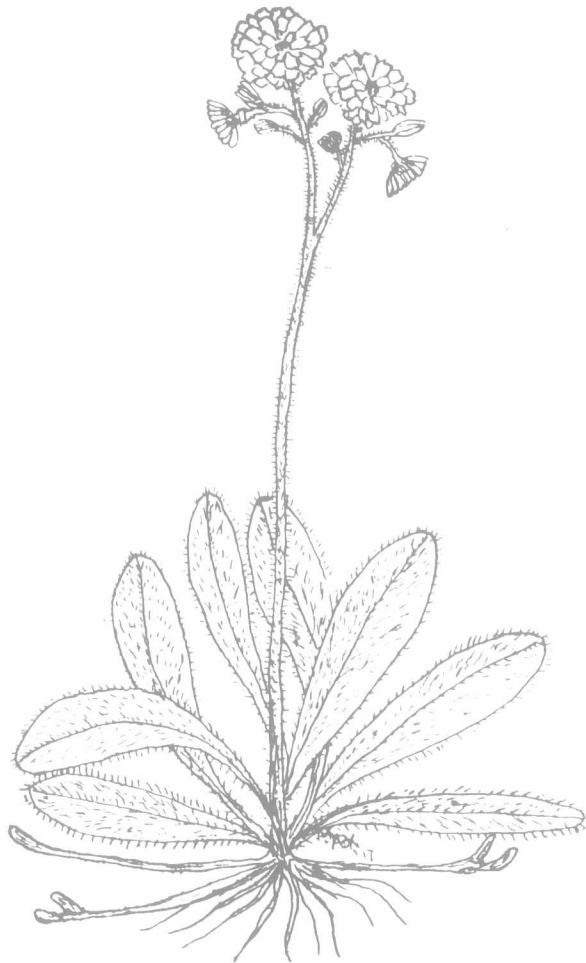
A short time ago we published an article dealing with the importance of having a special line in connection with mixed farming operations as carried out on the average farm. Mixed farming with one or more specialties is generally most profitable. All the eggs are not in one basket and yet, if properly managed the farm should be in the best position to give maximum returns one year with another. There is, however, such a thing as paying too much attention to a specialty and not enough to the other branches of the farm work

to properly round out the farm production and ensure the best possible results every year. For instance, in such Counties as Essex and Kent where corn and beans are leading crops it would seem that it would be good practice to specialize a little in dairying. It is not enough to depend on the seed corn crop or the seed bean crop every year, for they sometimes strike unfavorable weather conditions and may not mature to the best advantage. Besides, pigs go well with corn and dairy cows go well with pigs. A hog buyer recently made the remark in our office that almost anyone could feed hogs from 100 pounds in weight to 200 pounds, but it took skill to bring them from birth up to the first hundred. Where corn is grown as a special crop for husking, why not ensile the stalks? Why not, if necessary, have a field of corn, not husked, for silage purposes. It would look like good business to maintain a dairy herd to eat the stalks to return good money in the way of cream checks and to give a supply of skim-milk to bring the hogs on to the hundred pounds in weight, and the hogs would consume all the corn not suitable for sale for seeding purposes such as miniature ears, nubbins and any that were off type. This would aid in working up a high-class seed corn trade, would permit of making the best use of the poorer grades, would prevent fodder waste and would in bad seasons give three chances where seed-corn growing alone would give only one. We know a successful farm in the area mentioned which is being so operated. All corn or all beans is a risky proposition just as is all any other one thing. Farming should be planned so that nothing is wasted—so that each special line works well with one or two other specialties and the whole goes to make up a well rounded-out business. This makes for maximum production and highest net returns.

Nature's Diary.

A. B. KLUGH, M.A.

The worst weed in my garden is one of which we find no mention in the books dealing with Canadian weeds. It is a plant belonging to the Compositae, the same family to which the thistles, daisies, golden-rods, dandelions, etc., belong, and is called Galinsago, the



Orange Hawkweed.

scientific name being *Galinsago parviflora hispida*. I have not previously met with it, and the only records of its occurrence in Canada which I can find are in Gray's Manual, which credits it to Ontario, and Dr. Scott's list of the plants of the vicinity of Toronto in "The Natural History of the Toronto Region." It is not a native of Europe, as is the case with most of our worst weeds, but of tropical America, though it occurs now as a weed in Europe. I give a figure and description of it here because it is a plant for which every farmer should keep his eye open. It is a plant of vigorous growth and does not seem to be very easy to eradicate, as last year I thought that I had exterminated it but am fighting it again this year.

It will attain a height of from one to three feet, but will begin to flower when only five inches high. The

stem, especially the upper portion, is covered with rather long hairs which give it a downy appearance. The lower leaves are long-petioled, that is, have long stalks, while the upper leaves are sessile, that is, have no stalks at all but "sit" directly on the stem. The heads are very small, with numerous small, yellow tube-flowers in the centre and four or five small white ray-flowers.

A plant which is a bad weed in pastures in Quebec and in parts of the Maritime Provinces is the Orange Hawkweed. This species belongs to the Compositae, and is also known as the Paint-brush or Devil's Paint-brush. It is a perennial with a hairy flower-stalk and hairy leaves. From the crown it throws out many creeping stems and is propagated in this way as well as by means of the seeds which are carried long distances upon the wind by their plume-like tufts. The flowering stems are from one to two feet in height and bear at the top from eight to twelve flower-heads about an inch across and of a fiery orange-red color. So striking are these blossoms that some are inclined to spare the plants on account of their beauty, but this can hardly be recommended since it is a most vigorous and rapidly-spreading weed. It is easy of control in cultivated land, and badly infested pastures should be broken up and put in short rotation. In land which cannot be plowed, salt, applied at the rate of 20 pounds per square rod, should be used to kill it.

The Orange Hawkweed is a native of Europe, and there are several other European Hawkweeds which have also been introduced into this country. They are much like the Orange Hawkweed in general appearance but have flowers of a golden-yellow or lighter yellow color. We have also several species of native Hawkweeds which are often quite common in permanent pastures.



Galinsago.

ance but have flowers of a golden-yellow or lighter yellow color. We have also several species of native Hawkweeds which are often quite common in permanent pastures.

Hay Making, Past and Present.

BY ALLAN MCDIARMID.

Making hay while the sun shines may be all right but it's "some job", no mistake. Those of us who have been at it during some of the days of this past season, when the temperature was anywhere under a hundred in the shade and about a hundred and twenty in the sun, are good and ready to admit that. I heard of a traveller down South who asked a native he met, if he could tell him what the thermometer registered that day, in the shade. "No" said the man, "I can't, we don't have no shade in this country". And that is about the way it has seemed to be to one working in the hay-fields some days this summer. The worst of it was that we couldn't consistently kick about it after complaining so loudly about the wet weather that was keeping us back in our work for the previous three or four weeks. The one thing that there is no use complaining about is the weather, but a good many of us have the habit all the same. In regard to this point there are two kinds of men in the world, I've noticed. One is the man who expects to have everything go contrary to his wishes and kicks when they do, and the other is the one who is satisfied to take things as they come. This latter individual says, "Things might be worse". The former replies, "Yes, and they are going to be". But, talking about making hay, I was going to say that it beats me to imagine how our grandfathers and our fathers in their younger days, used to get through the work with practically no machinery of any kind, when we have a machine for everything from digging ditches to hatching chickens, and still are half killed with work most of the time.

I used to hear my father tell about making hay in his younger days. He said that sometimes it was so heavy that they had to put some of it on the fences to dry it, but just the same it had all to be cut with the scythe and loaded on to the wagon or cart with the pitchfork, and then forked off again into the mows that sometimes got so high before the hay was all in that the pitcher would have to go to the bush and cut a fork for himself that was long enough to make up for what he himself lacked in that respect. This pole with a forked end was a pretty rough substitute for one of our present-day hay-forks, but it was good enough to do the work, and that was the main consideration. I know of one man who put in the whole of the season's crop alone in this way, pitching it over the top stick in the barn and then getting up and mowing it back until the barn was full.

The horse-fork and the hay-loader are nowadays

supposed to make the haymaker's job a sort of a past-time, but some way, anyone who has tried it seems always to hold to a contrary opinion. A good many farmers have been looking forward this year to getting help from the cities, in the way of men out of the factories, that would stay for at least three weeks and who were to be paid their regular wages by the factory-owners in addition to the one dollar and ten cents a day that the farmer was supposed to give them. Very few of those who sent in applications had their wants supplied, but I was talking to a farmer the other day who had succeeded in getting one of these double-pay men, and his experience was not encouraging, either to farmers who are short of help, or to any city employees who may be thinking of taking advantage of the opportunity for a holiday in the country. So far as appearances went, he said, the fellow was all right, though his collar did seem to be a little too high for his ears, but it was when he got out to the hay-field that the disadvantages of city life became noticeable. Before noon the chap had his pocket-handkerchief on the end of the fork-handle to prevent further blisters appearing on his hands, and by night the sun had convinced him that life in the open air was not for him, and that he would take the rest of his holidays making ammunition boxes in a sash and door factory in "his old home town". At any rate he took the first train out the next morning. If farm life has been made easy by the use of machinery he had failed to notice it, and no doubt there are good many others like him.

The fact of the matter is that it doesn't signify what circumstances or conditions surround us, the strain and wear and tear will be the same. It is our own nature, and to some extent the spirit of the times that make us work as hard, or perhaps harder, than our forefathers did, although we have all kinds of machinery, and they had no more than could be hung up on a beam in the barn. To some extent this multiplicity of "labor-saving" farm machinery may be the very cause of the speeding-up of life in the country. It is the tendency of humanity to go to extremes. As one man will keep getting lazier and going slower until he stops for good, so will another keep going faster and faster until he ends in a smash-up, or rather a breakdown, as his doctor will tell him.

The men and women of fifty years ago took life easier than we do, in spite of the fact that they passed on to us a heritage of well-tilled fields, fenced, in many instances, by stone dikes that show they weren't afraid of hard labor. They lived, as a rule, comfortably, with plenty to eat and to wear, and they had time for a certain amount of social intercourse with their neighbors that the present generation pays very little attention to. These facts being admitted, the point is that a man can live more sensibly than we are doing if he wants to. The habit of hurry doesn't get us anything but indigestion, and there isn't any of us but can steady down to a sensible gait that will bring just as much into our lives in the end as will the "hurry-up" method. Some say that the man of to-day dies sooner than his grandfather did, but he gets more done because he lives faster. Well, if he does he pays for it with his peace of mind, very often, and that is too high a price. But I don't admit that he necessarily gets more done. I don't notice that there is any more hay in the barns to-day, or is it of any better quality either, than when I was a youngster, pushing forkful after forkful back into some loft over a stable, and every now and then running my head against a shingle-nail that had been driven too far through the roof. It was never intended that we should go to an extreme in the matter of accomplishment any more than anything else. There's lots of time. All eternity, in fact. If we can't keep our bodies from becoming over-heated on some of these days we can at least try to keep cool-headed. It's good practice if nothing else.

THE HORSE.

Bone Diseases—III.

Sidebone.

Side bones are frequently seen in heavy horses, especially on the fore feet. In rare cases they occur on the hind feet, but seldom if ever cause lameness when so situated. While the lighter breeds and classes are not immune, they seldom suffer. A side bone consists of the conversion into bone of a cartilage called the lateral cartilage. The posterior aspect of the os pedis (the bone of the foot) presents on each side a somewhat pronounced ridge of bone. These are called the wings of the os pedis. Each wing is surmounted by a somewhat irregular, quadrangular-shaped cartilage with a somewhat semi-lunar-shaped superior border. These cartilages are firmly attached to the wings of the bone and are called the lateral cartilages. The lower portions of these cartilages are contained within the hoof, but the upper portion projects well above the hoof, is covered only by skin, and can readily be felt and its outline followed by pressure with thumb or finger over each heel. They are quite elastic, yield readily to pressure, and resume their original position immediately when pressure is removed. Some claim that these cartilages assist in the expansion of the hoof, but it is generally conceded that they have little or no action in this respect. No doubt they expand and spread outwards when weight is put upon the foot, in order to accommodate the expansion of the soft tissues that are situated between them, which expansion is caused by weight, and so soon as the foot is lifted from the ground they resume their former position. In their expansion they are simply passive agents, being pressed outwards as

described. They may, however, be considered as active agents in the contraction of the parts, as, when pressure is removed from their inner surfaces they regain their natural position by reason of their elasticity, and the pressure they exercise upon the sensitive frog forces the heel into its original shape. Briefly, they may be said to be forced to expand when weight is placed upon the foot, and that they actively assist in contraction when the weight, which forces the frog upwards and outwards, is removed from the foot. It must not be understood that the foot expands and contracts upon its inferior surface, but at the coronet and heels; not the horny foot, but the soft parts of the heel and coronet. To prevent undue expansion of these, the lateral cartilages are placed as elastic sides.

The process of ossification (the conversion of the cartilage into bone) is usually slow, sometimes very slow, and often unaccompanied by inflammatory action, causing the animal no pain, hence not causing lameness. When the development of sidebone is expected, the frequent manipulation of the cartilage will reveal a gradual enlargement and hardening until it becomes unyielding to pressure and more or less altered in outline. Cases have been known where a marked thickening and hardening of the cartilage indicating that sidebone was developing were noticed, and in a few months the cartilage had regained its normal conditions. Lameness in many cases is not noticed, but may appear at any time, from well-marked exciting cause, as hard and fast work on hard roads. Lameness, no doubt, is caused by the constricted space (caused by the inflexible sides) causing undue pressure upon the soft parts in their efforts to expand each time weight is put upon the foot. At the same time, many horses with sidebone never show lameness although continuously subjected to the ordinary exciting causes, but on account of the danger of lameness a horse with sidebone should be considered unsound, although he may never have shown lameness or tenderness. The causes of the trouble may be said to be hereditary predisposition, and shoeing with high calkins. It is generally admitted that the predisposition is hereditary, hence it may be considered unwise to breed an animal of either sex, if he or she be affected. High calkins prove a cause—first, because the shock received by the heels when the foot comes to the ground is transmitted directly to the cartilages; secondly, because the pressure upon the heels of the wall is unnatural and excessive, the frog is prevented from bearing its

or it may be in isolated spots, either at the junction of the cartilage to the bone anteriorly, or involving the posterior border first. In most cases the process is slow, the cartilages gradually becoming enlarged and hardened until ossification is complete.

Treatment.—It is doubtful if any treatment is beneficial. When the process of ossification has commenced it cannot be checked. The advisability of endeavoring to hasten ossification by counter-irritation or firing is doubtful. The removal of the deposits by an operation has been practiced without success. In cases where lameness is extreme the operation of neurotomy by a veterinarian may be justified. This consists in removing the nerve supply to the parts.

It is well to bear in mind that while the condition in many cases does not cause lameness, the horse's gait usually loses that elasticity so essential to good action. In heavy horses this may not be of so much consequence, but in the lighter classes it is of great importance, not only as a question of soundness or unsoundness, but of the usefulness of the horse and the pleasure and safety of his driver or rider. WHIP.

Remounts.

In the rosy red of the dawning your hoofs on the roadway ring,
You that shall carry our heroes, you that shall fight for the King,
You that shall lead the triumph in a last long trampling line
When the swords have saved us Europe and slashed their way to the Rhine!
Called from an Irish farmyard, called from English fen,
Called from a prairie pasture to measure the lives of men,
What courage that laughs at danger, what spirit that scoffs at Death,
But, born to our Empire, freedom ye have drunk with your every breath!

Bred in our conquering kingdoms, you, too, are the Empire's sons.
You that shall tug at the wagons, you that shall gallop the guns,
You that are part of our glory, whose help has the years bestowed

Whenever our grandsires gathered,
Wherever our fathers rode!

And, faith, ye shall never fail us
When the whimpering bullets fly,

When the lances shiver and splinter
and Death in the spurs goes by:

When the stricken reels in his saddle
and the chill hand drops the rein,

And bloody out of the battle ye
wheel to the tents again!

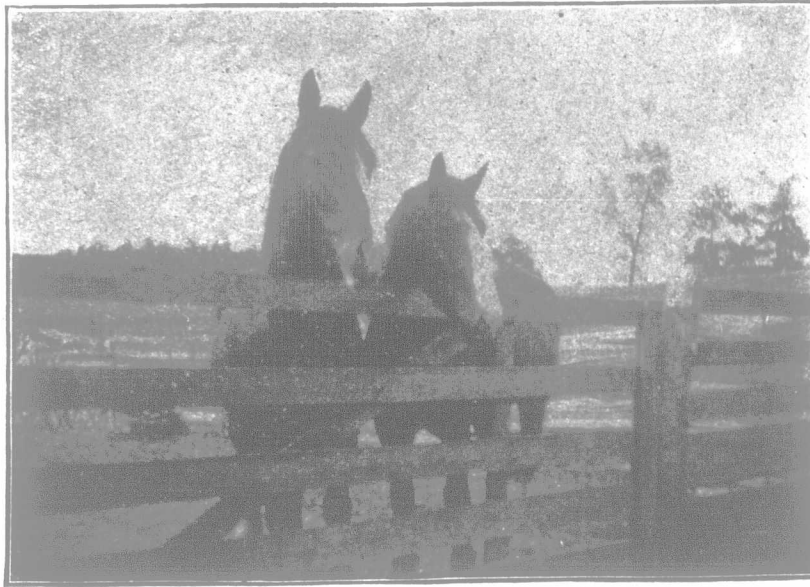
Hail to the hero that waits you,
gunner, hussar or dragoon!

Hail to the day of your glory—and
the War-God send it soon!

Luck to your prancing squadron,
whose hoofs on the roadway ring,

Proud ye shall carry the victors who
carry the swords of the King!

WILL H. OGLIVIE, in Saturday Post.



Waiting to be Taken from the Pasture.

proper weight; thirdly, because they are pulled inwards and downwards by the sensitive frog being pressed downwards, while its horny covering being removed from the ground forms no column of support. Direct injuries, as one horse treading upon the heels of another, blows, bruises, etc., are often blamed for causing side bone. This may be possible and, as they usually exist in pairs, if the cartilage on one heel be normal and that of the other ossified, and there be symptoms of previous injury, we may be justified in giving the horse the benefit of the doubt.

Opinions differ as to just when a horse should be condemned as having sidebone. The process of thickening, hardening and ossifying, being gradual, some claim that a horse should not be condemned until ossification is complete. There may be reasonable grounds for this claim, as a horse really has not sidebone until bone is really formed. At the same time, we are of the opinion that a horse in which the symptoms plainly indicate that ossification has commenced should not pass as sound.

Symptoms.—In many cases the symptoms are solely local; in others there is more or less well-marked lameness, which is usually characterized by the toe of the foot being first brought to the ground; when both feet are involved, by a shortness of step and an absence of elasticity of action. To detect the bony deposit it is generally necessary to press upon the cartilage, which is normally yielding and elastic, but when diseased gradually lose this character, becoming hard, unyielding and enlarged. In clean-limbed horses the enlargement can usually be noticed, but in the hairy-legged classes a manipulation is necessary to detect abnormality, and even in a clean-limbed horse where suspicion exists it is safer to handle. The deposition of bone may be uniform, involving the whole substance of the cartilage,

English Hackney Stud Book Opened Wide.

In accordance with many requests received from abroad the English Hackney Stud Book has been opened for the registration of Hackneys and Ponies owned or bred beyond the United Kingdom. Horses accepted by the Society will receive distinctive Stud Book numbers in the same manner as those bred in the United Kingdom. Horses can be registered to show prizes, produce, or changes of ownership. This is the information communicated by Frank F. Euren, Secretary of the Hackney Horse Society.

LIVE STOCK.

Two Flesh-Losing Periods.

There is no better season of the year to size up the situation in respect to green feed during the dry spell of mid-summer than when the actual needs are most apparent. It is during July and August that pastures become parched, the milk yields fall off and gains in beef cattle and growing stock cease. At the same time the pestiferous fly is most tormenting, all combining to reduce flesh, milk and profits. It is then that cattle are put on the market in order to ease the strain on the grass land, and prices drop. People are not consuming meats in the same quantity as is common earlier and later in the season, so the inevitable break in prices is sure to follow. This is all due to a natural peculiarity of our climate which farmers are striving to overcome with silos and green-feed crops. Markets

and actual farm conditions are now bringing this phase of the feed problem to our attention and it is an opportune time to size up our needs in this respect so we can make full preparation for a like emergency in 1918. The periods of the year when a falling off in yields or gains is most noticeable in Canada is during the dry season of mid-summer, and late in the fall when cattle should be on stable rations but are not. When stock is left out late in the season in the cold and usually wet storms, and the feed in the fields is getting scarce, considerable loss in flesh and thrift results. Experienced feeders attribute thin cattle in winter and early spring to this cause, especially when the rations have been fairly liberal throughout the winter months. Cattle should be brought in early enough to avoid these losses, for otherwise good feed which would ordinarily go to make gains is used up in restoring the flesh and vigor lost through exposure.

As for next summer's green feed, little can be done now except to estimate the requirements, or perhaps erect a silo suitable, in respect to dimensions, for summer opening and feeding. On the other hand the silo must depend upon this year's crop of corn.

While we see no reason for the close stabling of young stock and beef cattle over winter in this country, it is obviously unwise to force them to find their living in the fields late in the fall when the weather is inclement. Such cattle housed over night in sheds or stable and fed a reasonable amount will not lose the flesh laid on during the pasture season. Roughage and grain will then go into gains rather than be lost in restoring failing flesh and vigor.

English Live Stock News and Notes.

Many Orders in Council, i. e., passed by the King and the Privy Council and so becoming Law right away, have just been issued to prevent the wastage of cattle and horses; to preserve and ration their feeds, and to generally safeguard agricultural interests. Some of the Orders are good and have been heartily welcomed; others at the moment are being warmly debated by the farmers and stock breeders of the United Kingdom. A Regulation has been made under the Defence of the Realm Consolidation Act, 1914, prohibiting an occupier of an agricultural holding in Great Britain from selling or parting with any horse used, or capable of being used, for the cultivation of the holding except by license.

Now the Council of the Shire Horse Society and the War Emergency Committee of the Royal Agricultural Society of England have both passed resolutions protesting against the Order recently made in Council prohibiting, except under license, the sale of agricultural horses. To each Society the Order appears unnecessary, unfair and against the interests of owners and breeders of agricultural horses. Likewise it must seriously affect the commercial horse requirements of the country.

In consequence of their old-time London Agricultural Hall now being otherwise occupied, the English Shire Horse Society has decided to hold its next spring show at Newmarket. The Thoroughbred, Hunter and Polo Pony Societies have also agreed to accept Messrs. Tattersall's offer of the use of their paddocks and it now remains for the Hackney Society to say whether they will co-operate with the others. It is proposed to erect a ring 200 feet by 80 feet, the cost of which would be from £350 to £550, less the amount realized by sale of timber after the shows. This cost will be divided pro rata among the various societies participating in the exhibition. The provision of 200 loose boxes with a covered-in judging ring could not be met with in any one centre in the provinces. Birmingham could probably offer the latter detail, but the provision of loose boxes—with the restricted use of timber—was practically out of the question. The proportion of permanent loose boxes at the other three centres were Newmarket, 219; Peterborough, 92; and Crewe, 69. To increase this number at the last two centres the fittings of affiliated societies would have to be loaned. Labor and carriage would increase outlay. In all three cases the provision of a temporary erection or covering for the judging would have to be considered. Railway transit facilities were in the following ratio: Crewe, Peterborough and Newmarket; but it should not be overlooked that Newmarket's facilities are specially concerned with horse traffic and the local folk are keen upon this new phase of horse breeding coming amongst them now that racing is tabooed.

The new Food Controller is Lord Rhondda, a Hereford cattle breeder, and a man who as plain "D. A. Thomas" once said to himself, "When I have got on in the world I'll go in for farming." And he did—both. He has a big task before him. He tells me he has decided that, in order to limit further rises in the prices of the more important foodstuffs and as far as possible to reduce the present level of prices, it will be necessary to institute much stricter and more complete measures of control in the industries engaged in the production of foodstuffs. Maximum prices require to be enforced by strict control through the producer and the retailer, with the object of limiting profits at every stage of production and distribution to a fair remuneration for services rendered. The first step will be to determine the costs of production and handling. For this purpose the Food Controller has already taken steps to set up a Costing Department in the Ministry of Food consisting of highly skilled accountants, who will have full powers to examine books and obtain all particulars which may assist him to arrive at accurate figures as to costs. The object of control will be to fix prices by reference to actual costs with the addition of the normal pre-war rate of profit, independent of market fluctuations in the manner which has already enabled the Army authori-

ties to purchase many of their essential supplies at prices considerably below the market prices ruling for civil consumption.

In consequence of the high prices at which all classes of store cattle, i. e., cattle bought for grass feeding, were bought in, and the fact that owing to the late season they are in poor condition and consequently will not be marketed until later than usual, the War Emergency Committee of the Royal Agricultural Society of England is strongly of opinion that the proposals for maximum prices for meat should be announced immediately, but should not come into operation, at the very earliest, until September 1.

The English Shorthorn Society is forging ahead all right. Their Annual Report states that in the interval between the last general meeting and the present, held at the end of June, eight life members and twenty annual members had died; twenty-four annual members had withdrawn, and eighteen life members and 119 annual members had been elected. The Society now consisted of 595 life members and 1,383 annual members, making a total of 1,978 members on the register. The balance in the hands of the Society's bankers was, on

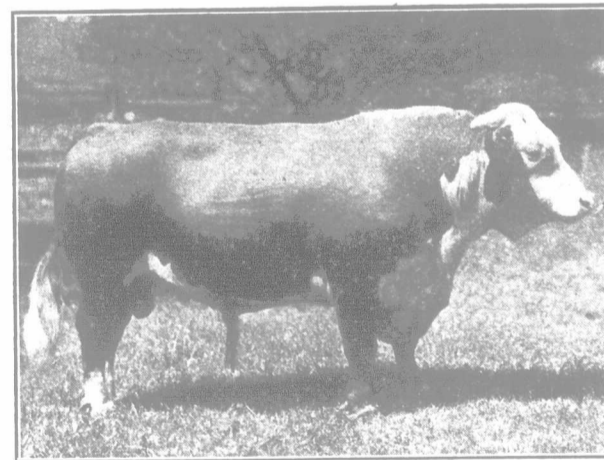


Riby Perfect Model.

First prize and champion Lincoln ram at the English Royal afterwards sold in Buenos Aires for \$8,000.

June 1, £772 18s. 11d. on the current account, and £1,500 on deposit; the Society's reserve fund being £14,841 3s. 4d. on December 31 last. Since that date £1,000 Treasury Bills have been converted to War Loan 5 per cent. stock, and a further amount purchased to raise the amount to £1,700. An additional £500 of 5 per cent. War Loan Stock had been recently purchased.

The Council felt that in this time of depression, caused by the war, it was a matter for congratulation that the exportation of pedigree Shorthorns should have exceeded during the past year the number exported in any year in the Society's history, with but one exception, that of the year 1906, and this notwithstanding the serious difficulties attending the shipping trading of the country. The total number of exportation certificates issued by the Society between June, 1916, and June, 1917, is 1,838, to the following countries: Argentina, 580; Australia, 8; Canada, 289; Chili, 1; Monte Video, 4; New Zealand, 10; South Africa, 292; South America, 90; Uruguay, 6; and U. S. A.,



A Leading Hereford Sire.

558. Canada's collection is a good one, and the E. S. S. are pleased that America is buying so freely.

A request has gone forth from Mr. Prothero, our Minister of Agriculture, that he expects 3,000,000 more acres to be put under cereal crops in 1918. This means cutting up their peerless grass lands, the envy of the world. The Shorthorn Society are "after" Mr. Prothero with the following resolution:

"That the Shorthorn Society hereby request the Royal Agricultural Society of England to arrange for a deputation consisting of representatives of the R. A. S. E. and all the breed societies to wait upon the President of the Board of Agriculture at the earliest possible moment to explain to him the very great value of the pedigree studs, flocks and herds of this country and the serious danger in which they are placed by the scheme for the indiscriminate ploughing up of permanent pasture, and to urge that the scheme be modified."

Most of the horse breeding societies have protested

in similar phrase, and Mr. Prothero is beginning to realize he is in a tight corner.

Ireland is going on with its Draft Horse breeding scheme. They are developing a type that must be clean legged. The Department of Agriculture are "inspecting" colts ere they place them on the register and admit them to the Book. ALBION.

Why Not a Farm Herd Competition?

The Standing Field Crop Competition in Ontario has been productive of much good in its particular field. The Plowing Match is also being taken to the farm. The object of these enterprising schemes is to promote better cultivation, better seed, and consequently better crops. All are agreed that the products of the farm should be returned to it through live stock, and without this combination complete the chief objective will not be reached. A chain is no stronger than its weakest link, so the cultivation may be ever so good, the seed may be selected with exceeding great care, but if the product of this up-to-date treatment is fed to a scrubby herd of cattle, the usefulness of the chain is impaired and the efficiency of two links practically lost. The success of the Plowing Match and Standing Field Crop Competition suggests a final step, namely, prizes for good farm herds.

It may appear to some that this phase of agricultural education is fully covered by the show-ring at exhibitions and the fall fairs. Such is not the case. At the larger events the best pure-bred cattle in the country are brought out in highly-fitted form, and while they present the ideal towards which all should strive, they represent a type considerably superior to that one might expect to establish and maintain in an average herd on the ordinary farm. An exhibitor's graded herd is frequently made up of animals purchased from several breeders at no small price. This does not decrease the value of the exhibit to the public in one sense, for the spectator stands at the ring-side expecting to see the best of the various breeds and the most desirable type in group or individual. At the local fair it is not customary to have classes for graded herds and the exhibit consists chiefly of one or two selections from many herds, which, after these are taken out, may possess no particular merit. Here again type may be depicted but at no fair or exhibition is there a reward for the good average farm herd made up of a pure-bred sire, a dozen or more good, uniform, thrifty, breeding females, and a lusty bunch of young stuff coming on. The uniformity, thriftiness and general good-doing qualities of a herd are no more represented in the show-ring by one or two animals than are the evenness of stand, uniformity, freedom from weeds, etc., and yield per acre of a field of grain by a single sheaf selected therefrom. Likewise, it is the ten, twenty, or thirty-acre field, well plowed, that counts, not the quarter or half acre upon which three to five times too much time has been spent. A painstaking farmer might select a good bushel of grain or a creditable sheaf from a very mediocre field, and so might an expert herdsman fit a beast so it would flatter the herd from which it was selected and the very sire and dam whose offspring it was. The show-ring has done wonders for the live-stock industry and its work is just begun, but there must be some more effective way of encouraging the improvement of the farm herds.

In any farm herd competition a ban should not be placed on pure-breds, which are the mainstay of all live stock, but it would not be fair to permit herds which supply animals to the pure-bred trade, or to the larger exhibitions to compete with the farm herd maintained for the purpose of converting crops into meat or milk. A herd headed by a grade bull should be debarred, and only those accepted which are mated with a pure-bred sire, whether he be owned on the place or by a neighbor. It is the grade herds of this country that make the farms fertile and supply the cheese factories, the creameries and the packing houses. The nearer pure-bred they can be made, the more uniform they can be wrought, and the more productive of meat and milk at the least expense they can be rendered, the better for the agricultural industry and the nation as a whole. The pure-bred still holds the highest place in the estimation of all trained or experienced agriculturists, but when working towards that end it seems that some encouragement should be given to excellence even in grade herds, which make up such a large proportion of Canada's cattle population. If local interest could be aroused in better cattle and better herds through a farm herd competition, it has just as much to commend it as the standing field crop competition or the plowing match. Seemingly these two schemes on behalf of agriculture are not complete without some recognition of the herd or live stock which factor in the final disposition of the farm product.

Prizes for grade herds is not a step backward. For generations yet to come the greater part of the meat and milk on this continent will be produced in grade herds headed by pure-bred sires. As these herds are improved the quality of the pure-bred stock of the country must be enhanced in order to supply suitable sires. In this way the industry will progress more quickly than when all stress is laid upon the pure-bred with only five per cent. or less of our farmers interested as owners. If local interest could be aroused in uniform, thrifty, good-doing, steady-breeding herds, showing the result of good sires and wise selections, as well as a capacity to produce meat or milk economically and in reasonable abundance, an object lesson would be set up in the district capable of driving home an idea that is not exemplified in any other way.

Profits of a Packing House

The following figures re profits of the Wm. Davies Company were recently published in the Toronto Saturday Night. They make rather interesting reading for producers of pork.

"An interesting side light on the past profits of the Wm. Davies Company is obtainable owing to their being court records. Some years ago there was a friendly action-at-law, brought by the executors of the estate of Mrs. Wm. Davies against several interested parties.

As a result it was shown that the capital stock of the company was then valued at from three to four hundred dollars per share (par value \$100) and that the dividends over a period of fourteen years, 1893 to 1906 inclusive, ranged from 15 to 120 per cent., the average over the entire period being a little over 50 per cent., which seems enough under the circumstances.

"A table was placed in evidence, showing the dividends which the stock paid during these fourteen years to be:—

"For the year ending March 31, 1893, 65 per cent.; 1894, 34 per cent.; 1895, 40 per cent.; 1896, 45 per cent.; 1897, 100 per cent.; 1898, 120 per cent.; 1899, 82 per cent.; 1900, 60 per cent.; 1901, 27½ per cent.; 1902, 27½ per cent.; 1903, 15 per cent.; 1904, 30 per cent.; 1905, 41 per cent.; 1906, 25 per cent."

THE FARM.

The Farmer's Opportunity in British Columbia.

EDITOR "THE FARMER'S ADVOCATE":

Leading professors from colleges of agriculture in different parts of the world, are beginning to realize the possibility of a world famine. In prominent magazines and newspapers they are writing articles calling upon all who have the opportunity to assist in the production of foodstuffs. This call is receiving the attention of farmers of this province, and while increasing the production of your farm to the limit, it would be advisable to make a careful survey of your financial position and its relation to the future.

Those who are in a measure, familiar with the conditions in this province, and have worked for a number of years among the farmers, know that now is an opportunity for the farmer to place himself and his farm on a financial basis. Some may differ, quoting the high cost of labor, but there are ways of overcoming this difficulty. There is only one definition that answers thoroughly the question, "what is a farm?" and that is, "a commercial enterprise run for profit." You will see by this answer, that the farm is placed on the same level as the bank in the business world. If you were thinking of placing money in the bank for safe keeping, there are two features of that bank's business that you would investigate:

1. Its yearly balance sheet.
2. Its reserve fund.

A good balance sheet and a large reserve fund is the best advertisement a bank can have. Until our farms can show the same results, they cannot be called a good business proposition. What has been the position of the farm to a large degree in different parts of our province? Farm purchased on a deposit with a large balance to be paid with the interest. The farm situated in a valley deep in the Rockies, or on the shores of one of our many lakes and rivers. Men and women have toiled from daylight to dark, clearing the trees off the land in an attempt to get enough under cultivation so that from the proceeds, they would be able to clear the debt off the farm. What with poor shipping facilities, high freight rates, no organized markets, and a lack of the spirit of co-operation among them, very few have succeeded, and some of these at the expense of those that failed. A number of would-be farmers have searched our province for the available so-called farm land. This they have purchased in large quantities with a small deposit, and the balance over a number of years, then have commenced a campaign of advertising that has reached nearly all countries. The result is that we have settlers who have purchased land that in a good many cases will never produce enough to adequately support them. It would be much better perhaps if this was not put so plain, but these observations are the result of personal contact with a large number of farmers covering a wide range of this province. Now is the time for the farmer to entrench himself financially. There may be a number of lean years after this war is over, because each country is endeavoring to make itself self-supporting. This year you are assured of high prices for whatever foodstuffs are put on the market.

I know the barn needs shingling and the house, a coat of paint; in fact, some of you are thinking of building a new barn, and the buggy has been in commission for a number of years, and a new one would not come amiss. Some of you are having visions of an automobile. This is bad business; it is not the time to put more money into the plant than is absolutely necessary, except into movable assets, such as live stock, grain, etc.

A few years ago this province was suffering from the land speculator, now it is the speculator in farm products. You can handle the increased production of your farm and take his share of the profits. With hogs selling at \$16 per hundredweight, it is more profitable to raise and feed them than sell them off when young, for five or six dollars. Men are going around buying

up your young hogs, and will make a clear profit from each of \$10 and upwards. You might just as well have that profit. If you cannot handle them, come to a workable agreement with your neighbor who may have the facilities for handling them.

Do not sell the potatoes to the first dealer who comes around this fall. The middlemen nearly cleared the Okanagan and Arrow Lake district of potatoes, which they bought at anything from \$12 to \$17 per ton, held a short time and sold for \$35 per ton and upwards. If there is a market in Seattle for potatoes, ranging from \$80 to \$100 per ton, as there is this year, what is to stop the farmer from getting into personal touch with it. Why not have a live co-operative society in your district. By getting into touch with the retailer in our cities when you have something for sale, you will add from 10 to 20 per cent to your income. If you want to purchase anything by working co-operatively, you can purchase from the wholesaler. Co-operation is an economic principle resting on a solid basis, and fruitful of brilliant results when the necessary precautions are taken. By co-operation, you will be able to stand firm instead of using the Government for a post to lean up against.

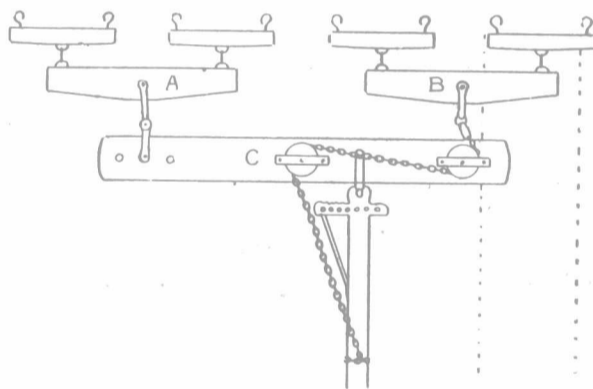
The main thing is the spirit of union among the farmers. Provincial action is not to take the place of, but only to awaken and revive the free energies, and economic forces of the organized farmers, leaving them all the responsibility. Now is your opportunity to work together as a solid force and control that which you produce. You who have been left on the farm and have been cut away, to a large extent, from the social life of our cities, did not expect to play an important part in this war. In this hour of national crisis, our rulers turn to you and say, on you depends, to a large extent, its successful termination.

British Columbia. R. J. FERRIS.

An Evener That Worked.

EDITOR "THE FARMER'S ADVOCATE":

I saw an enquiry for a four-horse evener for two-furrowed plow. I tried the one you sent me in page 401, March 9, 1916, and it proved all right. (It is Fig. 5.) I had some trouble finding the correct place to hitch the chain on the plow, but found it worked best just behind the bridge or clevis on left side. I plowed 13 acres with four horses, three on the land, and believe



Four-horse Evener for a Plow.

that it is the only hitch it can be done with satisfactorily. If your correspondent will write me I shall be glad to give him all the information I can. That evener alone is worth all the subscription I ever paid. I would not be without "The Farmer's Advocate" for anything. Have put them all away this year, and I think that index is a grand thing.

Essex Co., Ont. E. W. HOLDEN.

A Four-Horse Evener For the Plow.

EDITOR "THE FARMER'S ADVOCATE":

In July 26 number of "The Farmer's Advocate" a correspondent made an enquiry about a four-horse hitch. I noticed in your answer that you mentioned the using of a tandem hitch, which I do not think is as successful as the four-horse hitch, a diagram of which was shown in your paper some months ago. I refer to the one that works with pulleys. The first pulley is seven inches from one end of the doubletree, and the plow is hitched fifteen and one-quarter inches from the pulley. The second pulley is two feet from the first pulley. One must be careful to hitch the chain by which the horses draw to the axle, not to the side of the plow, to avoid a side draft. When this diagram was given in your paper it was stated at that time that you had not tried this method, and consequently could not vouch for it. I beg to state that I and several of my neighbors have found this method highly satisfactory and, believing that increased production is the best form of national service for the farmer, I felt it my duty to mention my success with it that through the medium of your valuable paper this knowledge might be made more widely known.

Peterboro Co., Ont. J. W. DAWSON.

Let the hogs glean in the stubble fields. They will pick up a lot of grain that otherwise would be wasted. They will also do better if they have access to the ground than if closely housed.

Those Government Advertisements.

EDITOR "THE FARMER'S ADVOCATE":

I have been an interested, though perhaps rather critical, reader of the advertising which the Ontario Department of Agriculture has been placing in the farm press, your paper included, and while some of it has been good and timely, other pages have been ill-advised in wording and illustration. While not approving of all the advertisements, it was not until I received your issue of July 19 that I decided it was time some farmer put the pen-pushers down in Queen's Park, Toronto, right. Such caricature sketches as the three which illustrated the advertisement on the back page of that issue are an insult to the intelligent Canadian farmer, and do not reveal any marked degree of understanding of the farmer and his problems on the part of the Department of Agriculture responsible for the advertisements. It is bad enough for the cheap and senseless comic sections of the papers, which are made for city consumption, to carry such outlandish caricatures of the farmer, but when our own Agricultural Department foists such upon us through the columns of our leading farm papers, it is time some one pointed out to them that farmers are not babies in a patented walker, nor are they Mossbacks of the corn-cob-pipe variety. Neither do they carry their crops on their backs to a market, which looks more like a German dugout than a place of exchange. Where was the man raised who passed such an advertisement for the Department of Agriculture? If it was on the farm, he must have long ago lost all sympathy for the farmer and understanding of his viewpoint and conditions.

The illustration entitled "The First Step" depicted the farmer as a baby in a baby walker, with some big daddy—presumably the Department of Agriculture—holding a pair of stilts and emitting the encouraging phrase: "Learn to walk first, sonny." The walker was supposed to represent a local co-operative society, and the stilts nation-wide co-operation. The whole was a distinct insult to the farm, cheap, nasty and just about as close to the point as the Commissioner of Agriculture's Department is to the practical farmer.

Then there was "The Golden Fleece" effusion. Who ever saw a sheep farmer like the illustration? And the poor sheep with the woe-be-gone expression and the carbuncle under the shears. How she did hate to part with such valuable wool! It will surely now and henceforth be the aim of all farmers and farmers' sons to grow like the sheepman in the Golden Fleece illustration and to raise sheep like the one he has over his knee, to say nothing of the old corn-cob pipe.

The large illustration at the top of the page needs little comment. The worried young man doing the German goose step with the season's crop on his back and leaking badly from the old bed tick into a flock of starved and gluttonous, mongrel cockerels is too far-fetched and poorly executed to waste time upon.

I just want to inform the Department of Agriculture that farmers are nothing like the caricatures which they put in their advertisements, and which are intended to be funny but turn out ridiculous. If they depict ideas which the men in the Agricultural Department have of the farmer, how can we look for anything better from our city friends who are not supposed to know any different?

Ontario Co., Ont. YOUNG FARMER.

Improving Farm Crops.

A good deal of work is being done by the Field Husbandry Department of Macdonald College, Quebec, in determining the varieties of crops, rates of seeding, and methods of cultivation best suited to that locality. Considerable work is also being done that should be of Dominion-wide interest. Ninety acres are divided into ranges and a system of crop rotation is followed, except where perennial crops as alfalfa, and some of the grasses are grown. Prof. Murray and his staff are confining their efforts to a limited number of varieties in the different classes of crops, rather than experimenting with a large number of varieties that are known to be of little value to farmers of that portion of the country. Those believed to be most suited are specialized in and through crossing, new varieties are evolved which combine the desirable qualities of two good crops and produce a crop even more valuable than the parent plants. Experimental farms and stations throughout the country have been of inestimable value to the farmers and, incidentally, to consumers in general. While a comparatively new farm, much valuable work has already been done at Macdonald College.

Special work is under way at present to improve the quality of roots. Already an increase of from ten to fifteen per cent. in the dry matter content has been reached, but Prof. Murray expects that by continued breeding and selection a further increase can be made. It is generally considered that the dry-matter content of roots is equal to that of grain for feeding purposes, consequently the higher the percentage of dry matter the greater the value of the root crop. From a feeder's standpoint the yield should be estimated by the dry matter, rather than by bulk. It is generally found that the heaviest yielding varieties are lower in feeding value than some of the poorer yielders. However, it is believed possible to produce varieties which will not only yield well but will have higher feeding value than some now grown.

Considerable of the soil in Eastern Canada will produce alfalfa satisfactorily. On the Experimental grounds a practice is made of using a double cut-away disk after the crop is harvested. Naturally one would think that this treatment would destroy the plants,

and it does make the stand look a little ragged for a time, but it cleans out grass and weeds. Plots which had been down four years and treated in this manner yielded at the rate of eighteen tons of green matter per acre this year. Prof. Murray advises using a disk or cultivator after the first cutting of alfalfa which has been down over two years. There are many fields sown to this crop, which have become infested with grass, where this treatment might rejuvenate the alfalfa plants. In that portion of Quebec it is customary to make three cuttings in a year and a yield of from four to five tons of cured hay is obtained. Seed sown on summer-fallow about August 1 without a nurse crop, gives a good stand. The nurse crop oftentimes becomes so heavy that it smothers the small legume plants. Sowing without a nurse crop in the spring frequently results in weeds gaining the ascendancy. For seed production alfalfa is sown in rows two and one-half feet apart, at the rate of three or four pounds per acre, and is cultivated during the season, and as high as 175 pounds of seed have been obtained from an acre under this method. It is usually noticed that the thinner the plants in the rows, the bigger the seed and the better the quality.

Considerable land is devoted to experiments in corn. While it is estimated that 65,000 acres of corn are grown in Quebec, one-half of which is the Quebec Early for grain, the acreage devoted to fodder corn increases very slowly, owing to difficulty in obtaining varieties which are adapted to the climate and soil. Early maturing varieties must of necessity be grown,

owing to the shortness of the season. Among other varieties, what is known as North Western Dent, a reddish-yellow corn which is about a week later than the Longfellow, and yields from eight to ten tons of fodder to the acre, is giving promise of fitting into conditions favorably in Quebec. Ten or twelve varieties are being experimented with, which include what are believed to be best suited to the district, together with a few others for comparison. Different rates of seeding are also tried to determine the amount of seed to sow per acre in order to get the largest yield of fodder with the most feed nutriment.

Considerable breeding work is being done with different grains, grasses and roots with gratifying results, which goes to show that there are great possibilities of further increasing the yield and feeding value of many of the farm crops.

Combatting the Tobacco Horn Worm.

EDITOR "THE FARMER'S ADVOCATE":

On the Harrow Tobacco Station spraying the tobacco with Arsenate of Lead, as soon as the worms appear in appreciable numbers, has been found to be the most effective method for controlling this pest. By spraying not only are all worms then damaging the tobacco killed but, under most conditions, all which hatch within the next few days after spraying are killed

also. Arsenate of Lead may be used either as a dust, or powder, or in solution. If applied in solution six pounds of powdered Arsenate of Lead should be used to each 100 gallons of water. If the paste form of Arsenate of Lead is used double the amount of paste is required. When used as a powder the quantity varies with the size of the tobacco. On small tobacco before it begins to lap across the row, four and one-half pounds per acre is usually sufficient; on larger tobacco six pounds per acre is necessary.

Arsenate of Lead is a rather heavy powder and in order to get it thoroughly and evenly distributed over the plant it is necessary to mix it with a carrier, when applied in the dust form. The best carrier known is dry sifted wood ashes. These should be mixed with the Arsenate of Lead in equal parts. If ashes can not be obtained finely sifted air-slaked lime is the next best carrier. In the powdered form Arsenate of Lead must be applied when there is very little breeze, and while the dew is still on the tobacco. In purchasing powdered Arsenate of Lead demand that form having at least 30 per cent. Arsenic Oxide. Arsenate of Lead with a smaller percentage of Arsenic Oxide acts too slowly for use as a spraying material. Paris green is also a good insecticide for combatting the Horn Worm. However, due to its tendency to burn the tobacco; the fact that it washes off more readily, and the quickness with which it becomes ineffective, as compared to the Arsenate of Lead, the use of the latter is recommended.

D. D. DIGGES,

Superintendent Harrow Tobacco Station.

Automobiles, Farm Machinery and Farm Motors.

Story of the Automobile.

A very interesting book from the pen of H. L. Barber, the well-known economist, has just been published. It is entitled "The Story of the Automobile," and deals with the history and development of the motor car from 1760 to 1917. The volume contains an analysis of the standing and prospects of the automobile industry. Most of the book is rather dull and uninteresting, but a chapter upon the benefits of the auto is filled with bright thoughts and lively suggestions. The author states that the production of five acres of land is necessary for the maintenance of the horse for a year, and points out that the elimination of our old equine friend, is being rapidly accomplished by the pleasure car, the motor truck, and the tractor. He figures that great economies can be exercised by substituting motor-driven vehicles for the horse-drawn type, because every time ten horses are taken from the overhead expense of a farm, fifty acres can be given up to cultivation of crops.

Another point that is raised concerns the high cost of living. Mr. Barber feels that the automobile will be active in reducing prices because of its convenience as a freight carrier, truck gardeners will not, in the future, be compelled to locate close to towns and cities, as a few miles in the hauling problem will make no difference. Not only will the marketing of products be greatly facilitated, but the delivery of goods from the city to the country will receive the same impetus.

It is not necessary to go into detail, regarding the good-roads argument introduced by Mr. Barber, for his ideas follow the general lines. He seems to strike a timely topic, however, when he indicates that in times of freight car shortages and railway congestion, such as we are experiencing at the present time, the motor truck, with the aid of good roads, can do a great deal to relieve the tying up of perishable products ordinarily consigned by rail. It is stated in this book that where roads are in good condition almost any kind of competition can be successfully fought, and that the cost of horse hauling per mile is $2\frac{1}{2}$ times that of motor trucking, everything figured.

There is a little touch of grim humor in the book, for the author emphasizes the fact that many human lives have been lost through the failure of physicians to appear on time. In the old days the doctor's gig or phaeton travelled at a slow pace, and it is sad to relate that upon innumerable occasions the patient had passed away before the vehicle containing medical assistance could possibly arrive. Especially was this true in the case of accidents, and patients requiring urgent attention. It is claimed that the farmer, because he knew the value of an automobile to a doctor, has practically forced the veterinarian to use the same means of locomotion. If it was a good thing for human aid to arrive with every despatch, then it was also advisable that equine assistance should be attainable with a rush. There is a touch of irony in the fact that the horse himself should depend upon the veterinary's automobile for quick service in cases of illness.

The social side of the motor car includes the ability

to visit one's friends within a greater radius, to attend different functions in connection with church, charitable and patriotic causes, to enjoy the delights of companionship through travel, and in addition, to give the rising generation a chance to make friends along broader lines. It is even suggested, in this book, that close intermarriage has been obviated by the automobile because the young people can visit farther afield. Young folks, it is said, met within a radius of five to ten miles in the old days because the buggy would not allow them to become well acquainted at any greater distance. The automobile increases this five to ten mile radius up and beyond thirty or forty miles. To quote from one sentence: "The swains are getting away from alliances with relatives, and there is consequently a decrease in the mixing of blood strains."

Perhaps "The Story of the Automobile" will be best remembered because it makes a salient of the idea that the motor car is liberalizing the people. Persons who find it difficult to get away from old associations naturally become narrow minded and near visioned. This is especially applicable to those located in sparsely settled sections of the country. The constant exchange of ideas between just a few people, no matter how intelligent they may be, can only develop a mental bias and a narrow outlook. The automobile is conferring a benefit upon those who can be bettered by contact with conditions at great distances from home. Broader views follow the use of the auto, and so country-wide conceptions are being brought to a standard and the national life of Canada made easier of interpretation.

AUTO.

Canada's Young Farmers and Future Leaders.

Man Oftentimes Judges His Neighbor by Appearances.

There was not much appearance of thrift about the Jones' place, judging from general appearances of the farm and buildings. The fences were out of repair, the gates were swinging from one hinge, or else propped up, boards were off the barn and there was a conglomeration of things scattered between house and barn. Nevertheless, the family always had enough to eat and were respectably dressed. There were no better neighbors in the community. They would sacrifice their own interests to help one less fortunate than themselves. Mrs. Jones was always ready to assist in the sick room, and Mr. Jones could be depended upon to help out in any emergency. Even the younger members of the family were always being sought after to run errands, help with the hoeing, etc. However, with all their good qualities, the fact remained that they did not have much of this world's goods and the farm conditions showed it. The generation before them was the same, and there was every indication that there would be little improvement in the rising generation.

It seems that some people are misfits. They may be excellent mechanics and would make a success in that line of work, but they make a failure of farming and vice versa. Evidently Mr. Jones was not cut out to be a farmer and the children apparently inherited his tendencies, as the boys were about as careless about the appearance of the place as was their father. It evidently never dawned upon them that they were being judged by appearances, or that a vast difference could be made by straightening things up. Then the war broke out and the oldest boy enlisted. The next boy was made a tempting offer by a neighbor and he accepted it, thus leaving the work of the farm on the shoulders of the father and sixteen-year-old Tom. That was in the spring of 1916 and between showers the crop was put in. Tom

felt that when driving the team on the cultivator and drill he was doing a man's job, and he was, but he never seemed to see the way things were out of repair. When waiting for the ground to dry after a heavy rain he would spend his time in idleness around the house, or else at the blacksmith shop in the neighboring hamlet. While in the shop one afternoon he overheard two men talking. One said: "There is excellent land in that Jones farm and it would give heavy crops if a few drains were put in. I am going to try and buy it for my boy next spring. I think Mr. Jones will accept a good offer quickly enough, as I don't think they are making ends meet." The other man replied: "Yes, it is a good farm and the Jones are excellent neighbors, but they lack ambition and initiative. I don't see why they don't straighten things up, hang the gates, and make a little improvement in appearances. They would get more for the place if it were fixed up a little, but the boys would sooner sit around where there is a crowd than repair gates and fences. You can't blame them too severely as their father and his father have always been the same way."

This conversation which was not intended for his ears set Tom thinking. No ambition, loafing instead of fixing things up, not making ends meet, were phrases which he could not get out of his mind. When he reached the road gate leading to his home he stood for some time surveying the situation and a new determination took root. He would show people that there was still a spark of ambition smouldering in his breast. He did not wait until next morning to put his new resolves into effect, but immediately proceeded to fix the road gate. A hinge and a few slats were found at the barn which were sufficient to make the gate whole and to swing easily. When the father drove home from town a little later, he praised his son for his work and said, "it makes the place look better."

The following morning it was too wet still to cultivate

so Tom secured the necessary tools and proceeded to repair the road fence. It was heavy work for one so young, and frequently he was almost inclined to give up but the conversation he overheard would always loom up and he kept on. In the afternoon the father decided to assist, and while working together Tom suggested several other improvements which might be made, and even enquired about the expense of securing tile to put a couple of drains across the corn and root field. It was surprising what a difference a few repairs made, and the father began to catch some of Tom's enthusiasm or ambition. Throughout the summer and fall Tom kept on making little changes and improvements here and there. The crops were fairly good and the repairs made a marked improvement in the appearances of the place. It was frequently remarked in the neighborhood that "the Jones family must have been left some money", or, "What has aroused Jones?" The credit was not given to the boy at first, although it was a satisfaction to him to know that people noticed the change. This only incited him to redouble his efforts. He commenced reading up on agricultural subjects and soon became interested. This spring he had well graded seed in readiness when the soil was fit to work. He has put in a few drains, has an excellent vegetable garden, and is now planning to work into better stock, to give the orchard a little care, etc. Although only a boy yet, he enjoys his work even though it is heavy for him at times. He has the satisfaction of seeing the home farm gradually taking on the appearance of thrift. When his attention was drawn to the condition of things at home, Tom set about with a determination to right them and he has succeeded. His ambition now is to be the best farmer in the township, and we predict that the very man who said that "the Jones family had no ambition" will have to take second place to Tom as a farmer before long. While his words cut Tom a little at the time, he has thanked the man many times since

for uttering them. The farm has not been sold and is not likely to be so long as Tom has his health.

When things are out of repair and the work does not go with a swing, it dampens the spirits of old and young, and has a tendency to deaden any ambition which might have existed. It is surprising the effect a little improvement in the surroundings has on the mind and system. If things are going to pieces about the farm, follow Tom's example. Don't wait to be told that certain things need to be done. Cultivate the habit of seeing these things for yourself and then going and doing them. There are many who are so unobservant that they fail to see the rail off the fence, the gate with the broken hinge, etc., until some damage is done. There is a certain magnetism about a well-kept farm and it is worth while to expend a little time and labor in beautifying the place. To be a quick observer is an asset to any young man and one which should be cultivated. Along with this you should train yourself to act. Ambition and initiative are two traits of character which aid one on the road to success.

THE DAIRY.

Things to Consider When Making Dairy Butter.

Although a large portion of the cream produced in Canada is manufactured at creameries, there is still a considerable quantity of butter made on the farm. The creameryman has the facilities for pasteurizing the cream and handling it so as to make a reasonably good grade of butter even if the cream is not of choicest quality, consequently creamery butter brings a higher price on the market than does dairy butter, due largely to the matter of quality. While the creamery relieves the farmer and his family of a good deal of work, there are many who are so situated that they cannot conveniently deliver cream to a creamery and as a result there will continue to be a considerable amount of dairy butter placed on the market. By a little extra care in handling the cream from the time the milk leaves the stable until the churning is finished, the average quality of dairy butter could be greatly improved. In Bulletin 53, on "Buttermaking on the Farm," by George H. Barr, of the Dairy and Cold Storage Branch, Ottawa, concise information is given relative to the methods of creaming, care of cream, pasteurizing, churning, washing and salting the butter. The main defects in dairy butter as compared with creamery butter are bad flavor, staleness or rancidity, too many shades of color, and unsuitable packages. Mr. Barr claims that flavor is of the highest importance and no matter how good the butter may be in other respects if it is "off" flavor it is likely to be classed as inferior. The staleness and rancidity are largely due to failure to keep the cream at sufficiently low temperature. Any taint which might be in the milk or cream is liable to be carried over to the butter. The following are mentioned in the Bulletin as factors tending to injure the flavor of butter: turnips and turnip tops; rape or rye; decayed silage; leaks; onions; apples in large quantities; cows' udders and teats in an unclean condition at milking time; milking in unclean stables; using unclean wooden, or rusty pails; separating the milk in the stables; improperly cleaned separators; keeping cream where roots and vegetables are stored or in a cellar for several days at a temperature over 55 degrees; cows drinking from a stagnant pond or water contaminated with seepage from barnyard, etc.

In order to produce fine flavored cream Mr. Barr contends that cows should have an abundant supply of pure water, that they must have free access to salt at all times, and that milking must be done in a clean atmosphere. There are three methods of creaming in vogue. The shallow pan, which in pioneer days was practically the only method practiced, is not to be recommended in this generation as it not only causes a loss of fat in the skim-milk but it tends to make poorly flavored cream owing to a large surface of milk being exposed. If using shallow pans the best results may be obtained by setting the milk immediately after milking in pans about three inches deep and setting them on a cool surface. Deep setting is a system that is an improvement over the latter as the milk is put in a covered can and placed in a tank of cold water; the colder the water the more complete the separation of fat. While good quality cream can be secured by this method it entails considerable work and has been superseded on the majority of dairy farms by the hand or power cream separator. By the use of the latter there is the minimum amount of fat left in the skim-milk, a uniform quality cream is secured and the skim-milk is in good condition for feeding young stock. However, there are certain precautions which must be taken in order to get the best results. Three things to be observed, as pointed out by Mr. Barr, are: the speed of the separator must be maintained according to directions, as low speed means loss of fat; the flow of milk in the separator must be uniform, and the temperature of milk should not be under 90 degrees. It is essential that all parts of the separator which come in contact with the milk or cream be washed first in luke-warm water, to which some cleansing powder has been added, and then thoroughly scalded. It is advised that the separator be kept in a well-ventilated and lighted place that is free from stable odors or dust.

The information given in the Bulletin on Cream and its Care is to the effect that there are several advantages of a rich cream. It leaves more skim-milk for feeding young stock, there is less cream to cool and ship. A rich

cream will keep sweet longer than a thin cream, other conditions being equal, and will churn more easily. If the cream is allowed to stand in a temperature of 70 or 75 degrees for any length of time, the flavor is likely to be injured and there will be a serious loss of fat in the buttermilk. Cream can conveniently be kept in shot-gun cans, as these can easily be set in a tank of water. The cream should be cooled before being put into the cans and the whole stirred thoroughly.

There is frequently a good deal of trouble in getting the butter to gather in a reasonable time, which is largely due to improperly preparing the cream for churning. The proper acidity should be reached, and no fresh cream added for twelve hours before churning. It is difficult to set a definite temperature to have the cream for churning, as it will depend somewhat on the richness of the cream, length of time the cows have been milking and the feed of the cows. Rich cream, cream from the milk of fresh cows, and cream from milk of cows receiving succulent feed require a comparatively low churning temperature, varying from 54 to 62 degrees. Thin cream, cream from cows that have been a long time in milk, and from cows receiving dry feed require a higher temperature for churning, varying from 64 to 75 degrees. The aim should be to have the temperature and acidity of the cream such that the butter will gather in about thirty minutes. It is necessary to use a thermometer, although many buttermakers claim that they can get along without it. If the cream is too warm the butter is soft and the texture greasy; if the cream is too cold the butter does not come very quickly and is apt to be so firm that it will not gather properly.

A good deal can be done to improve the quality of butter by pasteurizing the cream. This practice is invariably followed in the creameries and goes a long way towards the production of a uniform product. Owing to lack of the proper utensils this work is not so easily done on the farm. However, it can be done by filling the ordinary boiler with water and putting the shot-gun cans, containing the cream, into it and bringing it to the proper temperature on the stove. For ordinary purposes heating to 145 degrees and then cooling to churning temperature will be satisfactory. If the cream is a little "off" in flavor and the butter is to be kept for some time, Mr. Barr advises heating to a temperature of 165 to 180 degrees. This may impart a cooked flavor to the butter, but it passes off in ten days to two weeks. Do not pasteurize until all the cream is ready for churning.

In order to make the highest quality butter certain precautions should be exercised in the churning; for instance, the cream should be strained into the churn in order to remove any lumps which might have formed. The churn should never be more than half full, in fact, churning will be done in a shorter time if only filled one-third full. The coloring should be added just before churning is commenced. Turn the churn at a speed which gives the greatest concussion. It frequently happens that the butter gives every indication of coming too quickly. In such cases a little water, two or three degrees colder than the cream, may be added. On the other hand, when the butter takes too long in coming the cause may be attributed to too full a churn, or the cream being too cold. Stop the churn when the butter granules are about the size of grains of wheat; over-churning tends to retain a large amount of buttermilk. It is a mistake to allow the butter to remain in the buttermilk after it is gathered. Wash the butter as soon as churning is finished. This may be done by running as much water as there was cream into the churn, then revolving the churn a few times and drawing the water off. A second washing, using slightly less water, may be necessary. The amount of salt to use depends a good deal on the market. Mr. Barr suggests, for prints, one-half to three-quarters of an ounce per pound, and for packed butter not more than one ounce per pound. The salt may be worked into the butter in the churn by the use of a ladle, but it can be done more conveniently in the butter-bowl. A lever butter-worker is preferable, however, and makers of dairy butter would find that it would lighten the

labor of working the buttermilk out of the butter and incorporating the salt.

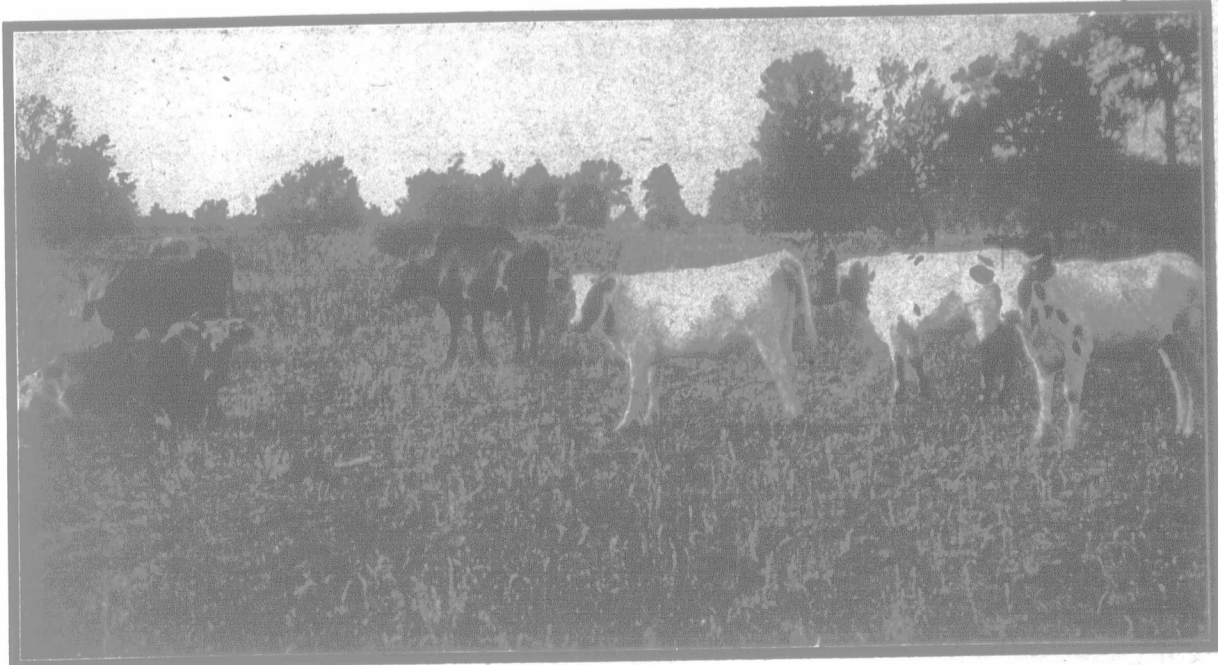
More attention should be paid to the packages in which the butter is marketed. An unattractive package leaves a poor impression. When marketing the butter in prints, good parchment paper should be used, on which the name of the farm or dairy, the words "dairy butter," and the address of the proprietor are printed. This will tend to advertise the product, and is also an inducement to put up the highest quality product. Butter is an article of diet in which the quality is influenced by a number of factors. Poor butter is not wanted at any price by consumers. A little more care, so as to produce a uniform grade, would place dairy butter on a higher plane than it now occupies. There are many who make first-grade butter but there are also some who have not acquired the art and the latter are talked about more than the former.

Providing for the Herd in Summer.

Although there was a vast amount of rain during spring and early summer, which kept the pastures fresh and green, they soon showed the effects of the hot weather which set in in time for harvesting the hay crop, and the result was quite noticeable in the dairy. Cheesemakers in Western Ontario report a marked falling off in the quantity of milk delivered, although there is no noticeable decrease with some of their patrons. Enquiry revealed the fact that where the milk flow was up to normal the pastures were being supplemented with silage, hay or a soiling crop. In some instances grain was fed, but many dairymen considered concentrates too expensive. It is another evidence of where it pays to be prepared for what may come, which in this case is practically a yearly occurrence. Yet, comparatively few make provision to supplement the pastures, and suffer accordingly, depending on the extent of the drought. An acre of corn or an acre of a soiling crop will furnish a good deal more feed than an acre of grass; and silage may be fed with success summer or winter, but in order to ensure a supply for summer feeding it necessitates planning a year ahead which too many fail to do.

Professor Barton, of Macdonald College, Quebec, banks on silage the year round for keeping up the milk flow, and at the end of June, when a representative of "The Farmer's Advocate" visited the College, there was a silo containing 250 tons of corn yet to be opened. For four or five weeks when the pastures are at their best, silage is not fed, but just as soon as the milk flow shows any signs of decreasing, silage and a little meal are used. Only a small area of the farm is in pasture, as depending wholly on grass is considered to be far too expensive a way of feeding dairy cows. All the roughage and some of the concentrates should be grown on the farm, but it pays to buy highly nitrogenous feeds at times to maintain a proper ration. The herd of over sixty cows in milk, at Macdonald College, have an average yearly record of over 8,000 pounds of milk, and silage forms a large part of the ration all but a few weeks of the year.

Dr. Cline, of Middlesex County, who is building up a large dairy herd, finds that corn for silage and hay are two of the most important crops for a dairy farmer to grow. As a rule they give a lot of feed to the acre, and if clover or alfalfa is grown the two crops make a very satisfactory ration in themselves. Silage and legume hay have been found to give better and more economical results with dairymen than all dry roughage with grain. It is necessary to have considerable bulk to the ration, and the crops mentioned furnish it. The amount of concentrates should be governed by the milk flow. The cow must give enough extra milk to pay for the grain plus a profit to make it good business feeding grain. Some cows return a substantial profit on ten or fifteen pounds of grain fed, while others fail to pay for five. From an economical and efficiency standpoint, the individual cows in the herd must be studied. Dr. Cline puts over thirty acres in corn each year, and has two capacious silos to store the crop in. He claims that with



The Herd on Pasture.

the price of millfeed last winter it did not pay him to feed much concentrates so long as he had legume hay and good silage. Farming is a business and should be handled as such. Grow the crops that will return the most money when fed to good-quality cows. Planning for winter but neglecting to make provision for emergencies during the summer is not showing the highest type of efficiency in farm management.

POULTRY.

Prepare Now for Gathering Dollars From the Flock During Winter.

EDITOR "THE FARMER'S ADVOCATE:"

If you wish to be sure of picking coins out of the nests in December, your flock's progenitors will have to be winter layers. To begin at the very beginning, if only for the sake of looks, a farm flock should be of one size and color. I convinced one neighbor of that, and the results were far reaching. My birds were laying through the winter while he was only vaguely aware that his chickens were somewhere about the barn all that time. It was enough for him that a fair proportion managed to survive the winter. I was proud enough of my birds to tease him about his flock of scrubs until in sheer self defense he bought a trio of pure-bred stock. His old birds had come from a long line of this survival of the fittest business. They managed to pick up enough stray grains and bugs in the fields during the summer to keep the vital spark burning through the long cold months, but the vital spark burnt all too feebly to evolve such a preposterous thing as an egg in January.

If my neighbor had not seen eggs in my hen house the winter previous I do not think he would have bothered much with my advice. I find that generally so. Most folks hate to take advice unless they see a litter of little dollars curled up in it, and in most free advice that is a rare sight. But no matter what you see in this article, I can guarantee it free from theory. My neighbor thinking to himself that what one man could do another can, started in. On the south side of his barn he built a shed-roofed house forty feet long and fifteen deep. This is ample space for a hundred and fifty layers. The wall of the barn supplied the back wall; the front, about seven feet high was alternate glass and cotton in frames, as was the west end. From the east wall a door led directly into a wing of the stable. This arrangement made it easy for him to attend the birds and gave them a maximum of light. When the sun shone it was as warm in that house as any day in July. At night he lowered drop curtains of old bagging in front of the roosts which allowed the birds plenty of air yet sufficiently confined their body heat to keep them comfortable on the coldest nights. The cotton fronts were swung up day and night, and only lowered when snow or rain drove straight in.

His trio of "bred to lay" birds had one pen to themselves. Some sixty scrubs had the rest of the house. The floor was dirt, raised ten inches from the ground level, and covered with about six inches of straw. There was wooden V-shaped trough for mash in each pen, and a hopper containing grit and shell. The hens dusted themselves on the dirt floor, which was kept loose. From strings lowered to within easy jumping distance were hung mangels and turnips, which provided the birds with much needed succulent feed and exercise. The water pans were raised on blocks to escape contamination, and he was careful to see that they always contained water. In the morning he fed a mash containing bran, shorts and cornmeal in the proportions of four, two and one with an added handful of meat scrap for every four birds. About three in the afternoon he scattered in the straw a mixture of corn, oats and wheat in about equal parts, a rough handful for each bird. By roosting time this was all picked up. After dark he again mixed in the litter about half this ration of grain so that when the birds came down in the morning they got right to work scratching and thus put themselves in fine fettle for the day. The birds were dry under foot. I believe that to be the most essential feature in the production of winter eggs. Chickens are not web-footed, as you may have noticed, and a damp hen house generally presents the lugubrious spectacle of the inmates crouched about in the corners, one foot drawn up and both eyes closed in utter misery. The nests are roomy, about fifteen inches square, fastened underneath the dropping boards with the entrance to the rear. They were well supplied with clean straw, thus ensuring unbroken and spotless eggs.

All this was not finished until winter had set in, but soon after the birds were installed his trio started in to lay as though it was the most natural thing in the world. The mongrels were obviously delighted with their surroundings but had no idea of how to show their gratitude. About the beginning of February the weather became unaccountably warm. The nights were pleasant and the days glorious. The "anybreeds" were convinced that spring had come and laid a few eggs to celebrate. They might have kept it up if about this time an untrustworthy farm hand had not neglected to feed and water the flock for a day or so. The cold days came again and the little spurt of laying dwindled to nothing. Not so, however, with the "bred to lay" birds. They stopped for a day or so to show their disgust at the neglect, but picked right up again when the feeding became regular. By this time my neighbor's faith in the old-fashioned merits of the "dunghill" type had died a natural death and he swore out a warrant for the arrest and execution of every last one of the mongrels. Since then his poultry yard has a more

attractive appearance and his purse is considerably fatter, for the flock of snow-white pure-breds that help him keep the bugs out of his fields, work none the less diligently for the fact that their regular rations are not stinted.

To start with a trio, as this man did, is one good way. He paid ten dollars for them and now considers it was the most fortunate ten dollars he ever invested. As many pullets as you think the proposition merits, or you have room for, may be bought reasonably in the fall. The best layers should be singled out to form a breeding pen for the spring, to which is mated a cockerel, unrelated, but if possible, from the same strain or family. If you are unused to buying from advertisements, and a little afraid of getting a "pig in a poke", remember to avoid those who make extravagant claims. When you see stock offered at a dollar and a half a head, and the man claims 250-egg flock averages, pass on. But the man who claims nothing spectacular, uses trap nests, can show testimonials from satisfied customers, give that man a chance to quote you.

Now that you have installed your new flock, give them a chance to show what they can do. It is quite likely that a flock of pullets which have been bred from generations of birds accustomed to proper surroundings would give a worse performance than the mongrel if kept under average farm conditions. This is only to be expected, yet I believe that in this fact lies the source of most of the distrust with which pure-bred poultry is held in farming districts. The first step to ensure the comfort of the birds is to make sure, by disinfecting, that mites have left the place. Mites do far more damage than lice. The bird can do nothing for itself, as in the case of lice, by dusting. Mites lurk in cracks during the day and make their attack at night, breaking up the night's rest and incidentally all chances for the morrow's egg. It is easy to insulate the roosts by wrapping rags soaked in strong disinfectant around the roost supports. A generous dust box and the weekly use of insect powder on your selected birds will be sufficient.

Granted, then, that your birds are free from vermin, have bone-dry quarters, fresh air and much light, pure water always, there is only the question of feeding to answer. When I first studied this subject I tried to digest much contradictory and highly scientific information about proper feeding, and to tell the truth, the subject soured on me. I was always afraid I was feeding too much, or too little, or the wrong feeds. I tried to go by rule and it was a lucky day for me when I discovered that there are not enough rules to cover cases. I sought the advice of an old poultryman. He told me to watch my birds closely at feeding time and feed for "liveliness". Therefore, when the flock betrays no enthusiasm at my approach around regular feeding time, and pick disinterestedly at their rations I stop right there and miss a meal, or wait until they use both wings and legs to hustle themselves along when they see the familiar pail. A flock that keeps red in the comb most months in the year, that is alert, bright-eyed, and full of vim, is a well-fed flock and will not be troubled with colds or roup, leg weakness or any of the many dozens of other fowl ills which are a doleful legacy from the ages in which this feathered friend of man has hung around the cold and cheerless doorstep waiting for a crumb.

Leeds Co., Ont.

W. A. STAEBLER.

Can Your Hens for Winter Use.

"Canned chicken" may be made at home in your own kitchen out of the old hens that ought to be killed anyway. The method of operation for what is known as "Straight Pack" by the trade is very simple and is given in detail as follows: by Dr. Robt. Barnes, Chief of the Meat and Canned Foods Division, Health of Animals Branch, Department of Agriculture, Ottawa.

Clean and cut up the chicken. Sort out the fleshy portions, such as the legs, thighs and breast. Break off the protruding portions of the bones in each piece. Pack these fleshy portions in a gem jar or other container, as closely as possible. Add salt and pepper. (About a teaspoonful of salt and one-eighth teaspoonful of pepper.) Fill to within three-quarter inch of overflowing with the liquid that comes from the balance of the chicken, process for preparing which is given below.

Place in boiler or other vessel containing warm water and gradually bring to a boil. For pint jars boil 2¼ hours. For quart jars boil 3½ hours. For the balance of the chicken, place in the kettle and boil till the meat will strip free from the bones. Strip off all meat and pack in jar, then pour thereon the balance of the liquid in the kettle that has not been used in the first jar. If there is not enough liquid to fill the second jar, add water. Place in boiler as above, and boil as follows: For pint jars 1¾ hours. For quarts 2¼ hours.

If desired, the whole of the chicken may be prepared the same as the last part. In all cases take care not to expose the gem jars to a sudden change of temperature. Also, after the jars have cooled off, examine the tops to see that the covers are air-tight. During the cooking of the product, place the glass tops on the sealers but do not fasten them. Any steam or gas which may be generated will escape. As soon, however, as the process is finished, fasten the tops securely.

While describing the method of canning, something should be said about the poultry to be canned. What is preferred are good, plump fowls, with a fair proportion of chickens, the bones of the latter giving a firmer jelly and lessening the danger of a soupy or slushy product. As a precaution against this condition, where the pack is straight fowl, gelatine may be, and

often is used. So much has been said and written about the proper methods of starving, bleeding and plucking poultry for market that it is useless to go over them again. One can only emphasize the necessity of exactness in carrying out the accepted principles in connection with these points, which are just as applicable to poultry to be canned as they are to those intended for the market. There is another point which is important, although possibly its carrying out may detract from the appearance and affect the sale to an inexperienced buyer, namely, that all poultry intended for food, canned or otherwise, after being properly starved, bled and plucked should be left undrawn and kept in a suitable temperature for a day or two in order that the chemical changes which follow the killing of the bird may have an opportunity to take place.—Experimental Farms Note.

HORTICULTURE.

German Trick to Ruin French Orchards.

Thanks to the genius of the French race, it is hoped that large numbers of the fruit trees which the Germans did their best to destroy, and in many cases succeeded in destroying, may be saved. Mr. Henry Wood, the special correspondent of the United Press of America with the French armies, tells in a despatch how this "miracle" has been wrought. Throughout the entire district devastated there were thousands of trees that the close pursuit of the French prevented the Germans from cutting down completely. Instead the cultured tree-killers cut off a circle of bark which, with a few days' exposure to the sun would have been enough to kill them.

These trees presented the easiest problem. The wounds were bound up by thousands of army surgeons, and Red Cross ambulance drivers and stretcher carriers assisted. The circle was first covered with a special grafting cement, and the entire wound then carefully bandaged, often with bandages prepared for human limbs. Tar was used for the work, and finally even a loamy clay. In the end it was found that moss, twisted and tied about the dressed wound, was as effective as anything else. A much more serious problem presented itself where the trees had been cut down. But here French genius also solved the problem. The stumps, protruding usually two or three feet from the ground, were first trimmed off so as to conserve the sap. This stump was then treated with the grafting paste and carefully bandaged till the tree lying at the side budded from the sap that remained after being cut down. Branches that showed great numbers of buds were then cut off and grafted into the prepared stump. To-day these grafts are in full leaf and blossom, and years have been saved in restoring the cut-down orchards.—Canadian Forestry Journal.

When Consumers Turn Producers.

One important factor in the vegetable trade this year is the enormous production in the urban dweller's backyard. The volume of food thus produced does not permit of even a rough estimation, for the lots vary so much in size and are hidden away in the most unlooked-for places. It has been estimated that in the City of London, Ontario, alone there are 200 acres of potatoes. The moist weather of the spring and the enthusiasm of the amateur gardener brought about a yield of produce that has surprised the market gardeners and inflicted upon them considerable loss. Usually the professional gardener has his early, out-door stuff disposed of before the back-yard vegetables are ready to use, but this year owing to the peculiarities of the climate, all came on together. This meant slow sales and much wasted produce on the hands of the men who in past years have catered to the city's needs. Kitchen canning and curing has been popular and extensively practiced, which should carry a large volume of perishable stuff over for winter use. However, the market gardener has something to consider. Will the city and townsman continue as a producer, or will his enthusiasm gradually die down and thus allow the trade to re-establish itself along former lines? It is very likely that a decrease in urban production of vegetables will take place, but many have learned that they can grow stuff for their own table and that nothing can surpass in flavor or crispness that which is taken fresh from the soil. If urbanites continue as they have done this year, or even in a lesser degree, to supply their own tables with vegetables throughout the early summer and fall months, the market gardener will be obliged to work more under glass, or produce less perishable products that can be stored and marketed when the demand is best. This condition exists over the entire continent, for in the United States as well as Canada an enormous amount of garden truck has been produced by city and town people who do not feel any the worse for their labor expended on the soil.

Since it is sought to "fix" everything for the farmer from his hired help to prices of his crops, it is a wonder some energetic organization, either self or government-appointed, has not attempted ere this to standardize and dish up good weather for haying, harvesting and the crops generally. Nothing should be left undone.

FARM BULLETIN.

Our Scottish Letter.

Providence has been extremely kind. After a trying winter and spring, when for the first time in the history of the British race we had to "brain" our food and eat according to ration and rule, there are in promise bumper crops of almost every kind of foodstuff. We had the unusual experience, after the poor crop of 1916, of a potato famine; the prospect is that during 1917 we will have a glut of potatoes and that the Government may have some difficulty in justifying payment of a minimum price of £6 per ton after September 1 for sound, marketable potatoes. Unless disease becomes prevalent, and so far there is no hint of that, we are to have an unusual plenty of potatoes. Let us be thankful.

The Ayrshire early potato sales are over and digging is now in full swing. The prices paid at auction have eclipsed all records. The highest was £165 per acre for a small plot of two and three-quarter acres on the farm of Jamestown Maybole. On that plot potatoes have been grown continuously year in and year out for at least twenty or twenty-five years—it may be for thirty years. Averages have been realized for lots of 200 acres or thereabouts of £117 14s. 7d.; £97 3s., and £91 12s. 4d. per acre. The yield is somewhere from four to five tons per acre. These potatoes were being retailed in Glasgow last week at 7d. to 8d. per pound. This week the price has fallen to 4d. per pound, and with the splendid weather for swelling the crop and getting ahead with the lifting, the price will come tumbling down week by week until it will be an unremunerative figure for the merchants who have gambled at the highest prices quoted. The farmers who have grown at these prices will get out all right. They are being paid by the acre, and in nearly every case prices are about double what they were in 1916. This is well for the country, and everyone will be glad when potatoes reach a price low enough to ensure an abundant supply for the poorer classes.

One farmer is said to have made £10,000 of excess profits out of 200 acres of these early potatoes. The excess means the excess over the revenue from the crop of 1916. Yet farmers do not pay income tax on their profits, still less do they pay the excess profit tax. Hence a growing impression that farmers are prospering at the expense of the community. The average citizen does not discriminate between one farmer and another. He concludes that one and all are coining money, and he brackets the ship owner and the farmer as the prime profiteers in Great Britain.

Dairy farmers, unless they happen to be cheese-makers, have not been coining money. Their experience has been very much the other way. Milk was almost the first article the Government interfered with, and of all agricultural products it was and is still the cheapest to the public and least remunerative to the farmer. The reason is this: During summer when cows are on the grass milk can be produced at a cheap enough rate. But milk dealers insist on making yearly contracts, and the cost of producing winter milk is almost as prohibitive as the cost of producing summer milk is inviting. In summer the cows are never inside a door except for the milking; in winter they are never outside the door. The grazing season does not last for six months out of the twelve, and during the remaining months the keeping of dairy cows is a very costly enterprise. In view of the prevailing conditions it is little wonder that many farmers are abandoning dairying. Every week the auction marts bear witness to the fact, and unless something is done to stay the depletion of dairy stocks there will undoubtedly be something like a milk famine during the ensuing winter.

The unsatisfactory nature of the dairy trade is reflected in the number of herds of dairy Shorthorns and British Holsteins which are being dispersed. The lamented death of Lord Lucas, who was serving in the Royal Flying Corps, has led to the dispersion of his herd of dairy Shorthorns at West Park, in Bedfordshire. The sale holds the record for this class of stock. Ninety-two head made the extraordinary average of £187 11s. 8d. A few days later forty-three head, at a sale near Bath, made an average of £133. The question naturally arises, what are dairy Shorthorns? The answer is, they are Shorthorns recorded in Coates' Herd Book, which have passed the standards of the Dairy Shorthorn Association as dairy cattle. This Association came into being in 1912 on account of a feeling that dairy properties were being lost sight of in the fashionable types of Shorthorn cattle. It was urged that deep milking was not a characteristic of Cruickshank cattle, and that in the demand for short-legged, thick, fleshy cattle one grand feature of the Shorthorn was likely to be sacrificed. The Dairy Shorthorn Association set out to rectify this by offering prizes for Shorthorn cattle on a milk yield and butter test. The Association also drew up a panel of approved judges for such prizes, and published a scale of points upon which dairy Shorthorns should be judged. The justification for the existence of the Association has been its success. In five years it has demonstrated the value of the milk yield and butter test in pedigreed Shorthorns. It has caused a revival of interest in the Bates' families of Shorthorns in which the dairy type is most readily found, and indirectly we are persuaded the milking properties of the breed as a whole will be improved. It is notorious that quite a number of fashionably-bred beef cattle cannot rear their own calves. These are reared on wet nurses, many of them Ayrshire cows which have a great reputation in this line of things.

The dairy Shorthorn has been bred largely in the North of England. Lord Lucas' best cows came from

the Kendal district of Westmorland, and in these Cumberland and Westmorland dales are to be found perhaps the finest big dairy cows in Great Britain. It is whispered that there is an undue proportion of tuberculous animals in this variety. One has little difficulty in giving credence to this rumor. Cumberland and Westmorland are two of the most unprogressive counties in England in respect to housing of stock. The cow sheds stand badly in need of a thorough overhauling, and only when some regard is paid to modern ideas regarding ventilation is there likely to be much success achieved in getting rid of tuberculosis in cattle. We have heard of an importer who wished to fill an order for eighty dairy Shorthorn heifers. He had to buy two hundred before he was able to find the eighty which passed the tuberculin test. The large number of reactors, viz., 120 out of 200, were sold at one of the auction marts in the North of England, not in bulk but in piecemeal, and so dispersed throughout the area without any brand to indicate their true character. This is a suicidal policy, and one wearies for the day when wise councils will prevail and under an enlightened Board of Agriculture all reacting cattle will be so marked that wherever they go their real character will be known.

One of the greatest bovine scourges has been epizootic abortion. It would almost seem as if the Board had obtained the mastery over it at last. Many remedies have been applied, but close investigation did not strengthen faith in their efficiency. Recently Sir Stewart Stockman, the head of the Veterinary Department, delivered an interesting lecture on the subject in Ayr. He gave a sketch of the history of the disease and of the successive attempts that had been made to master it, and explained at length the method of inoculation which has proved more successful than anything previously tried. This method of preventing the disease has been put to the test in Ayrshire with good results. The first step towards success was taken when the microbe or bacillus of the disease was identified and isolated. Then came the process of cultivating the germ and the application of the preparation as a vaccine. This application is followed by no ill effects in the case of young heifers and yield cows, but it appears to have an upsetting effect upon a cow that is yielding milk or that is in-calf. Farmers are hard to convince that the bull is not a great carrier of the germs of this disease, but close investigation would seem to show that the number of cases for which the bull can be blamed is almost negligible. At the same time it is not denied that the bull may be a "carrier," but he is a carrier in a mechanical sense. The chief means of contagion is by injection, that is, the cows inhale the germs in an affected byre, or they swallow them along with their food. The one satisfactory feature in Sir Stewart Stockman's recital is the evidence that this deadly scourge can be and has been successfully combated, and its ravages circumscribed.

Women's Institutes are no new feature in Canadian life. They are, however, a quite new departure amongst us here. The idea of doing something to brighten the lives of residents in rural districts has fairly caught the imagination of certain energetic farmers' wives and a successful meeting to give the movement a send-off was held in Edinburgh ten days ago. The chief speaker was Mrs. Watt, from British Columbia, and splendidly did this Canadian lady acquit herself. The business-like account which she gave of this particular women's movement in Canada was well worth going some distance to hear. One had no difficulty in realizing the causes of the success of such a movement in Canada, and it was comparatively easy for anyone who had visited Canada, especially in winter, to understand why women would come long distances to attend the meetings of the Institute. Here we have not generally quite parallel conditions, but there are many rural districts in which Women's Institutes will supply a real want in social life. To Mrs. Watt the best thanks of the Scottish agricultural community are due.

Women have come to their own in agriculture. In some parts of Scotland they long ago had come to their own. The dairying districts of Scotland have never denied to women their full meed of toil and responsibility; in many cases they could have done with less. There are districts, in the West of Scotland in particular, in which dairy farming would have been a poor business without the women's share in the toil. It is strange but true that many illustrations could be cited showing that a woman and her family never knew what prosperity or even comfort meant until the natural bread-winner had been removed by death. We could name many instances of this nature, and the cases we have in view are not those in which the husband and father was a drinker, if not a drunkard. Unhappily plenty such cases there are. The instances before the mind's eye were of such a character that the woman's share in the partnership alone averted disaster while it lasted, and secured prosperity when death had dissolved it. But speaking of Scotland generally and of England universally, women were not regarded as counting for much on a farm. In the year 1915 it was almost impossible to get farmers to employ women who volunteered for farm service. In 1916 there was a truer recognition of the value of their labor; this year there are not enough women to go round. Farmers are glad to get women alike for outdoor and for indoor work. One difficulty is the lack of housing. The war is believed to have sealed the fate of the Bothy system. Parts of the country in which the Bothy system prevailed have no proper accommodation for women workers. The war has revealed the imperative necessity for increasing housing accommodations in rural districts. The Bothy system is (or was) one in which young, unmarried men were herded together in quarters by themselves. They make their own food, such as

it is, and very often the premises are loathsome in their filthiness. In some cases a farmer or proprietor with more enlightened notions employed a woman to keep the bothy in order, and under such conditions it could be made a tolerable method of living. As a general rule the system was bad and under its worst phases unspeakably so. Good housing means a resident, rural population, and every right-minded man and woman knows that this we must have if the country is to prosper.

SCOTLAND YET.

An Educative Exhibition at Regina.

Regina Exhibition was favored with ideal weather, which contributed materially to the success of the show. The farmers of Saskatchewan turned out en masse to see the products of stable and field exhibited at their Provincial fair. A fire which occurred the middle of the week and destroyed the large grandstand, the industrial and several other buildings, slightly interrupted the proceedings. It was fortunate that the fire was gotten under control without loss of life. There were a number of special educative features put on by the Dominion and Provincial Governments. The exhibit by the Saskatchewan Agricultural College was especially worthy of note. The display by the mechanical department consisted of charts and models of different binder knotters and other adjustments. Professor Smith, who was in charge, gave demonstrations in making adjustments to different parts of the binder, in lacing belts and in making new knots, hitches and halters. The exhibit was essentially practical, and many a farmer learned a new wrinkle which he will be able to put into practice on his own farm. Professor Shaw also had an exhibit from which much practical information was obtained. By having representatives of different breeds the value of pure-bred sires was plainly shown; for instance, in one pen he had a common range ewe with two pairs of twins. The ewe weighed 140 pounds and cost \$4.90 in a carload lot. She sheared seven pounds of wool. She was bred to a pure-bred Shropshire ram, and the progeny weighed 160 pounds each at the Exhibition and sheared ten pounds each. The second pair of twins weighed 75 pounds each at four months old. Similar illustrations were offered in cattle breeding. In one pen there were a bunch of pigs four months old and weighing 100 pounds each, which were raised on shorts, oat chop and pasture. It was an illustration of the fact that good pigs can be raised without skim-milk.

With the exception of Shorthorns the live-stock department was well filled. Many of the exhibitors came direct from Brandon, but the competition was changed somewhat by the entrance of local herds and flocks. The Clydesdale exhibit was marked by high quality. Percheron entries were not heavy, but the classes contained animals of high merit. The Belgian exhibit was good. Sheep entries were 100 per cent. greater than last year, and the quality was uniformly high. Alberta breeders had the bulk of the entries in the swine classes. There was a splendid line-up of Holsteins, but not a large showing of the other dairy breeds.

JUDGES.—Clydesdales, Wm. Graham, Claremont, Ont.; Percherons and Belgians, I. Beattie, Brandon; Shorthorns, Jno. Miller, Jr., Ashburn, Ont.; Aberdeen-Angus, Col. R. McEwen, Byron, Ont.; Herefords, Thos. Clark, Beecher, Ill.; dairy cattle, Prof. Barton, Macdonald College, Que.; sheep, Col. R. McEwen and Jno. Miller, Jr.; swine, Jno. Flatt, Millgrove, Ont.

Champion Clydesdale stallion, Finlayson, on Edward Garnet. Champion mare, Thorburn and Riddle, on Maggie Fleming. Champion Percheron stallion, Head, on George P. Champion mare, Lane, on Nellie Bell. Champion Belgian stallion, A. McGeorge, Waldie, on Balcarres Turban. Champion mare, Rupp, on Armilla Queen. Champion Shorthorn bull, J. G. Barron, on Augusta's Star. Grand champion female, Watt, on Thelma 3rd. Grand champion Hereford bull, Fuller, on Martin Fairfax. Champion female, Chapman, on Beau Fairy. Grand champion Aberdeen-Angus bull, McGregor, on Black Cap McGregor. Grand champion female, McGregor, on Majesty Queen. Grand champion Holstein bull, Bevington, on Sir Belle Pieterterje. Grand champion female, Clarke & Simms, on Rugby Nig. In the Ayrshire classes Ness won practically all the firsts in both the male and female classes. Harper & Sons secured all the herd prizes and championships in the Jersey classes.

A. McEwen, of Brantford, took every first in the Shropshire ring, except in the shearling ram class. With Oxfords, P. Arkell & Sons, Teeswater, won every first and most of the seconds. In Southdown classes the prizes were fairly evenly distributed between the entries of Johnston Bros. and Fred. Skinner, of Saskatchewan. Jas. Bowman secured a fair share of the prizes in the Suffolk classes.

Prospects for Wheat in Various Parts of the World.

Information from the International Institute of Agriculture at Rome regarding the 1917 crops, is to the effect that the wheat crop of France is three-quarters that of 1916. In United States there is estimated to be an increase of 21½ per cent. over last year, but 18 per cent. less than the average from 1911 to 1915. In British India the prospects are excellent, the yield being estimated at 5 per cent. above the average, or 20 per cent. above last year. In Japan the crop is above the average. No estimate is available from several countries, but the acreage in Spain is 6 per cent. over the average, in Algeria 8 per cent., and in Tunis it is 12 per cent. below that of 1916, but slightly above the average.

Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending August 2.

Receipts and Market Tops.

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

Table with columns for CATTLE, CALVES, HOGS, and SHEEP. Sub-columns include Receipts, Top Price Good Steers, and Top Price Good Calves/Lambs. Rows list cities like Toronto, Montreal, and Winnipeg with weekly data.

Market Comments.

Toronto (Union Stock Yards.) Eighteen hundred cattle arrived at the Union Stock Yards over the week end, and these, with the five hundred head left over from last week...

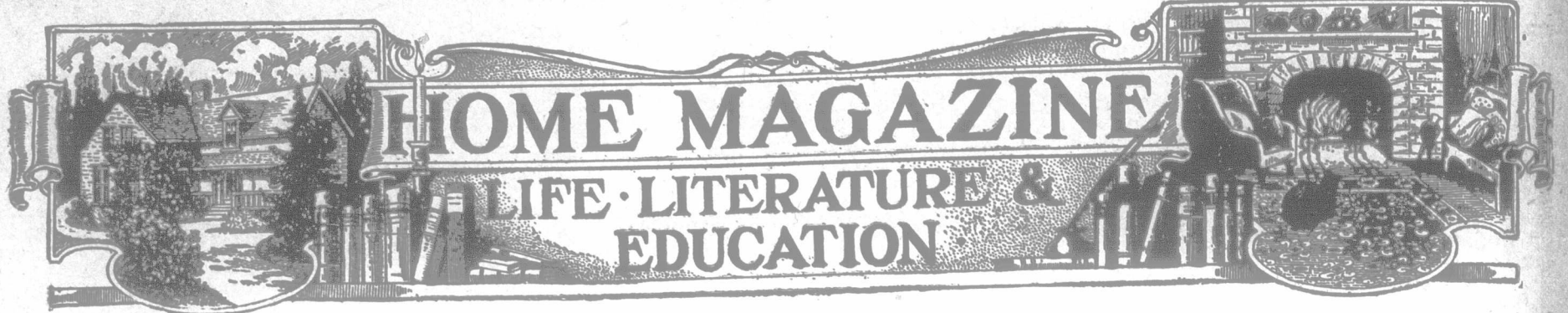
Table with columns for TORONTO and MONTREAL (Pt. St. Charles). Sub-columns include No., Avg. Price, Price Range, and Top Price. Rows list various livestock categories like STEERS, HEIFERS, COWS, etc.

Following light shipments of lambs, quotations advanced 50 to 75 cents on Monday, with the bulk selling at \$14 to \$14.50 per hundred. On Tuesday, another advance of 50 cents followed...

to the country included 51 calves, 90 milk cows, 316 stockers, 88 feeders and 9 lambs. Shipments to United States' points totalled 160 calves, 172 butcher cattle, 150 stockers and 21 feeders.

small bunch from the Eastern Townships, averaging one hundred pounds each, topped the market by a good margin at \$15.50 per hundred. Common eastern lambs sold generally from \$12.75 to \$13.25 per hundred...

hogs; compared to 23,015 cattle, 31,020 calves, 11,835 sheep and 51,212 hogs, received during the corresponding period of 1916.



Sir Eric Geddes.

Great Britain's New First Lord of the Admiralty. He is only 41 years of age. He was an Engineer who made his mark in practical work first on an American railroad, then building roads in India. After the Great War began he was made Director General of Transportation in France.

My Neighbor.

BY HELEN M. DOYLE.

"Come out and see the sunset," my neighbor said to me,
"It is so beautiful to-night, I want that you should see."
I felt almost impatient and I did not want to go,
For there were things upon the stove that needed watching so.
The chilli-sauce was cooking, and the jelly would not jell,
And the kitchen was a melting-pot of heat and smell.
But I tinkered with a damper and I laid my apron by,
And I went out with my neighbor to the flaming autumn sky.

There above the mountains was the glory of the Lord,
In fiery, burnished chariot, in mighty, flaming sword,
In strength and power and majesty, His glory shone around,
And reached down to envelop His children on the ground.
It drew us close together, and each grasped the other's hand,
In a quickened understanding, in a comprehension grand,
As we listened in the silence to the symphony divine
That found a fervent echo in my neighbor's heart and mine.

The colors gently faded, and the quiet evening came;
I went back to my kitchen, but nothing was the same.
A song had entered in my heart, a peace lay in the air,
And a wondrous benediction seemed to follow everywhere.
So I thanked my God for neighbors and for all His beauties sent
To rest His weary children and whisper His content.

Through the Eyes of a Canadian Woman in England.

June 28th.

England is glorious in June, and this has been verily the month of roses. Last night I walked through acres of them, crimson, white, yellow and pink ones almost as large as cabbages and "dead perfection" as to form, hue and

perfume. I said "last night," for with this splendid daylight-saving scheme in force we go to bed like the birds while it is still daylight, and have our breakfast at an earlier hour, leaving a beautiful long summer day before us. Every humble dwelling has its tall bushes laden with roses, as well as millions of dwarf cnes clambering over its thatched roof and stone walls, while to enter one of the more pretentious homes one walks through avenues of them trellised overhead like hanging gardens. They tell me this is a great rose year. Everywhere one wanders in town and country the air is redolent with their fragrance. This is the month of honeysuckles as well, and wild ones climb over hedges and intoxicate the passer-by with their scent. Crimson poppies dot the green fields, and there is a profusion of bloom in every direction.

This week my Canadian friend and I left the hospital in sleepy old Rugby and came to Surrey hills for a holiday. Surrey, which has only one rival, Devon, in being the most beautiful county in England. It all seems like a dream leaving Rugby where, except for the presence of wounded men in hospitals, one would hardly realize there was a war on—and coming back to Surrey in close proximity to the big Canadian training camp where everything is stir and bustle, and where one hears the swirl of bag-pipes and the tramp of armed men. Oh it is good to be here and to hear Canadian voices once more! One is obliged to learn English all over again as one visits the different counties, both in regard to accent and expressions. Of late I have had to listen attentively to follow the Lancashire patients with their soft slurred a's, and the Yorkshiremen with their vagaries of dialect, and Cockneys bereft of their h's, and most trying of all the Rugbians—or Roogbians—with their "ous" and "awhs." So it is an absolute joy to hear again the clear-cut and distinct pronunciation of Canadians. Charles V once said in speaking of the European languages: "French is the language to speak to your friends, Italian to speak to your mistress, Spanish to speak to the Gods, Hungarian to speak to horses, German to speak to soldiers, and English is the language to speak to the Devil." My only comment on this is that the devil must have loved variety! I have decided during the last day or two not to go back to Rugby, and am filled with wonder how I put in three months, when there are places in England where many Canadians dwell. There my pal and I were the only ones, and were always referred to as "the Canadians." No, not always—sometimes we were called "foreigners."

To reach Surrey we arrive first at Euston Station and cross the city over one of the famous London bridges to entrain again at Waterloo Station. We treated ourselves to a few hours stop-off in the big city, and had to become accustomed all over again to its roar and bustle; I always wish when I am in London that, like a fly, I had eyes all over my head both to take in the sights and ensure my safety. We called at Devonshire House, the V. A. D. headquarters, and while waiting had time to admire the magnificence and loftiness of its rooms, and the gorgeous winding stairway of white marble. Afterwards we were shown through the extensive secluded gardens at the back, something one would never expect to find in the heart of such a great city. It is one of the most costly and beautiful houses in London, and has been given up for the duration of the war for the needs of the time by its owners, the Duke and Duchess of Devonshire. Leaving there we went on to wonderful shop windows in Bond and Regent Street, and proceeded to the lunch-room in the great American shop—Selfridge's. By this time we were very hungry, and somehow it is difficult to get accustomed to wartime meals, they are always so disap-

pointing. "Never mind," I said to my pal, "wait until we get to Surrey where people know how to cook and where fruit and vegetables abound." And so it proved to be. For the last few days we have been revelling in new potatoes, green peas, carrots and turnips, and a bowl of luscious strawberries—God's choicest fruit—at almost every meal. All this with such a welcome, and kindly hospitality—for I am at the dear old "nurseries" where I spent such happy days last winter. Now its fifty-acre garden is in all its June glory, and I never tire rambling through its winding paths bordered with box and fragrant with roses and lavender.

I have already offered my services to a hospital nearby so my holiday will not be very long, and I am making hay while the sun shines. A day or two ago we visited the famous galleries of Sir Frederick Watts, sculptor and artist, to which we had a long walk through clover fields, hedged lanes and shady copses. The gallery consists of a large bungalow covered with climbing roses, in the midst of green hills. Large pieces of snowy sculpture shining through the trees first catch the eye, and one enters by ascending a stone stairway. There is a large collection here of sketches and paintings of all sizes and value. It is most interesting to study the first efforts of the great man and then go on to his later achievements. It would take too long to give a description of many, but I was most impressed by his portraits, and the large picture called "The Song of the Shirt," showing the pallid woman so pathetically described in the well-known poem; also the famous painting of the beautiful Lady Godiva, as she passes through the terrible ordeal of riding unclad through her native village to appease the severity of her lord for his people. This actually occurred in the pretty town of Coventry, near Rugby, which I recently passed through. Hanging near this is "The Dedication," a pitying form looking down upon piles of scattered feathers which in their different colors represent many of the feathered tribe, and bearing underneath these words: "To all who love the beautiful and mourn over the senseless and cruel destruction of bird life and beauty." I wish copies of this picture could be hung in every school-room. Among those of a lighter vein, I paused longest before "The First Oyster"—two life-sized forms, possibly Adam and Eve—sitting on the sea-shore. The man has the two shells in his hand, having evidently swallowed the delicacy, and with an expression of great satisfaction on his face still wears one of wonder and surprise at the sudden disappearance of the oyster, while his companion's face expresses deep interest and enquiry also at the rapidity with which it vanished from her sight.

I found it hard to tear myself away from this fascinating gem in the wood. From there we climbed another hill to the cemetery where stands the little chapel dedicated to the artist, and full of more beautiful pictures, and then to look at his tomb which Lady Watts still visits day by day. She is over seventy and lives nearby in the centre of all she loves best on earth. On the outside of the marble structure is a bas-relief of the poet and below it these words:

"1817-1904. As one that doeth truth cometh to the light, so he living sought light diligently and dying could say, now I see that great light. So may man's soul be sure of vision when suddenly it is sure of light, for this light is from Him and is He."

With regret we turned away from this quiet scene of beauty to which we hope some day to return for another feast. We chose a different winding road to get home. Even the roads in Surrey have been made according to artistic sense and have no sharp corners. We soon turned into a little tea-garden which was entered

through an avenue of tall, blue larkspur and nodding foxglove, where each little table was in a bower covered with vines and again—climbing roses. There we leisurely sipped our afternoon tea and ate thin bread and butter. When the waiter removed the trays several tiny birds hopped upon the tables fearlessly and devoured the remaining crumbs. We were not surprised upon looking around to see Canadian soldiers seated at some of the tables. They roam the Surrey hills and one meets them everywhere; nor does one need to look for the "Canada" on their shoulders to recognize these fine virile men as "overseas." After another mile's walk we came upon the Charterhouse school, one of the oldest English places of learning, which was started in London but so grew in numbers that it had to be removed where there were larger spaces. To have attended "Charterhouse" is an envied distinction. There is a veritable village of buildings, a most extensive campus, and acres of beautiful gardens. Everywhere were groups of boys clad in white flannels, for the day was warm. I am sure I shall always remember that June day spent in the company I love best, as my very happiest one in England.

There is great activity in camp these days. Sometimes our men are away bivouacking three days at a time, and during their long and complete training here they have become as well acquainted with the surrounding country as they are with the roads in their Canadian homes. This training, which they expect will very shortly be put into actual use in France, has made rugged men of them, and the hearts of mothers and wives of the Fifth Division would throb with pride if they could see them now in the prime of their health and strength. They seem ready for anything. A stroll of twelve or fourteen miles never phases them, and they are all in high spirits as they tramp along to the music of the bag-pipes or brass band, or their own singing. On a hot, dusty march when throats become parched and a roadside "Pub," of which there are many, appears to view like an oasis in the desert, they change their song with lightning rapidity to suit the occasion, and resounding through the hills may be heard lusty Canadian voices singing to the tune of a familiar hymn (O Happy Day!) "God only knows how dry I am, how dry I am, how dry I am, etc." It is needless to add that a "Pub" during the march is "out of bounds." The law in regard to the sale of spirits to soldiers is very restricted to-day, the sale of them only being allowed three or four hours out of twenty-four. Besides the quality of malt liquors has so deteriorated that it holds out little inducement, while the price is more than doubled. But the soldier has always hanging at his side his bottle of—"Adam's ale."

I hope when I next write to tell you, if you are interested, about another Tommie's hospital, one I expect to be helping in very soon. There is plenty of war work to do here, but I feel happiest when with the wounded men. I am so sorry that Canadian hospitals have not yet seen fit to admit the Voluntary Aid Worker for commandants of British ones all agree as to her faithfulness and usefulness. The patients need more than trained nurses can do for them, for they must have well-cooked food to coax back the color to their pale faces, and many other attentions than mere nursing to make them comfortable and contented in the monotony of long weeks in the wards. Shall I tell you of one of the many actual happenings in a London hospital which has its pathetic as well as its happy side, and which shows love's triumph over reason? There was a wife whose husband, a soldier in the Leicesters, had been officially reported "missing." Not a word came from him and there were long

weeks of ago comrade told her somewhere in So she wrote receive a formal other record be and that they Buoyed up wi to visit a long thought that ill to speak her that it was her woman's h else, and she after day vi walking their poor woman having shell-gotten his na were kind to had better go news from th shook her hea man is somew on until I fin thought she s ward, and the smile, but it v went on. A soldier in the one knew any wounded and robbed him o there was not his regiment, town. It w that have occu ptized the tr treatment ha markable cur the world, th Then a wondr this ward can looking for h gazed wistful went on till was lying pr The features l appeared muc face and gray with a vacan on. All of by the soun shouted anxio him she had in bed, an ea Sister was ru saying, "Wh the other wo was ended. We are all since the ne Rhondda has that he will among profi wife tells her rural holiday landed in a and decided t of the shops. a green groo timidly if po be had and l the words. Sh and delighted keeper resp "You can ha new ones ar pound." Ther was plentiful quart, and shillings a do home laden w there being a pound of sug There was there, but pro the farm to So she return up her lare moved to th rents were more reasona tion of the w There are pised classes land (and el the slacker, t objector, an The slacker i up, the cons tor may be vote, and th in the clutcl Controller w Glaring l newspapers feature the r mission for into the sta Mesopotam early days o vance there does not hesi

weeks of agony and suspense, when a comrade told her he might be in a hospital somewhere in England, probably London. So she wrote to the war-office only to receive a formal reply that they had no other record beyond that he was "missing" and that they couldn't advise her further. Buoyed up with a new hope she started to visit a long round of hospitals with the thought that he might be lying there too ill to speak. Her friends pleaded with her that it was useless, but once possessed her woman's heart could think of nothing else, and she kept on in her quest day after day visiting new hospitals and walking their wards with officials. The poor woman said that perhaps after having shell-shock he might have forgotten his name. The hospital staffs were kind to her but told her finally she had better go back home and wait for news from the war-office. She only shook her head and said, "I am sure my man is somewhere in London, I am going on until I find him." Sometimes she thought she saw his face and hurried forward, and the patient greeted her with a smile, but it was not "her man," and she went on. All this time there was a soldier in the Charing Cross hospital no one knew anything about. He was badly wounded and the shock of battle had robbed him of speech and memory, and there was nothing on him to show what his regiment, or what was his native town. It was one of the many cases that have occurred in this war which have puzzled the authorities who by special treatment have been able to effect remarkable cures. This man was dead to the world, though able to eat and sleep. Then a wonderful thing happened. Into this ward came the lonely, weary woman looking for her missing husband. She gazed wistfully at the rows of beds. She went on till she came to where a man was lying prone and stopped to look. The features looked familiar but this man appeared much older with his wrinkled face and gray hair. He looked at her with a vacant expression as she passed on. All of a sudden she was arrested by the sound of her christian name shouted anxiously, and she turned to see him she had just passed trying to sit up in bed, an eager look in his eyes. The Sister was running quickly to him and saying, "Why, you can speak!" Then the other woman knew that her search was ended.

We are all expecting drastic changes since the new Food Controller, Lord Rhondda has taken office, and it is hoped that he will order a careful investigation among profiteers. One London housewife tells her experiences while taking a rural holiday recently. She landed in a small village—and decided to make a round of the shops. Calling first at a green grocers she asked timidly if potatoes were to be had and blushed to utter the words. She was surprised and delighted when the shopkeeper responded briskly, "You can have two pounds, new ones are five pence a pound." Then she found milk was plentiful at four-pence a quart, and fresh eggs two shillings a dozen, and went home laden with food parcels, there being actually one-half pound of sugar among them. There was no middleman there, but produce direct from the farm to the customer. So she returned home, packed up her laces and penates and moved to that village where rents were less and living more reasonable for the duration of the war.

There are much to be despised classes of men in England (and elsewhere) today, the slacker, the conscientious objector, and the profiteer. The slacker is being rounded up, the conscientious objector may be deprived of a vote, and the profiteer soon in the clutches of the Food Controller we hope. Glaring headlines in the newspapers the last few days feature the report of the commission formed to enquire into the state of affairs in Mesopotamia during the early days of our army's advance there. The report does not hesitate to place the

blame where it thinks it should be laid, and couples the names of prominent personages with this heart-rending story of incompetence. The British public are not in the mood at the present time to have errors of judgment kept in the dark, and it is a healthy sign that they seek the truth. Every cloud has its silver lining, and in this case it is the fact that the blundering which brought about such suffering of the Empire's men in the East, has been followed by an organization of all forces—fighting, hospital, and supplies that is now almost perfect. The magnificent work of the army in its advance on Bagdad in the past few months is a bright page in the history of the war.

But still the war goes on! Kitchener's "three years" will mature within the next few weeks, and it is a bold spirit who will venture a guess as to when we may look for the end. The arrival of the United States forces in France during this week brings into actual conflict the remaining great nation of the Northwestern Hemisphere. Monarchies and republics, both great and small, from all corners of the earth are now in the fray, and the Welsh leader, "the man who saw," was apt in his comparison in a recent speech when he likened this war to the deluge, inasmuch that though the dove had twice brought in offerings of peace, it had not yet found a resting-place.

As I close this letter the boys are going past from a hard route march. They are looking forward to the days in the near future when this splendidly equipped and thoroughly-trained division will cross the Channel, and confident in the hope that the home-land will continue to supply the needed reinforcements, the song on their lips as they swing along is:

What's the use of worrying
It never was worth while,
Pack all your troubles in your old kit-bag
And smile, smile, smile.

SIBYL.

Hope's Quiet Hour

Resting With Christ.

He said unto them, Come ye yourselves apart into a desert place, and rest while: for there were many coming and going, and they had no leisure so much as to eat.—S. Mark 6 : 31.

Come ye yourselves apart and rest awhile,
Weary, I know it, of the press and throng;
Wipe from your brow the sweat and dust of toil,
And in My quiet strength again be strong.

BISHOP BICKERSTETH.

In these strenuous days many of the best people harness themselves to the great car of the world's work, and pull with all their strength until they drop, exhausted, and have to be carried by their friends. Is God like a slave-driver? Does he care nothing for the well-being—bodily, mental and spiritual—of the children of men? If we think (as the servant in the parable said) that He is "an hard Master", it can only be because we don't know Him. And why are we so ignorant of His heart of love? Perhaps it is because we are so eager in our life of service that we refuse to accept His invitation to come apart with Him, and rest awhile.

Must we wait for that healing, strengthening resting-time until all the work that is calling us is done? Look at the story of our text. The apostles had been sent on a mission of healing and preaching. They returned with a report of their work and found their Master surrounded by crowds of needy people. There was so much work pressing upon Him and upon His disciples that they could scarcely find time to eat necessary food. "They had no leisure", yet, a time of rest was necessary to their bodily and spiritual health. Leisure must be made if it could not be found, therefore, a sudden stop to the pressing work was ordered by their King. "Come!" He said, "and rest". He did not say "Go"! As their work had been done in Him, so their rest must be also in Him. Their mission to the world was to hold up the Great Ideal—the Vision of the holiness of God, shining in a spotless human life—and how could they reveal Christ to others unless they knew Him themselves?

If we devote all our time and attention to earthly pursuits—even to pressing work—the Presence of our invisible Master and Friend will be forgotten. Work is necessary and right, of course, but, to the disciples now as to the apostles long ago, comes at times the gracious invitation: "Rest awhile with Me". The invitation of a King to a subject is always a command. Are you one of the people whose boast is! "I am always busy?" If so, then at this very moment you may be refusing the call to gain

new strength for work by a season of rest.

Yesterday I read a letter from a prisoner in Germany—a civilian, who has been imprisoned three years. He is doing a splendid work among the other prisoners, especially trying to win for Christ a rough lot of sailors. Every hour of his day is crammed with work for his Master. Therefore, he, and several of his friends, with difficulty made the arrangements for a Quiet Day—a Retreat with Christ. It was a day of prayer, a day of gathering up a reserve of strength for the hardness of their everyday life and the greater troubles which probably lie ahead of them.

If JESUS, who is "The Life"—the eternal source of power—needed that quiet evening with His disciples, and the midnight retreat with His Father, to prepare His human soul for the awful conflict on Good Friday, how much more do we need to go apart with our Divine Friend.

Many of our readers have told me that they gained help for their work from this "Quiet Hour". That is certainly not because I have any power to pass it on to them, but can only be because when they sit down quietly to read about Christ they feel His hand in theirs, and hear His voice speaking to them: We are like the virgins who could not get oil for their lamps from other light-bearers; we must go to the Holy Spirit for ourselves. "He shall glorify Me": said our Lord, "for He shall receive of Mine, and shall show it unto you".

Are we so strong and brave that we can fight the great battle of life in our own strength? Can our Canadian soldiers carry with them supplies for the long campaign? They also need an occasional period of rest, or their nerves would give way under the strain—and so do we. Those who wish to be fit for hard service will bring their jaded spirits to their Lord to be refreshed and strengthened. We must be on our guard lest the cares of life crowd out of our thoughts the good seed planted by the Sower. He says to busy workers:

"Come ye and rest: the journey is too great,
And ye will faint beside the way and sink;
The Bread of life is here for you to eat,
And here for you the Wine of love to drink".

I shall never forget a much-needed message from my Lord which came to me once when I was working—laboring for Him—seven long days each week. The message came as a warning in a



Home of Mrs. C. W. Cadwell, Windsor, Ont.

Showing what can be done on hard clay soil in one year. Illustration from Horticultural Societies Report for 1916.

letter from a wise friend: "Your body needs to lie back on God and be pressed into His Life, before your reserve force will be ready for hard service". The "body" needs rest and change, the mind needs recreation and the spirit needs to seek and find God.

How foolish a motorman would be if he tried to drag his street car along by his own strength, instead of making connection with the invisible but mighty force which we call "electricity". Yet we are far more foolish when we try to work for God without getting into living and continual touch with Him.

Take the question of Sunday, for instance. People ask: "Is it right to do this or that on Sunday?" as if it were a day of rigid rules, like the old Jewish Sabbath, instead of being a priceless opportunity of resting awhile, apart with Christ. I have known many Jews who thought it wicked to strike a match cut a piece of string or tear a piece of paper on the Sabbath. Such scrupulousness made them very uncomfortable, but I don't see how it could bring them nearer to God. "The Sabbath was made for man", as our Lord said, "not man for the Sabbath". We need the weekly resting-time for our souls, and the only way to secure it is to check—as far as may be possible—the rush of week-day work.

A thoughtful observer once said that you might write over thousands of graves this epitaph: "He kept no Sunday." He declared that strong men were cut down in their prime, and the doctors gave a dozen names for the cause of their untimely death—"softening of the brain, paralysis, heart failure, nervous exhaustion"—but, sifted to the bottom, the real fact is that men kill themselves by breaking God's law of a rest day every week. Sunday is not a "holiday", but a "holy-day", a day when we are invited to enter into the Holy Place and "Remember," He says tenderly, but warningly, "that thou keep holy the Sabbath day". Sometimes we insult God by bringing only our bodies to church, and remembering everything else but the fact that we are in His Presence. If our Sundays are to give any joy to our Father and any inspiration to ourselves we must bring the whole of ourselves into His House—our minds and spirits as well as our bodies.

Especially should we be in our places when our Master desires to keep the Feast with His disciples, drawing very near to us all at His own Table. I have been startled to read—in letters from friends in England—that, although many people there are so near the Great War

that they can hear the roar of the guns, multitudes of Christians still refuse to meet Him at His own Table.

In that sacrament we not only are permitted to abide in Christ and Christ in us (S. John 6 : 56) but we can reach across the sea and eat of the same loaf and drink of the same cup as our brothers and lovers in the trenches (1 Cor. 10 : 16, 17).

We may already find the promise fulfilled that there shall be "no more sea"—nothing to separate loyal hearts.

We may share the feasting of those who have "passed over" the River and entered into rest.

days—trying to practise what I preach—and gifts for the needy have followed me "Country Woman"—whose first gift started the "Quiet Hour purse" has again sent \$5.00. "A Puslinch Friend" sent \$2.00, and \$10.00 (from D. H.) quite overwhelmed me. The purse is very full, but I hope to pass on its contents soon—when my resting time in the country is over. How kind our readers are! HOPE.

Rural Life Movement.

The new "Ontario Rural Life Movement," inaugurated last week at Guelph,



A British Submarine Beached for Repairs—International Film Service.

Dare you refuse the invitation of the King of Kings? Don't you want, with all your heart, to accept His call to go apart with Him and rest awhile! There you will find refreshment and restoration, inspiration and strength.

"Then, fresh from converse with your Lord return

And work till daylight softens into even: The brief hours are not lost in which ye learn

More of your Master and His rest in heaven".

DORA FARNCOMB.

Gifts for the Needy.

I have been in the country for a few

is one of those things that promise to be the nuclei of great developments. It was formed at the School for Rural Leadership which for two weeks had been in session at the O. A. C.—its purpose to carry on throughout the year a programme for the promotion of higher ideals in all departments of rural community life.

The officers elected were: President—G. N. Simmons, Springfield, Ont.; Vice-Pres.—H. W. Fowley, Brooklin, Ont.; Sec.-Treas.—A. MacLaren, Guelph. Executive Committee—W. F. Carpenter, Horning's Mills; N. A. Campbell, Inwood, Ont.; Miss Stover, Queenston, Ont.; Mrs. W. J. Booth, Hornby, Ont.

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 for questions to appear.]

Dear Ingle Nookers.—How all the world's interest seems turned, these days, to food conservation. A few minutes ago I picked up a newspaper. One page appeared some account of the steps which Lord Rhondda is taking in England to lower the prices of essentials and ensure a sufficiency of nourishing food to the mass of the people; upon another was mention of the similar work being done in the United States by the Food Controller there, Herbert C. Hoover. Turning the page one found some paragraphs describing interviews with Lady Hearst and other women who are trying to lead a movement for food conservation in Canada, and, elsewhere a report of some of the demonstrations in canning which are being given in various parts of the country during these hot summer months, by experts from "the Department"—which, I do not need to tell you, means the Department of Agriculture. In still other portions appeared news notes in regard to the crops, here and out West.—Everywhere a sort of tenseness in regard to the second of the two great questions before the world to-day: the first, "How shall our armies win?" the second, "How shall the world be supplied with food until this great crisis has passed?"

All this is very good, this anxiety in regard to production and the stoppage of waste. True, it took the war to force these things upon us, but good is good, however it come, and perhaps we were all becoming too careless and wasteful.

It is to be hoped, however, that everyone will understand fully the reason for all that is being done.—Assuredly not that we may add more to our individual bank accounts, but simply that more may be spared for the soldiers in the field and all others who, forced to be non-producers, still need food in order that they may live. Every can of vegetable "put up" in Canada, no matter where eaten, releases just so much other foodstuff for these needy ones; and so it is that it is patriotic—humanitarian (I like that word better)—to make little backyard gardens, and to can and dry vegetables, and to see that nothing be wasted anywhere.

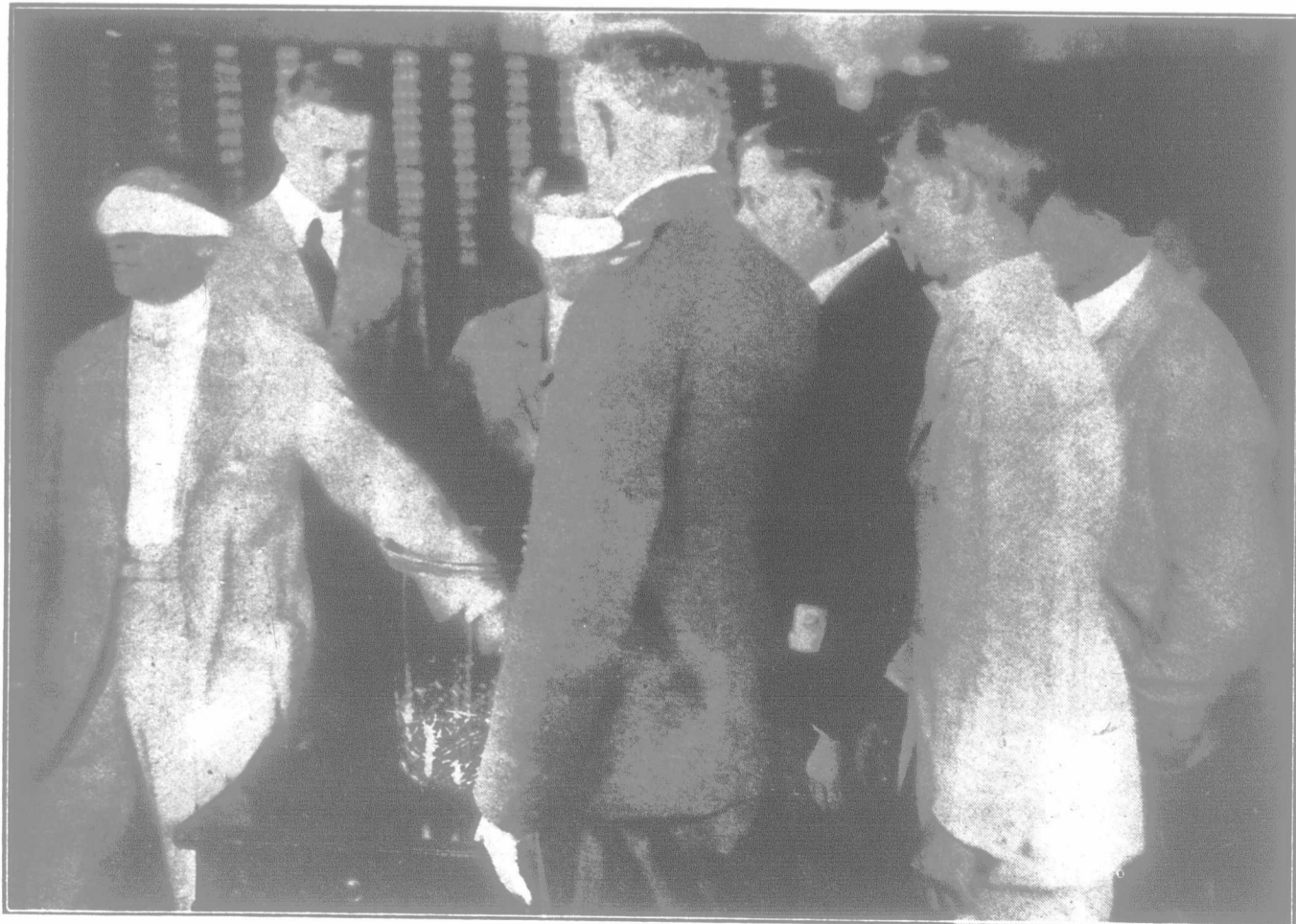
After this preamble it may be said that all vegetables may be canned according to the method given in last week's issue.—Perfect sterilization of jars, and vegetables, boiling according to the intermittent method, perfect sealing, and the thing is done.

Squash and pumpkins may either be canned in this way, or dried. To dry them stew the vegetable with as little water as possible, then dry on plates in the oven; or simply cut up raw into small cubes and dry without cooking.

Carrots, parsnips, cabbage, etc., may, as you know, be kept in the cellar or in pits. Pack the carrots and parsnips in sand. Also leave some parsnips, salsify and artichokes in the ground where they grew for use next spring.

When you hear the word "preacher" you immediately think of a pulpit and "the cloth". Is not that so? But it struck me, the other day, that in these times of alert, eager questioning in regard to eternal things—due, perhaps to the war—the preaching is by no means confined to the ordained "preachers". There are thinkers everywhere, and whenever there is a real thinker who will tell his thought there is a "preacher"—one, less trammled, perhaps, than many of those trained in the class-rooms of the theological schools, some of which, it must be confessed, have not advanced with the on-going of the times. True, there are thinkers in the class-rooms. But, again, there are mere absorbers, too. And the pity of it is that these last go out, just as formally equipped as the thinkers, to be leaders of men in these questions, the most important of any in the world.

I am thinking, as I write of those "preachers" who have never worn the cloth, of a medical doctor whom I heard expressing his views not long ago. In a little country village, and almost independently so far as outer assistance



The Greatest Lottery in the World's History.

This picture shows how "Uncle Sam" is drafting men for the army.—Newton D. Baker, Secretary of War, making the first draw. The numbers are sealed in capsules, and blindfolded men do the drawing. The first number drawn was 258, which meant that every man in 4577 districts holding this as his number, was the first man in his district called. This system will be adhered to so long as necessity for men lasts. Photo—Underwood's.

has been the conclusion of philosophers in the point of crystallization of everything.

But one of the delving conquests—and tell me, what is the creed, which?

That the consists in some way evil. After the "old re thought, a dare to dis Great Cor words, that about lovin Nixon V analogous I must give

"A rose to Than su In filling lo A rose to If gracious The hun A rose to Than su

It is the new, but h How man our time i them to th if we were our lives o realizing v There a calamitous roses, rose where, els to become

By the v appeared of Carryin interest y having be this is a R. Romany ir woman of device m by many has often something esting the complicate them thei for the su work it, i the Roma October? fallen a l buying te "the boys making th so much r house. T there' will

When the very sugar that substance themselves of this t cooked cu grapes ar strawberri tain less, a with them and, later good jelly will blend for this p

When does not though th know tha sugar to a although proportion and to must use matter, k one has c find that of a pound for a pint

Fruits much bet in which th and alway



Real Daylight Saving

In the harvest time every hour between daylight and dark is worth money to the busy farmer.

You get an early start in the morning intending to do a big day's work, but the

binder, mower or other implement breaks down and you must go to town for the repairs. If you have a Ford you are soon away and its speed clips two hours off the former three-hour journey there and back.

Count up the extra half days that a Ford will save you

during the rush of seeding, haying and harvest. You will find that the Ford will save you a week or more of valuable time on your necessary trips alone.

Many times you will want to take some produce along with you. Then your staunch

Ford is ready to carry a load of 1000 pounds. How handy this would be?

Once you own a Ford and find out the many ways you can use it for business and pleasure you will wonder how you managed without it.

The Ford is an economical investment, and a necessity on every farm.

Ford

Touring - - \$495

Runabout - \$475

F.O.B. FORD, ONT.

Ford Motor Company of Canada, Limited

FORD - - - ONTARIO.

42

of the Antipodes, it appears that some of the older countries need sharp waking.

General Manager Elisha Lee, of the Pennsylvania Railroad, has directed the general superintendents on the Pennsylvania lines east of Pittsburg to report what positions may be filled by women. The intention is not to displace men now employed by the railroad, but to engage and train a reserve army of women to take the place of the men called out for military service for the duration of the war. Some of the positions open to women, in addition to clerical work, are elevator operator, parcels clerk, telegrapher, signaller, train dispatcher, ticket seller and various jobs in the machine shops.

PATENTS AND LEGAL SOLICITORS. FETHERSTONHAUGH & CO. PATENTS. Solicitors. The Old Established Firm. Head Office, Royal Bank Building, Toronto, and 5 Elgin Street, Ottawa, and other principal cities. Send for free booklet.

WANTS & FOR SALE

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 required. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

DAIRYMAN AND HELPER WANTED FOR thirty cows, milking machine on farm, fifty miles north of Toronto. House, light, fuel, milk, potatoes provided. State wages expected. Box D, Farmer's Advocate, London.

FARM WANTED TO RENT - FIFTY TO eighty acres in Norfolk County, from April. Lawrence Gibson, Vanessa, Ont.

WANTED AN EXPERIENCED MARRIED man for dairy farm, good milker. State wages and qualifications. Leonard Parke, Caledonia, Ont.

When writing please mention this paper

The Dollar Chain

Is it because of the busy harvest that so few contributions are coming in for the soldiers? This week but one has to be recorded, that of "Helper", \$2.00. This makes the total up to August 3rd \$4803.90.

Current Events.

The Dominion Government will acquire the entire common stock of the C. N. R., and operate it through the C. N. R. Company by controlling the Board of Directors and acquiring all subsidiary companies.

The Allied troops have left Greece, having confidence that no attack need now be expected from that quarter. Forty thousand Greeks are said to have

starved to death in East Macedonia since its occupation by the Bulgarians.

Out of 17 German steamers that attempted recently to sail from Rotterdam to Germany through the British blockade only three succeeded in returning to Rotterdam.

The great battle on the West front which began on July 31st, still rages, spreading gradually through Flanders and France from the North Sea to the banks of the Scarpe, with airplanes and tanks everywhere in evidence. In some places the lines waver; in others, decided advantage has been gained by the Allied troops, the latest reported at time of going to press being the recapture of St. Julien by Gen. Haig's men. From the fact that this week the Kaiser hurriedly summoned his War Council to Brussels it is judged that Germany begins seriously to fear the issue. On the Russian front little has occurred that is immediately hopeful. In the southwest the troops continue to retreat, except in a few places, and Czeronowitz and Kimpolung have been left in the hands of the enemy. At Petrograd, too, there have been dissensions, and Premier Kerensky and practically all of the Provisional Government resigned, but were persuaded, with one exception, to withdraw their resignations. The last important event in Russia has been the appointment of Gen. Korniloff to the chief command of the armies.

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. See under illustrations for price of patterns shown in this week's issue.

When ordering, please use this form:—
Send the following pattern to:

Name.....
Post Office.....
County.....
Province.....
Number of Pattern.....
Age (if child or misses' pattern).....
Measurement—Waist..... Bust.....
Date of issue in which pattern appeared.....



9001—Child's box plaited dress, 1, 2 and 4 years. Price 10 cents.



9054—Boy's suit, 4 to 8 years. Price 10 cents.



Join
M
H
Thous
so. T
ing, b
K
S
and m
Perha
with
Thoro
Sprain
you m
bough
Join t
paign
the ol
the la
condit
Sold by
6 for \$
"A T
Dr. J
v

Priv

These priv
garage or
large fact
for particu

Canadian
261 A

THI
A valuab
treatm
given
LIN
The Ca

Put u
Stand
Fe

Standard

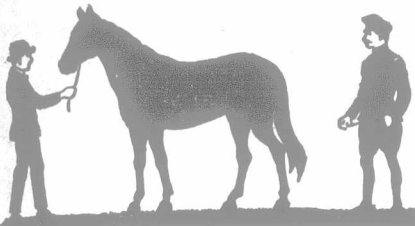
Allow
Angus

Rams and
1st prize, I
Robt. M

Kennelw
At spe
Victor
able ag
PETER A

Beaver
Cows with
Shearling r
One Avrsh
Alex. McK

BALME
Get high-c
pion steers.
10 to 24 m
heifers. T



Join the Government's Thrift Campaign

Make Your Horses Sound

Thousands of Farmers have done so. They have treated lame, limping, broken-down horses with

KENDALL'S SPAVIN CURE

and made them strong and healthy. Perhaps you have a horse, crippled with Spavin, Curb, Ringbone, Thoropin, Bony Growth, Swelling, Sprain, Strain or Lameness? Or, you may know of one that can be bought cheap?

Join the Government's thrift campaign—get Kendall's Spavin Cure, the old reliable remedy—and put the lame horse back to work, or in condition to sell for the top price.

Sold by druggists everywhere, \$1 a bottle, 6 for \$5. Also ask for copy of our book, "A Treatise on the Horse", or write us.

Dr. B. J. KENDALL CO.
Enosburg Falls
VERMONT - U. S. A. 125

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.

Alsike for Sheep.

Is alsike hay good for sheep for winter feed? W. F.
Ans.—Alsike clover hay proves very satisfactory for feeding sheep and lambs.

Auto Magazines.

What is the name and address of the company who publishes the magazines "The Automobile," and "Motors"?
What is the price per copy, and how often are they published? R. J. McG.
Ans.—The "Automobile" is a weekly and the "Motor" a monthly magazine. Both are published in New York. Addressing them by name will find them.

Preventing Trespassers.

Can a man keep parties from picking berries on his farm if it is not all enclosed? I have a small patch, and as we cannot get to them early in the morning they are generally picked before our arrival. Some tell me I cannot keep people off. E. S.

Ans.—If it is your property you could have signs printed and placed in prominent positions warning trespassers that they will be prosecuted. A notice to the same effect might be placed in the local paper.

Veterinary.

Swollen Leg.

I have a mare that was in-foal in 1916. The colt was dead and the milk never came into her udder. About sixteen days before foaling one of the hind legs swelled up and the swelling has never left the leg. The inside cord is swollen and sore. Is there anything I can do for it? G. O. T.

Ans.—Give her a laxative of 1½ pints raw linseed oil, and follow up with 1 dram of iodide of potassium twice daily. Get a liniment made of 4 drams each of iodine and iodide of potassium and 4 ounces each of alcohol and glycerine. Rub a little of this well in once daily. Have patience and continue treatment, as quick results are not likely to be noticed. V.

Gossip.

A Good Ram to Insure Quality.

In a communication to "The Farmer's Advocate," W. A. Dryden, of Maple Shade Farm, Brooklin, Ont., writes thus regarding this year's crop of lambs:
"The high prices prevailing for sheep and wool make it imperative that every sheep breeder should protect the quality of the products of his flock. Now is the time, more than any other, that the quality should be of the best so that he may reap the full benefit of the very high prices which he may receive. It does not matter whether he is breeding 'grades' or pure-breeds, he should aim at the very best he can produce, and in so doing he not only is adding to his own income but is rendering a patriotic service as well. Acting on this principle last fall I paid a very long price for the imported ram 'Minton 36' with the expectation that he was a Shropshire ram that would make his mark as a sire. In this respect I know that my expectations have been more than met, as proved by his first crop of lambs, now ready for sale. I can offer for this year's trade what I believe are the best lot of ram lambs that I have yet produced. Every reader of your paper knows right well the proper kind of ram that he needs for his use, and if he wants the best this year he should not hesitate to drop a line or come and see for himself."

Only Fine, Flavoury Teas

are used to produce the famous

"SALADA"

blends. Every leaf is fresh, fragrant full of its natural deliciousness. Sold in sealed packets only. B 107

WESTERN FAIR

London, Canada

September 7th to 15th, 1917

1867—"A Half Century of Success"—1917

The Great Agricultural Exhibition of Western Ontario

\$32,000 in Prizes and Attractions

A very interesting programme, including Military and other features—TWICE DAILY.

FIREWORKS EACH NIGHT TWO SPEED EVENTS DAILY

REDUCED RAILWAY RATES

Prize Lists, Entry Forms and all information from the Secretary.

LIEUT.-COL. W. M. GARTSHORE
PRESIDENT

A. M. HUNT,
SECRETARY

Private Telephones

These private systems are made in all sizes from a garage or stable line of two or three phones to a large factory system of one hundred phones. Ask for particulars.

Canadian Independent Telephone Co., Ltd.
261 Adelaide Street, West, Toronto.

THE VETERINARIAN

A valuable book which tells you all about the treatment of diseases of your live stock, given FREE with a trial ton order of

LINSEED OIL CAKE

"Maple Leaf" Brand
Write to-day for lowest prices.
The Canada Linseed Oil Mills, Limited
Toronto and Montreal

Put up a Lasting Fence

Standard Fence and Steel Tube Fence Posts make an ideal pair. Send for prices.

Standard Steel Tube & Fence Co., Limited
Woodstock, Ontario

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.

Kennelworth Farm Aberdeen-Angus

At special prices, six young bulls sired by Victor of Glencairn. All are of serviceable age, and show individuals.

PETER A. THOMSON Hillsburg, Ont.

Beaver Hill ABERDEEN-ANGUS AND OXFORD DOWN SHEEP

Cows with calf at foot and bred again. Shearling rams and ram lambs.

One Ayrshire bull calf for sale.

Alex. McKinney, R. R. No. 1, Erin, Ontario

BALMEDI 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-yr.-old heifers. T. B. BROADFOOT, FERGUS, ONT.

Another Wet Season in Prospect



You will need Canvas Covers for your Engine, Thresher, Stacks, etc. Canvas Duck is very high in price this year, but we bought early and can quote you attractive prices.

Get our prices on Belting, Hose, Oils and All Power Users' Necessities.

Ask for our 1917 Catalogue.

WINDSOR SUPPLY CO., 57 Sandwich St., West, WINDSOR, ONTARIO

FLETCHER'S SHORTHORNS

Our herd of Scotch Shorthorns represents Orange Blossoms, Kilblean Beauties, Matchlesses, Mysies, Missies, Clementinas, etc., and is headed by the Watt-Stamford bull, Victor Stamford =95959=, a Toronto winner. Present offering—one roan Orange Blossom bull, 12 months old (a show animal) also younger bulls and several choice cows and heifers.

Geo. D. Fletcher, Erin, Ont., R. R. 1, Erin Sta., C.P.R., L.-D. Phone.

Bell Telephone

HILLSDALE FARM

Farm, 3¼ miles east of Ottawa

B. ROTHWELL

BREEDER OF HIGH-CLASS CLYDESDALES

Write me for prices on champion mares. R. R. No. 1, OTTAWA, ONT.

OUR LATEST IMPORTATION OF CLYDESDALES

arrived at our barns late in November. A number of them since have been prominent winners at both Guelph and Ottawa. But we have others (both stallions and mares) that were never out, the majority of the stallions weigh around the ton, and better quality and breeding were never in the stables. Come and see them. We like to show them. SMITH & RICHARDSON, Columbus, Ontario

OAKLAND---50 SHORTHORNS

A herd of feeders, breeders and milkers that give satisfaction wherever they go. One bull for sale, 12 months, white, extra milk strain. Also females, any age. Priced so you can buy. One of the finest bulls in Ontario heads this herd. JNO. ELDER & SONS, HENSALL, ONTARIO

SALEM SHORTHORNS

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

Glengow Shorthorns, Cotswolds

For the present we have sold all the Cotswolds we wish to spare, but 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, Ont. Myrtle, C. P. R., Brooklin, G. T. R., Oshawa, C. N. R.

SHORTHORN CATTLE AND LINCOLN SHEEP

Young cows and heifers of the best Scotch families. Sire in service, Sittyton's Selection =86508= The winning pen of long-wool lambs, all breeds competing, at 1916 Guelph Winter Fair, came from this flock. Imported and home-bred rams and ewes for sale. New importation will arrive in July. R. S. ROBSON & SON, DENFIELD, ONT.

Scratches and Stocking

Are prevalent in cold weather irregular work and overfeed 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

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

CREAM

We are open to buy cream both for churning and table use.

ASK ANY SHIPPER about our service and prompt returns.

Ask for Prices. The figures of yesterday may be TOO LOW for to-morrow. We furnish cans.

The Toronto Creamery Co., Limited Church Street, Toronto

The most economical system of life insurance is the MUTUAL.

MESSRS. A. J. HICKMAN & CO. LATE HICKMAN & SCRIBY, COURT LODGE, EGERTON, KENT, ENGLAND, exporters of PEDIGREED LIVE STOCK of all descriptions. Specialty 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.

Pure Cottonseed Meal

"Dixie Brand"	41% protein, fat 5.50%
"Forfat Brand"	38.55% protein, fat 5.00%
"Danish Brand"	39% protein, fat 5.00%
"Creamo Brand"	29 to 25% protein, fat 5.00%

Mills conveniently located in every cotton-growing State in the South. Prices on application in car lots or less.

Glenfoyle Shorthorns

Present offering—three bulls from 10 to 12 months. Nice, straight, smooth fellows. Prices easy. Stewart M. Graham, Lindsay, Ontario

MARDELLA SHORTHORNS

Bulls, females, steers, quality breeding dual-purpose cattle over 40 years. The Duke—dam gave 13,599 lbs. milk, 474 lbs. butter-fat—at the head. Thomas Graham, Port Perry, Ont., R.R. No. 3.

PLASTER HILL HERD DUAL-PURPOSE SHORTHORN

A few choice bull calves coming on; also a few heifers in calf to Buttermilk Champion 110726. F. Martindale & Son, Caledonia, Ont., R. R. 3

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 the catalogue for full particulars. Could also represent a few shorthorn, Douglas Brown, Bright, Ont., R. R. A, NY Station, C. P. R. Dr. Bell's Veterinary Medical Wonder, 10,000 \$1.00 bottles. LKLI is the best remedy for the Wonder a fresh, guaranteed for C. D. E., inflammation of lungs, Bowels, Kidneys, Evers and Distempers, etc. Send 25¢ for mailing, packing, etc. Agents wanted. Write address plainly. Dr. Bell, V. S., Kingston, Ont.

Questions and Answers. Miscellaneous.

Mower Knife Breaks.

What can I do to prevent the mower knife breaking continually? O. S.

Ans.—It is not stated where the knife breaks; if at the head, it may be due to several causes. The cutting-bar may be out of line, the knife not centered properly, or too much play is allowed by the plates becoming worn.

Getting Rid of Rats.

How can rats be banished from the stable without using poison? They cause an enormous waste and do a lot of damage. O. K.

Ans.—Rats are rather hard animals to get rid of. They are very wary and keep away from traps set for them; they even avoid feeding on material on which poison has been sprinkled. However, if poison could be used we believe it is the quickest way of ridding the place of this class of vermin. We have known places to be cleared of them in a few weeks after a couple of cats, that were good mousers, were put on the job. Some find that sprinkling finely-ground glass in their run-way will have the desired effect. We know of one man who got rid of many rats that were infesting his chop barrel, by removing the barrel and replacing it with a water barrel. A little chop was sprinkled over the water and the next morning after he had made the change a score or more of rats were found in the barrel. This was repeated for two or three nights with good results, but after that the remaining rats kept away from that particular barrel. Ferrets are sometimes used for killing the rats; they go right down into the burrows after them.

Field Tile in Sandy Soil.

I have a 6-inch tile drain about 150 rods long on my farm. It is laid on a sand bottom and the tile filled. If I put in 10 or 12-inch tile, which would give a lot more space for the water, would they fill with sand in time on a grade of 2 3/4 inches in 100 feet. I saw a few weeks ago where second-hand sewer pipes were advertised. Would these be better than ordinary field tile for the drain mentioned? W. T.

Ans.—If the tile are properly laid they should not fill very quickly on the grade mentioned. The larger tile would, no doubt, give more satisfaction, but then if the larger size is not needed to carry off the water it would be considerable extra expense. If the bottom is inclined to be quicksand there is always the danger of a few tiles settling, which soon causes the drain to clog. If it is found that the clogging starts at such places, some top earth could be placed in the bottom and around the tile, which would prevent the sand from working into the tile. Sewer pipe would be all right for carrying the water, but the way the ends are joined would prevent water getting through the joints; consequently they would not be of much use in draining the territory through which they passed.

Pure-bred versus Scrubs.

I noticed in a recent issue of "The Farmer's Advocate" where it was stated that it cost no more to pasture pure-breds than scrubs. I would like to know if you consider all cows that are not pure-breds as scrubs. A. MCG.

Ans.—Certainly not. There are scrubs among the pure-breds as well as among grades. However, the general quality of registered stock is higher than that of grade stock, and as a rule they bring a higher price on the market. Too many are keeping low-quality stock. The aim of every stockman should be to improve his herds and flocks, which can very often be done by a little more care in the selection of a sire. One has but to follow the auction sales to see the difference in value between common and good stock. Animals from one herd may average from \$100 to \$125 apiece, while animals of the same age from an adjoining herd may not go over \$60 to \$80. We venture to say that it took as much grass, hay, silage, high-priced concentrates, the same amount of labor, and expense in building for the latter herd as for the former, but yet there was a big difference in the sale price of the animals. The difference is in the quality of the individuals, whether they be grades or pure-bred, and the man who is not trying to improve his herd is standing in his own light.



INTERNATIONAL Ensilage Cutters are now made in five sizes, with capacities ranging from 3-6 to 16-25 tons per hour.

International Ensilage Cutters fill silos at the lowest power cost. Every feature of these cutters, the knives and blowers on the same flywheel, the carefully machined bearings, the complete oiling system, the absence of all unnecessary gears and sprockets, the steady feed arrangements, the fine adjustments that can be made, all tend to make them easy running, and economical of power. A 4 to 6-H. P. Mogul kerosene engine will run a type F cutter up to its full capacity of 6 tons per hour, and the largest International cutter, a type A, requires only 25 Mogul kerosene H.P. to handle its heaviest loads. When you buy an **International Ensilage Cutter**, of any size or type, you get a complete machine that will do the work it was built for at the lowest cost, with safety to the operator, and in a satisfactory manner. A line to the nearest branch house address below will bring you full information promptly.

International Harvester Company of Canada, Limited
BRANCH HOUSES
WEST—Brandon, Man., Calgary, Alta., Edmonton, Alta., Estevan, Sask., Lethbridge, Alta., N. Battleford, Sask., Regina, Sask., Saskatoon, Sask., Winnipeg, Man., Yorkton, Sask.
EAST—Hamilton, Ont., London, Ont., Montreal, Que., Ottawa, Ont., Quebec, Que., St. John, N. B.

MEADOW LAWN SHORTHORNS

We are offering 3 extra choice Scotch bulls, belonging to the Claret and Roan Lady families. Low set, thick, fleshy fellows by that great sire, Escana Ringleader, first-prize bull at Toronto and London Fairs. Write your wants or come and see them. F. W. EWING, R. R. No. 1, Elora, Ont.

THE MANOR STOCK FARM---SHORTHORNS

Two young red bulls (June and July), a Wimple and a Julia. Would buy a few females of good families. JOHN T. GIBSON, DENFIELD, ONT.

Shorthorns, Shrops., Clydesdales

If you want a good young bull, a promising stallion colt, or a young cow or heifer of Scotch breeding and beef type, having dams eligible or good enough for R.O.P., come, see, and satisfy yourself and please the owner. Prices reasonable, that they may be sold. Visitors welcome.
Wm. D. Dyer, R. No. 3, Oshawa, Ont. Brooklin, G. T. R. and C. N. R.; Myrtle, C. P. R.

Welland District Shorthorn Breeders' Club

are still offering young bulls of serviceable age, and a few breeding females. Chas. Gainer, Secretary, Box 607, Welland, Ont. A. E. Howell, President, Fenwick, Ont.

BRANT COUNTY SHORTHORN CLUB

offers several young bulls of best breeding and fit for service. Also the Beauty-bred bull, Roan Duke 101320, a proven sire, whose dam is a heavy milker. For prices and particulars address: THE SECRETARY, GEO. L. TELFER, R. R. 2, PARIS, ONTARIO

NICHOLSON'S SHORTHORNS

Herd headed by "Best Boy" = 85552 =, and "Browndale Winner" = 106217 =. Bulls and females for sale. Visitors always welcome to this herd of long-established reputation. R. & S. NICHOLSON, PARKHILL, R. NO. 2, ONTARIO

Imported Shorthorns

Thirty-five imported cows and heifers, forward in calf to service in Scotland; also five imported bulls. Our 1916 importations are all choicely bred. Have also home-bred bulls and females. Farm half mile from Burlington Junction. Write or call and see us. J. A. & H. M. Pettit, Freeman, Ont.

SPRUCE GLEN SHORTHORNS

of such popular strains as Minas, Fames, Miss Ramsdens, Florences, Emilys, etc. Have still a few young bulls—thick, mellow fellows, fit for service. JAMES McPHERSON & SONS, DUNDALK, ONTARIO

SHORTHORNS

Imported and Canadian bred. A. G. FARROW, Oakville, Ont.

SPRING VALLEY SHORTHORNS

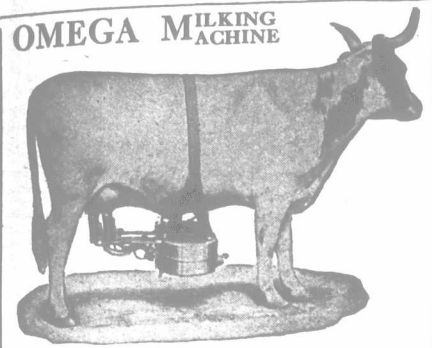
Herd headed by the two great breeding bulls, Newton Ringleader (imp.) 73783, and Nonpareil Ramsden 83422. Can supply a few of either sex. KYLE BROS., Drumbo, Ont. Phone and telegraph via Agr.

Blaigowrie Shorthorn Offering

Imported and Canadian-bred. More bulls to select from than any herd in Ontario, all of serviceable age; also a large number of females, which are bred right and priced right. All the stock for sale JOHN MILLER, Ashburn, Ont. Myrtle Station, C.P.R. and G.T.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 at a low price, considering the quality, and the freight will be paid. Write for anything in Shorthorns or Shropshires. One hour from Toronto.



OMEGA MILKING MACHINE. Has no rubber connections for the milk to pass through, but transparent celluloid tubes. The OMEGA is simple to operate, sanitary, and easily washed. It is used in the private dairy of H. M. King George V. at Windsor Castle. Increased the milk flow 3% in a 17-day test on ten cows at the O. A. C., Guelph. WRITE TO-DAY for FREE BOOKLET. C. RICHARDSON & CO., St. Mary's Ont.

Harab-Davies Fertilizers. Yield Big Results. Write for Booklet THE ONTARIO FERTILIZERS, LTD. WEST TORONTO

Manor Farm Holsteins. Those wishing a young sire from high-record dams and sired by King Segis Pontiac Posch, will do well to write for pedigree and prices before buying elsewhere. SATISFACTION GUARANTEED. Gordon S. Gooderham. CLARKSON ONTARIO

Record Holsteins. We have the only two sons in Canada of the 46-lb. bull Ormsy Jane King, only mature son of the world's most famous cow. One of them for sale. Also a 30-lb. calf, whose dam and 2 great grandams average 38.4 lbs. butter in 7 days. 11 bull calves of lesser note and females all ages. R. M. Holtby, R. 4, Port Perry, Ont.

HOLSTEINS. Having sold my farm, I am offering for immediate sale in pure-bred Holsteins, 1 bull, 2 cows, and 1 heifer calf, eleven months. All information cheerfully given. Wm. J. ROBINSON, Florence, Ont.

Willowlee Holsteins. A few bulls left 4 months old; dams, 65 lbs. of milk a day. \$50.00, delivered. A. MIGHT, R.R. No. 6, Brampton, Ontario.

RIDGE DALE HOLSTEINS offers three young bulls (one ready for service) at special prices. One is by Pontiac Hengerveld Pieterje, and the others are by King Segis Pontiac Duplicate. Can also supply a few females. R. W. Walker & Son, Port Perry, R.R. 4, Manchester, G.T.R., Myrtle, C.P.R.

LAKESIDE AYRSHIRES. A few young bulls for sale from Record of Performance dams, imported and Canadian-bred, sired by Auchenbrain Sea Foam (imp.) 35758, grand champion at both Quebec and Sherbrooke. Write for catalogue. GEO. H. MONTGOMERY, PROPRIETOR, Dominion Express Building, Montreal, Quebec. D. McARTHUR, MANAGER, PHILIPSBURO, QUEBEC.

Every farm should have an AYRSHIRE The Cow for Profit. Write Canadian Ayrshire Breeders' Association. W. F. STEPHEN, SECRETARY-TREASURER, HUNTINGDON, QUE.

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 Stn., G.T.R.

SUNNYSIDE AYRSHIRES. We have at present the strongest lot of young bulls we ever offered—one by Hobland Masterpiece, one by Sunnyside Matchless, and the others by our present herd sire, Sunnyside Masterpiece. Jno. W. Logan, Howick Station, Que.

D. M. WATT. For imported or Canadian-bred Ayrshires, bulls or females, get my prices. My importations win wherever shown. Write me for one animal or a carload. St. Louis Station, Que.

JERSEYS FOR SALE. One bull, twelve months, and one bull calf, also yearling heifers and heifer calves, sired by imported bull and from high-testing dams. Write: CHAS. E. ROGERS, INGERSOLL, ONT.

Questions and Answers. Miscellaneous.

Plastering Inside of Silo Wall. Do you advise plastering a new cement-block silo on the inside with a mixture of cement and sand, or would it be all right to merely wash it over with cement and water? C. T. Ans.—If the inside surface is comparatively smooth applying the cement and water with a whitewash brush may prove satisfactory. However, as there is liable to be a little unevenness where the blocks are joined together, we would prefer plastering.

Tons of Hay in a Mow. How much hay is there in a mow 20 by 9 by 6 feet? 2. How much hay will it take to feed a two-year-old colt from December 1 to May 1? D. C. Ans.—1 It is generally estimated that a ton of hay will occupy about 450 cubic feet. On this basis the mow will hold about two tons. 2. It is difficult to say, as some feed much heavier on hay than others. With a little grain from 10 to 15 lbs. of good hay per day should be sufficient. This would amount to from a ton to a ton and a half for the time mentioned.

Driving Motor Vehicles. 1. While driving my car I overtake a rig at a point in road about eighteen feet wide with a wire fence on either side and which continues about sixty rods. I sound klax-on repeatedly, but party refuses to take notice. I remain behind for a considerable distance and then give him a shunt with the bumper. In case of accident am I liable? 2. Does the law require him to give half of the road under above circumstances? 3. Is it contrary to law to pass a rig on bridge two hundred feet long and eighteen feet wide? 4. Can villages or towns legally determine speed limit if below fifteen miles an hour? Ontario. J. K.

Roof for a Cellar-way. I am rebuilding a cellar and am arranging it so I can load potatoes on the level, by having the wall running parallel with the cellar wall and set out about 9 feet. This gives me an opportunity to back a long sleigh underneath. What can I cover this outside apartment with? I want it very nearly level. If I use lumber it will rot out and if I use cement it will crack. Would treating the lumber in any way tend to preserve it? G. M. Ans.—You might get old iron rails from a railroad, cut the desired length and lay on the two walls to support a roof. By using woven wire for reinforcing, a level roof can then be put on with concrete that should not crack, as we have seen such used over a root cellar on the approach to the barn where it stands the weight of horses without injury. Undoubtedly if lumber were treated with pitch or some other preservative it would last longer than the untreated lumber.

Line Fencing. 1. Which is your half of the line fence, the part to your right or left when you face the fence? 2. A and B's lands adjoin. A wishes to build a fence but B refuses. Can A force B to build his share? 3. Which one is liable for damages if A's cattle break through B's portion of the fence? The fence is in no condition whatever to hold cattle. 4. If A builds the whole fence can he compel B to pay for his half, or must A keep the whole fence in repair after once erecting it? A has asked B to erect the fence but he refuses. Ontario. C. C.

Ans.—1. There is no arbitrary legal division. It is a matter for agreement, or, in case of dispute, for the local fence viewers. 2. Yes—either that, or bear the expense. 3. We should say, B. 4. A can compel B, through the fence-viewers, to erect and maintain his just proportion of the fence. He would probably be unable to obtain contribution from B, if he A, were to build the fence at the outset, as suggested.

Important Notice to Breeders of Holsteins

Under the auspices of The Western Ontario Consignment Sales Company, there will be held at the FRASER HOUSE, LONDON, ONT., on WEDNESDAY, OCTOBER 17th, 1917 a great sale of PURE-BRED HOLSTEIN CATTLE. Parties having stock to consign should communicate early with the dairy manager. Entries close August 15th. For entry forms apply to D. CAMPBELL, BOX 3, KOMOKA, ONT. DAIRY MANAGER

HIGHLAND LAKE FARMS. SOME OF THE BULLS WE HAVE FOR SALE AT ATTRACTIVE PRICES. 1. Born May, 1917, two nearest dams average 35.62 lbs. 2. Born March, 1917, two nearest dams average 34.16 lbs. 3. Born March, 1917, two nearest dams average (one at 3 yrs.) 34.23 lbs. 4. Born March, 1917, two nearest dams average (one at jr. two years) 33.12 lbs. These are sons of Avondale Pontiac Echo, our herd sire (under lease) a son of May Echo Sylvia, the world's record cow. Only one other 41-lb. bull in Canada. Send for extended pedigrees and prices on these and others, a few of serviceable age, one from a 111-lb. cow. We guarantee satisfaction. Twenty-five females for sale. R. W. E. BURNABY (Farm at Stop 55, Yonge St. Radial) JEFFERSON, ONT.

SENSATIONAL OFFERING IN 30-LB. BULLS. We have at present several 30-lb. bred bulls, all nearing serviceable age, that must go out to several of the country's best herds in the near future. They are sired by one of the three sires used in the herd during the past year. Pontiac Korndyke of Het Loo., Avondale Pontiac Echo, or King Segis Alcartra Spofford. Our herd contains more 30-lb. cows than any other herd of equal size in the Dominion. Extended pedigrees mailed on request. ROYCROFT FARM W. L. Shaw, Prop., NEWMARKET, ONT.

Hospital for Insane--Hamilton, Ont. Present offerings are 4 grandsons of Dutchland Colantha Sir Mona, and high-testing, large-producing R. of P. dams of Korndyke and Aaggie DeKol breeding. Born during April and May, 1917. Apply to Superintendent.

Sunnybrook Farm Holsteins

SELLING QUICKLY—A limited number of young bulls and heifers from approved cows, testing 18 to 30 lbs. in 7 days, and averaging from 7,000 to 12,000 lbs. milk per annum, sired by Sunnybrook Mercedes Natoye, whose dam is a 29.34-lb. cow, and Count Faforit Sylvia Segis, highly strained in blood of the world's record cow. DON'T MISS THIS OPPORTUNITY. Write—JOS. KILGOUR, Eglinton, Ontario; or Phone Toronto, Belmont 184. Adelaide 3900.

Choice Young Holstein Sires

I am offering a few choice young bulls at bargain prices. These are growthy, healthy, and great individuals. While the bargains last is the time to purchase. Write for prices, extended pedigrees and full information. Kindly give me an idea of the age of the bull that you would require. Correspondence solicited.

Oak Park Stock Farm - R. R. 4, Paris, Ont. - W. G. Bailey

SUMMER HILL HOLSTEINS

The only herd in America that has two stock bulls that the dam of each has milked over 116 lbs. a day, and their average butter records are over 35 lbs. a week. We have 50 heifers and young bull to offer, by these sires, and out of dams just as well bred. We invite personal inspection. D. C. FLATT & SON - R. R. 2, Hamilton, Ont. - Phone 7165

CLOVERLEA HOLSTEIN-FRIESIANS

Clover for sale, all ages, from choice, high-testing dams—75 head to choose from. Our special offering is a few choice heifers, due to freshen in September or October. Personal inspection is invited. GRIESBACH BROS. L.-D. Phone COLLINGWOOD, ONT.

EVERGREEN STOCK FARM . . . REGISTERED HOLSTEINS

Just now we are offering a very choice young bull, five months old, whose five nearest dams average over 30 lbs. of butter in seven days and 100 lbs. milk in one day. Also another bull calf whose dam was the top-price cow in the Woodstock Sale. Bell phone. A. E. HULET, Norwich, Ont.

DUMFRIES FARM HOLSTEINS

175 head to choose from. Special offering; bulls from one month to one year old. Grandsons of Prince Aaggie Mechthilde. Visitors always welcome. S. G. & ERLE KITCHEN ST. GEORGE, ONTARIO

SILVER STREAM FARM HOLSTEINS

Present Offering: One bull fit for heavy service, a straight and good individual of richest breeding. Sire's six nearest dams average 30.10 lbs. butter in 7 days; his dam's sire's five nearest relatives average 31.31 lbs. butter in 7 days. Anybody wanting a well bred sire at a moderate price, write at once. J. MOGG & SON, INNERKIP PHONE 1 ON 34, R.R. NO. 1, Tavistock, Ontario.

KING SEGIS WALKER'S

Oldest daughter with first calf made 456 lbs. milk and 24 lbs. butter; with her second calf, 560 lbs. milk and 29 3/4 lbs. butter. His first granddaughter, through his son, at 2 yrs. 2 months, made 440 lbs. milk and 23 1/2 lbs. butter. Young stock for sale. A. A. FAREWELL, OSHAWA, ONTARIO.

GLADDEN HILL AYRSHIRES

We are offering some choice young bulls, nine months of age from splendid cows and sired by Fairvue Milkman. A few females also for sale. LAURIE BROS., AGINCOURT, ONTARIO

Hillhouse Ayrshires

F. H. Harris, Mt. Elgin, Ont. Headed by Burnside Lucky Master Swell, a combination of blood so hard to equal, being of the Masterpiece and Lucky Girl families, a combination which means quality, production and constitution. Ninety head to select from. Special offering—20 yearling heifers and 3 bulls. Inspection invited.

THE DON JERSEY HERD—

OFFERS:—Several young bulls, all of serviceable age, and all from R.O.P. dams. These are priced right. Interested parties should write or see these at once. We also have females of breeding age. D. Duncan & Son, Todmorden P.O., Duncan Station, C.N.O.

THE WOODVIEW FARM JERSEYS. CANADA'S MOST BEAUTIFUL JERSEY HERD. The foundation of this herd is made up of very high-class cows, imported from the Island of Jersey, most of them in the Record of Performance, and while we have, at all times, a few mature cows for sale, we make a specialty of in-calf heifers and young bulls. Write us your wants, or better still, come and see the herd. We work our show cows and show our work cows.

Young BRAMPTON JERSEYS Bulls

For the next fortnight we are making a special offering on young bulls, bred from the highest producing families ever introduced into Canada. Brampton Jerseys and their descendants hold all Jersey R.O.P. records, save one. Females, all ages, also for sale. B. H. BULL & SON, BRAMPTON, ONTARIO

Bone Spavin

No matter how old the animal, how lame the horse, or how many doctors have tried and failed, use Fleming's

Spavin and Ringbone Paste

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

Fleming's Vest-Pocket Veterinary Advice

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

FLEMING BROS., Chemists
75 Church Street Toronto, Ont.

CENTRAL CANADA EXHIBITION

Ottawa, Sept. 8th to 17th, 1917

\$25,000 In Prizes for Live Stock

New York Hippodrome, Vaudeville Acts, Balloon Ascensions, Aviator, \$9,000 for Horse Racing, Pure Food Show, Gov't Exhibits, Dog Show, NIGHT SHOW—Magnificent Spectacle and Fireworks, British advance in Mesopotamia—Destruction of the Forts at Kut-El-Amara.

Entries Close August 31st. Reduced Railway Rates.

Stewart McGlenaghan, President,
J. K. Paisley, Mgr. & Sec'y.

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.

Tamworths

Young sows and boars from several litters just weaned.

HEROLDS FARMS, Beamsville, Ont.
(Niagara District)

Blue Pigs

If you are not satisfied with the growing qualities of the hogs you now raise, why not try the Blue ones? They are not expensive, but they are the best. Write for descriptive matter and booklet.

Blue Hog Breeding Company, Wilmington, Mass.

Morrison Tamworths and Shorthorns. Bred from the prize-winning herds of England. Tamworths, both sexes; 12 sows, bred to farrow in August and September. Young boars, from 2 to 10 months old. Shorthorns, males and females.

Chas. Currie, Morrison, Ont.

TAMWORTHS

Young sows bred for Fall farrow, and a nice lot of young boars for sale. Write:

John W. Todd, R. R. No. 1, Corinth, Ont.

YORKSHIRES Sows 170 lbs. and under not yet bred. Boars 2 and 3 months, 60 to choose from. Bred from prize-winning stock, Eldon Duke still at the head. Tell us your wants.

Wm. Manning & Sons, Woodville, Ontario.

Cloverdale Berkshires and Shropshires—In Berkshires I can furnish boars or sows, all ages, pairs not akin. All breeding stock imp. or from imp. stock. In Shropshires can furnish rams or ewes, any age, from imp. stock. Prices reasonable.

C. J. LANG, R. R. No. 3, Burketon, Ontario.

Berkshire Pigs Registered stock, choicely bred young boars, and sows in pig, all ages. Can supply pairs not akin.

CREDIT GRANGE FARM
J. B. Pearson, Mgr., Meadowvale, Ontario.

SWINE FOR SALE
Am offering choice stock in Poland China and Chester White swine of either sex, most any age. 1st-prize Poland China herd, London and Toronto, 1915. Prices easy.

George G. Gould, R. R. 4, Essex, Ont.

Champion Berkshires—When buying, buy the best; our present offering are sons and daughters of the two great champions, Lucky Lad and Baron Compton, and out of winners, including champions. Both sexes.

W. W. Brownridge, Georgetown, Ont., R.R. 3.

Volume 90 of the American Shorthorn Herd Book is now ready for distribution. It is complete up to April 2, 1916, containing bulls numbering from 448001 to 457000, and cows from 236001 to 257000. Like its predecessors it is well printed, indexed and bound. Copies may be obtained from the Secretary, F. W. Harding, Chicago, Ill.

Questions and Answers.

Miscellaneous.

School Matters.

1. Is there anything in the school law to compel a ratepayer to replace windows in the school house that his children break accidentally while playing, or should it come out of the money that is voted to run the school? There are thirteen ratepayers that have no children to go to school and ten that have children to go, in the district.

2. Has the teacher a right to dismiss scholars from school without notifying the trustees?

N. B. A SUBSCRIBER.
Ans.—1. We should say that the latter is the case.
2. We think so.

Hens Don't Lay.

My hens practically stopped laying last spring, as a flock of fifty have only averaged two or three eggs a day. They have been fed oats and buckwheat twice daily since winter. They have the run of the whole farm and appear healthy and are free from lice. Is it possible that they are too fat? What remedy would you suggest?

G. A. M.

Ans.—This is one of the things that are very hard to account for. The spring is the natural laying season for hens, and one generally expects to get the heaviest production during April, May and June. Oats are an excellent feed for hens, and a limited quantity of buckwheat is also good, although it is claimed to be fattening. We have known birds which were fairly fat to give heavy production, although it is generally believed that over-fat birds do not lay. Reduce or entirely eliminate buckwheat from the ration and try feeding a little mash. When the birds are on free range they should secure all the grit, shell and meat foods necessary. You do not state whether or not the hens laid heavily during the winter; a heavy winter production is frequently followed by few eggs being laid during the summer. A hen that does not lay is a poor proposition, and if the hens were idle during the winter we would be inclined to dispose of the entire flock and secure pullets from a strain that has proven to be good layers.

Farmer's Holidays.

1. How many legal holidays is a farmer entitled to in a year?
2. Is a farmer entitled to be off every second Sunday? If so, who is to milk the cows and do the rest of the chores?
3. If each farmer took from two to four weeks' holidays in July or August, as the other classes do, what would become of the other classes?

W. A. McK.

Ans.—1. The farmer who is his own boss can take what holidays he sees fit, whether they are what are known as legal holidays or not. It is his own business whether he takes an odd day now and again away from the farm or takes a week or two at a time. If the work suffers he is the loser. The case of a hired man is different. He is paid for doing his work and the legal holidays for him are Sundays, except for necessary chores, New Year's Day, Good Friday, Easter Monday, Victoria Day, Dominion Day, Labor Day, Thanksgiving Day, Christmas Day and any other day or days proclaimed by the Governor-General or the Lieutenant-Governor as a public holiday.

2. The average farmer has his interests at heart sufficiently to arrange for the milking of cows and doing the necessary chores on Sunday. Except by an arrangement with the employer, the hired man cannot escape doing chores every other Sunday.

3. Naturally, if all farmers quit work a part of July and August they, as well as people living in towns and cities, would suffer. There are many business and professional men who do not see their way clear to take a vacation during the summer. If a man desires a holiday he arranges it when his absence will least interfere with business or work; thus, it often turns out that while the farmer is busy during the summer he could arrange things to take a week or two off during the winter.

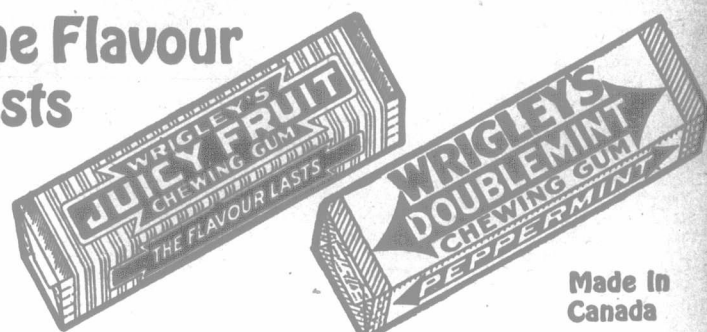


Airmen In the Great War

are using WRIGLEYS regularly. It steadies stomach and nerves, allays thirst, puts "pep" into tired bodies. Aids digestion. Lasting refreshment at small cost.

Chew it after every meal

The Flavour Lasts



LARKIN FARMS Southdowns and Shropshires

Having added to our flocks by purchasing, from J. C. Duncan, all the sheep of the Niagara Stock Farm, Lewiston, N.Y., we are able to offer an excellent selection of the two-year-old and shearing rams and ram lambs; also a few show flocks of both breeds for the Summer and Fall Fairs. Address

Larkin Farm, Queenston, Ont. Twenty-minute trolley-ride from Niagara Falls.

FARNHAM OXFORD DOWNS

Flock established from the best flocks in England. Our initial importation was among the first in 1881. Having quit the show-ring, we now make specialty of breeding animals. Special attention to flock headers. They will give a good account of themselves in the show-ring. Offering for the present season:—120 yearling rams; a few two-year-olds; 80 superior yearling ewes. A nice lot of ram and ewe lambs coming on.

HENRY ARKELL & SON, R. R. No. 2, (Tel. 355r 2 Guelph,) GUELPH, ONT., CAN.

MAPLE SHADE SHROPSHIRES

My Minton ram is proved by his first crop of lambs to be the best sire used on this flock during the past 20 years. Orders for ram lambs are already being received. If you really want a good one, drop a line or have a look. NO SHEARLINGS. Will. A. Dryden, Brooklin, Ontario Co., Ontario

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, Ont.
Langford Station on Brantford and Hamilton Railway.

OAK LODGE YORKSHIRE HOGS

We have a large selection of extra-good boars and sows of different ages. We are selling at prices that make it attractive for the purchaser. Write for what you want.

J. E. Brethour and Nephews, Burford, Ontario.

When writing please mention Farmer's Advocate

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 afterwards, 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!

Woodstock College

A High-Grade, Well-Equipped School for BOYS

DIAMOND JUBILEE 1857-1917

Teaches the boy to learn and live. A thorough physical, mental and moral training for college or business. Efficient faculty, athletic fields, modern gymnasium, swimming pool, manual training. Calendar on request.

A. T. MacNEILL, B. A. Woodstock, Ontario Principal

An Academic Department of McMaster University

Moulton College For Girls

Matriculation and English Courses. Senior and Junior Schools. Finely equipped music and art departments. Exceptional opportunities, with a delightful home life. Fees moderate. Reopens September 12th. Write for Calendar.

MISS H. S. ELLIS, B. A., D. Paed., Principal 34 Bloor Street East TORONTO

McCormick's JERSEY CREAM Sodas

Contain all the elements of a pure wholesome food at an economical price.

"1900" Gravity Washer

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

"1900" WASHER COMPANY 357 YONGE ST., TORONTO, ONT. (Factory, 79.81 Portland St., Toronto)

When writing please mention Advocate

The Guards Came Through.

Men of the twenty-first,
Up by the chalk pit wood,
Weak with our wounds and our thirst,
Wanting our sleep and our food,
After a day and a night—
God, shall I ever forget!
Beaten and broken in the fight,
But sticking it yet.
Trying to hold the line,
Fainting and spent and done,
Always the thud and the whine,
Always the yell of the Hun!
Northumberland, Lancaster, York,
Durham and Somerset,
Fighting alone, worn to the bone,
But sticking it, sticking it yet.
Never a message of hope!
Never a word of cheer!
Fronting Hill 70's shell-swept slope,
With the dull plain in our rear.
Always the whine of the shell,
Always the roar of its burst,
Always the tortures of hell,
As waiting and wincing we cursed
Our luck and the guns and the Bosche,
When our corporal shouted, "Stand to!"
And I heard some one cry, "Clear the front for the Guards!"
And the Guards came through.

Our throats, they were parched and hot,
But the Lord, if you'd heard the cheers!
Irish and Welsh and Scotch,
Coldstream and Grenadiers.
Two brigade, if you please,
We were down on our knees
Praying for us and for them!
Praying with tear-wet cheek,
Praying with outstretched hand,
Lord, I could speak for a week,
But how could you understand!
How should your cheeks be wet,
Such feelings don't come to you.
But when can me or my mates forget
When the Guards came through!

"Five yards left, extend!"
It passed from rank to rank,
Line after line, with never a bend,
And a touch of the London swank.
A trifle of swank and dash,
Cool as a home parade.
Twinkle and glitter and flash,
Flinching never a shade,
With the shrapnel right in their face
Doing their Hyde Park stunt,
Keeping their swing at an easy pace,
Arms at the trail, eyes front!
Man, it was great to see!
Man, it was fine to do!
It's a cot and a hospital ward for me,
And I'll tell 'em in Blighty, wherever I be
How the Guards came through.
ARTHUR CONAN-DOYLE, in The Times.

Gossip.

Bankers' Prizes at Fall Fairs.

The Canadian Bankers' Association is co-operating with the Dominion Live Stock Branch in offering special prizes at the Fall Fairs to boys and girls under seventeen years of age who exhibit certain classes of live stock. Information in regard to same can be obtained from the local branch Managers.

A boy was in the act of taking a short road through a plowed field, when the farmer, observing him, shouted: "Hi, man, there's no road there!" The boy turned round, and feeling that as twenty yards lay between him and his irate accuser he was safe, coolly replied: "So I see, but you needna trouble to mak' one. I'll no' likely be back this way again."

The minister delivered a sermon of but ten minutes' duration—a most unusual effort for him.

At the conclusion of his remarks he explained: "I regret to inform you, brethren, that my dog this morning playfully ate the portion of my sermon that I have not delivered. Let us pray."

After the service a man who was a member of another church shook the preacher's hand heartily and said:

"Doctor, I should like to know whether that dog of yours has any pups. If so, I want to get one to give to our minister."

ELEVATES GREEN CORN INTO THE HIGHEST SILO

or will blow dry straw 60 feet up into and across the barn.

Handles either corn or straw equally well, the only successful combination machine of this capacity made in Canada.

Wilkinson Climax "A" Mounted Pneumatic Ensilage and Straw Cutter

Capacity limited only by amount of material that can be got to the machine. Requires less power than any other machine of the same capacity. No lost power.

13-inch mouth, rolls raise 8 inches and set close to the knives, making a solid, compact cutting surface.

Direct pneumatic delivery, no worm gears or special blower attachment.

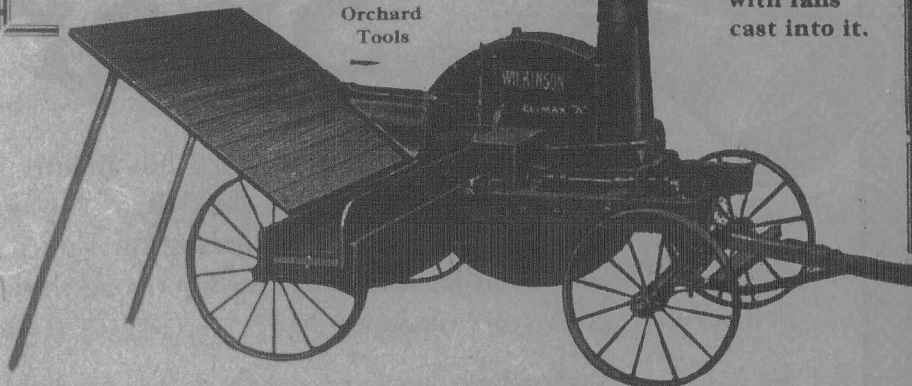
The knife wheel also carries the fans. No lodging on wheel arms, everything cut, wheel always in balance.

Supplied with necessary pipe and elbows, pipe rack, set of extra knives, tools, etc.

ASK FOR NEW BOOKLET

The Bateman-Wilkinson Co., Limited 41 Symington Ave., Toronto, Canada

Wilkinson and Iron Age Farm, Garden and Orchard Tools



Friction drive.

Reverses instantly.

Babbitted bearings.

Steel slat feed run set low.

Straight, flat, thin knives, easy to sharpen, take less power to operate.

Knife has inward shear cut.

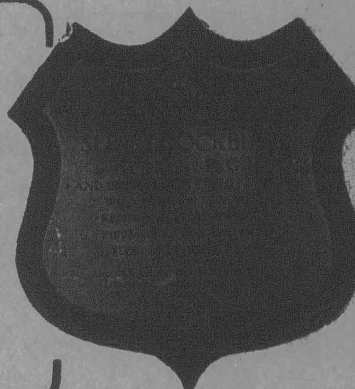
Heavy knife wheel with fans cast into it.

FOR THE MEN WHO HAVE PAID THE PRICE

WHAT can be done for a man whose life has been given in the great fight? One thing only—and that is to perpetuate his name and commemorate his sacrifice by a worthy memorial in the place where he once lived.

We bring to the work of memorial tablet-making a reverent care, a consummate skill that ensures the best expression of the remembrances of family, friends, church, society or lodge. Write for particulars of brass and bronze memorial tablets. Our special department will be glad to assist in every possible way.

The Dennis Wire & Iron Works Co., Ltd. London, Canada



ALMA LADIES' COLLEGE OPENS ITS THIRTY-7TH YEAR ON SEPTEMBER SEVENTEEN: NINETEEN HUNDRED & SEVENTEEN

Thorough courses in Music, Art, Oratory, High School, Business College, Domestic Science and Superior Physical Training.

FOR TERMS, ADDRESS: R. I. WARNER, M.A., D.D., President, St. Thomas, Ontario

MANY DAUGHTERS OF THE FARM ARE NUMBERED AMONGST OUR STUDENTS EACH YEAR

Academic courses from Preparatory Work to Junior Matriculation, Teachers' Certificates and First Year University: Music, Art, Oratory, Domestic Science; Social Economics and Civics; Commercial Work; Physical Training—gymnasium, swimming pool, etc.

ONTARIO LADIES' COLLEGE. Calendar from Rev. F. L. Farewell, B.A., Whitby.



REMINGTON
UMC



Sport!

For over 100 years that word has meant Remington UMC to thousands of shooters. And it's the sport that means health to the body, alertness to the brain and food for the table. Shoulder your "old reliable" Remington Pump Gun—or Rifle, pocket a few Remington Shells—or Metallics, and you'll return with a good bag and a cheery smile for Old Man Care and that humdrum, every-day job of yours.

For fast work with small game, use a Remington UMC .22 Rifle and Metallics.

Remington UMC

Remington UMC gives you everything in arms and ammunition and the Best everything.

Every year thousands of old models and compromise makes are discarded for the Remington UMC Pump, the first and the greatest hammerless repeating shot gun. Six shots. Positive slide action. Easily and quickly loaded. Smooth working. Rapid in fire. Solid breech, closed top and sides. Loading and ejection at bottom—shells, smoke and gases go down.

Remington UMC Rifles—all calibres from .22's to Big Game—are the world's standard for 100 years for workmanship, "hang," smoothness of action and deadly accuracy. See one at your dealer's, and you'll understand.

Remington UMC Cartridges come in all calibres and sizes to suit any rifle now in use. Remington-UMC loaded shot shells have a brilliant record in the field and at the traps for reliability, pattern and speed.

The dealer who shows the Remington UMC Sign is a good man to talk with about arms and ammunition requirement.

Remington UMC

of Canada, Limited
WINDSOR, ONTARIO

